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SECOND UNITED NATIONS CONFERENCE ON THE STANDARDIZATION OF GEOGRAPHICAL NAMES

London, 10-31 May 1972

Vol. II. Technical papers



UNITED NATIONS

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Department of Economic and Social Affairs

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NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

The official records of the Second United Nations Conference on the Standardization of Geographical Names, held in London, United Kingdom of Great Britain and Northern Ireland, from 10 to 31 May 1972, are issued in two volumes: volume I, *Report of the Conference*,* *and* the present publication. The texts of reports, communications and technical papers submitted to the Conference by participating Governments are contained in the present volume. The papers have been edited and consolidated in accordance with United Nations practices and requirements.

The designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

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AGENDA ITEM 7

Reports by divisions and Governments on the situation in their regions and countries and on the progress made in the stantardization of geographical names since the First United Nations Conference on the Standardization of Geographical Names

REPORT OF THE DUTCH-SPEAKING AND GERMAN-SPEAKING GROUP*

The Dutch-speaking and German-speaking group consists of the following members: Austria, Belgium (for the Flemish-speaking part), Federal Republic of Germany, Netherlands and Switzerland (for the German-speaking part). The members decided that they should take it in turns to act as spokesman for the group at each United Nations meeting. The Chairman of the Ständiger Ausschuss für Geographische Namen (StAGN), Bad Godesberg, Federal Republic of Germany, has been asked to act as secretary of the group.

The Dutch-speaking and German-speaking group has held four meetings since the First United Nations Conference on the Standardizaton of Geographical Names took place at Geneva from 4 to 22 September 1967. The first of these meetings was held on 28 January 1970, the others on 11 January 1971, 22 April 1971 and 25 November 1971, all at Bad Godesberg and always in connexion with the meetings of the StAGN.

The meetings have served the purpose of providing an exchange of opinions and information on national items in the preparation of the working papers and information on national items in the preparation of the working papers and information papers that are to be submitted to the United Nations Group of Experts on Geographical Names at its meetings in New York and to the Second United Nations Conference on the Standardization of Geographical Names.

* The original text of this report was contained in document E/CONF.61/L.3.

REPORT OF THE STÄNDIGER AUSSCHUSS FÜR GEOGRAPHISCHE NAMEN (StAGN), PRESENTED BY THE DUTCH-SPEAKING AND GERMAN-SPEAKING GROUP*

The Ständiger Ausschuss für Geographische Namen, comprising geographers, cartographers and linguists from Austria, Belgium, the Federal Republic of Germany, the Netherlands and Switzerland, is an advisory board on geographical names.

One of the undertakings of the Ständiger Ausschuss für Geographische Namen is the compilaton of the world gazetteer, the *Duden Wörterbuch Geographischer Namen*. This work illustrates the correct manner of writing geographical names and German exonyms — where they exist — as well as the national standardized names. It gives the pronunciation and indicates the position of the features.

Volume 1, *Europe excluding the USSR*, was published in 1966. Since the First United Nations Conference on the Standardization of Geographical Names, the following sections have been compiled: North and South America; Polar regions; the Arabic-speaking countries; Afghanistan and Iran.

Other sections are now in preparation.

The Ständiger Ausschuss für Geographische Namen is submitting a provisional copy (without pronunciation) of the sections dealing with the Arabic-speaking countries, Afghanistan, Iran and Israel to the Second United Nations Conference on the Standardization of Geographical Names as information papers.

In joint discussions with the German Hydrographic Institute (DHI), Hamburg, the Ständiger Ausschuss für Geographische Namen has prepared a concordance of the English, French and German versions of the generic terms for undersea features, based on the gazetteer of the United States Board on Geographic Names (1969) and the French equivalent, *Cahiers Océanographiques*, 12 August 1970, and entitled *Namengebung und Rechtschreibung Geographischer Namen* (Bad Godesberg: *Richtlinien und Mitteilungen*, 11 January 1971; second revised edition, 1972).

The Ständiger Ausschuss für Geographische Namen has also participated in the discussions of the Dutch-speaking and German-speaking Group to help in the preparation of the working papers for the sessions of the United Nations Group of Experts on Geographical Names and for the present Conference.

Finally, the Ständiger Ausschuss für Geographische Namen has assisted Professor Meynen in compiling the *Bibliography of Gazetteers, 1945-1970*, as requested by the *Ad Hoc* Group of Experts on Geographical Names.

* The original text of this report was contained in document E/CONF.61/L.4.

REPORT PRESENTED BY YUGOSLAVIA*

Principles of standardization

In Yugoslavia it is mainly linguists, geographers and cartographers who study the geographical terms and names used in their professions. However, although co-operation among these experts is indispensable — particularly to cartographers, whose need for precise professional terms increases daily—it is not organized.

The fact that Serbo-Croatian has two official sets of characters, Roman and Cyrillic, constitutes the first difficulty in disseminating any information, whether on plans, maps, atlases or any other publication.

In addition, Yugoslavia comprises several republics, each of which is entitled to use its own language and write in its own characters when preparing any information.

It is not difficult to conclude that in observing these principles Yugoslavia, a relatively small country, is setting an example — while at the same time posing a problem for experts and scholars throughout the world. Switching back and forth between Cyrillic and Roman characters presents no major difficulty, for both scripts have symbols that correspond to every sound in the language. The Cyrillic script is simpler, for it has fewer peculiar characters than the Roman script — those used in the Roman alphabet are: ć, č, i, j, lj, nj, š, ž, dj and dž; those in the Cyrillic script are: j, ћ and џ. Furthermore, the Cyrillic script has only one character for each sound, whereas in the Roman script certain sounds (lj, nj, dž) are represented by a combination of two characters. Transcription from one script to the other is effected through transliteration, that is, each character of one script is replaced by the corresponding character of the other, although the pronunciation always remains unchanged.

In standardizing geographical names and terms — place names, river names and orographic names and names of regions inside Yugoslav frontiers — in maps, atlases and all professional and scientific documentation (with the exception of literature, where the traditional writing predominates), the following method is generally used: geographical names are written in Roman or Cyrillic characters in accordance with the spelling and pronunciation used in the regions in which these places are situated.

Organization of work for the standardization of geographical terms

In Yugoslavia it is mainly linguists who work in co-operation with geographers and cartographers on standardizing geographical terms. This co-operation proceeds as follows: cartographers ask linguists and geographers for assistance in solving the problems that arise when geographical terms have to be written down. Such co-operation is most frequent when the name or term involved comes from bilingual regions near the frontiers.

Organized work on the standardization of geographical terms is conducted mainly in the language institutes of the science academies of the Yugoslav republics: the Yugoslav Academy of Arts and Sciences in Zagreb, the Serbian Academy of Arts and Sciences in Belgrade, the Slovenian Academy of Arts and Sciences in Ljubljana, the Macedonian Academy of Arts and Sciences in Skopje and the Academy of Arts and Sciences of Bosnia and Hercegovina in Sarajevo. The Inter-Academy Onomastic Committee presided over by the Yugoslav Academy of Arts and Sciences in Zagreb co-ordinates the work carried out in this field by all Yugoslav academies.

Yugoslav cartographic institutes and experts follow with interest the work of certain foreign institutes, such as the United States Board on Geographic Names, the Permanent Committee on Geographical Names (PCGN) in the United Kingdom, the Transcription Section of the Central Research Institute for Geodesy, Photogrammetry and Cartography (TsNIIGAIK) in the Soviet Union and the Institut Géographique National (IGN) in France. Since 1950 Yugoslavia has been a member of the Bureau Hydrographique International of Monaco through the Hydrographic Institute of the Yugoslav Navy in Split.

Means of gathering and compiling data

The gathering of geographical terms is still in its preparatory phase. The main cartographic institutes of Yugoslavia (the Institute for Military Geography in Belgrade, the Hydrographic Institute of the Yugoslav Navy in Split, and the "Geokarta" Hydrographic Enterprise in Belgrade) are gathering geographical terms and using them in the maps they issue. The results of their work have not yet been published.

Of all the data gathered, so far only the names of inhabited places have been published. They are contained in the following:

(*a*) A register of all inhabited places in Yugoslavia, several issues of which have appeared, the latest published in 1971;

(*b*) *Names of Places and Inhabitants in Yugoslavia* (Split, 1946);

(*c*) A statistical yearbook of the Socialist Federal Republic of Yugoslavia, published annually.

Ways and means of publishing registers of geographical terms, dictionaries, yearbooks and other informational material

It is now recognized that all geographical names and terms must be listed and published. As things stand at present, Yugoslavia has the professional and scientific resources needed for this. The financial resources, on the other hand, present somewhat of a problem; while the most difficult task of all will be organizing the work.

To this end, internatonal co-operation between cartographers and geographers would be desirable, particularly

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.6.

between those of neighbouring countries. Following a collective effort on the part of cartographers — since it is they who need these data most — it would be possible to list and publish geographical names and terms in various kinds of publications (geographical dictionaries, yearbooks etc.).

CONSIDERATIONS CONCERNING THE PROBLEM OF NATIONAL STANDARDIZATION OF GEOGRAPHICAL NAMES AND TERMS AND THE POSSIBILITY OF PREPARING AN INTERNATIONAL DICTIONARY OF GEOGRAPHICAL TERMS WITH INTERNATIONAL CO-OPERATION

The standardization of geographical terms and names depends in every country on international co-operation; therefore any co-operation in that work would be desirable and useful.

Yugoslavia is a relatively small country, so its participation in the preparation of an international dictionary could only be justified on the grounds that the Roman characters of Serbo-Croatian are eminently suitable for transcribing the geographical terms of nearly all languages and all scripts. The participation of Yugoslav experts in the preparation of an international dictionary of geographical names and terms would provide a splendid opportunity for publishing the geographical terms and names of Yugoslavia.

Geographical terms have been mentioned several times in this report. That means, primarily, terms which form the common part of compound geographical terms.

First, there is the problem of each nation's finding a precise and unambiguous definition of each part and feature of the surface of the earth and finding an adequate and definitive term for it. If the term is translated into another language, efforts should be made to find an equivalent which is as precise as possible and as close as possible to the language from which it is translated while bearing the definition in mind. In Serbo-Croatian, for example, when translating orographical terms for features (hill, slope, mountain, mountain chain etc.) it will be hard to find equivalent terms if the definitions are not approximately the same in the two linguistic regions. The difficulty is even greater when the terms in question involve objects not part of the land — on the surface of the seas or beneath them. This international task could be undertaken by cartographers working in co-operation with geographers and geomorphists.

At the same time there is the important matter of how to write abbreviations, and in particular the need to adopt a uniform way of writing abbreviations that designate more precisely the quality or position of the common part of compound geographical names, adjectives such as large, small, high, low, central, old, new and holy. As we all know, these more precise qualifications of the common parts of compound geographical names often become the main part of geographical names and play the role of proper adjectives, as for example in "Veliki brijeg" (large hill) and "Donji greben" (low ridge). In such cases, if the name is shortened the common part of the compound geographical name must also be shortened.

In order to solve these problems one must obviously try to rely on international co-operation among linguists, geographers and cartographers, while avoiding anything that might detract from international scientific co-operation.

REPORT PRESENTED BY THE REPUBLIC OF VIET-NAM*

Pending the establishment of the National Commission on Toponymy, which has been the subject of more than one proposal by the National Geographical Directorate of the Ministry of National Defence, the Directorate is at present the only body in the Republic of Viet-Nam dealing specifically with geographical names.

The work on toponymy from 1967 to 1972, which is the subject of this report, falls into five basic categories:

(*a*) Extensive co-ordination and expansion of toponymic research;
(*b*) Compilation;
(*c*) Standardization of rules for transcription;
(*d*) Preparations for compiling the Dictionary of *Geographical Names*.

CO-ORDINATION AND EXPANSION OF TOPONYMIC RESEARCH

Efforts have been made to extend international co-ordination and expand toponymic research within the country.

At the Sixth United Nations Regional Cartographic Conference for Asia and the Far East, held in October 1970 at Teheran, Iran, the Republic of Viet-Nam, together with Malaysia, Indonesia, Singapore and the Republic of the Philippines (the Khmer Republic and Laos were absent), designated Thailand as their representative in the United Nations Group of Experts on Geographical Names, which met in New York in February 1971. Subsequently, the National Geographical Directorate of the Republic of Viet-Nam has kept in constant touch with the Royal Thai Survey Department over toponymic problems.

The Directorate has intensified toponymic research work and identified sources dealing with regional geography with a view to extending and consolidating the documentation on toponyms. A comprehensive collection has been made of documents such as monographs on provinces, books on regional geography etc. At present, 15 monographs out of a total of 44 have been collected; the remainder will be provided shortly by local authorities.

The Directorate works in close co-operation with the Institute of Archaeological Research in checking topo-

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.9.

nyms which appear in old books, by providing it with maps and various documents.

A study in depth of the method of transcribing the geographical names of other countries has also been undertaken.

Compilation

Up to 1969, with the aim of providing our country rapidly with basic map coverage, the Directorate, with the assistance of allied cartographic services, concentrated on the publication of a topographic map (scale 1:50,000, series L.7014) of the Republic of Viet-Nam. In this effort toponymic accuracy was sacrificed or almost forgotten.

During this period our specialists restricted their field work to classifying geographical details. Toponyms appearing on old maps published by the former Indochina Geographic Service were compiled, with the exception of some thinly populated regions where the situation and time permitted geographical names to be collected in the field, checked and transferred to an overlay. For that reason many errors are still found in toponyms on maps published at the present time.

Since 1969, the problem of toponymy has been given particular attention by the National Geographical Directorate. Precise technical instructions on the work connected with geographical names have been given to the specialists in order to ensure the highest levels of precision and accuracy. Before going into the field, our specialists prepare toponymic overlays on which they transcribe geographical names taken from existing maps. In addition to the maps published by the Directorate, our specialists must scrutinize all existing maps, on any scale, published by other bodies, such as the General Directorate of Agrarian Reform and the Directorate of Shipping. In the field, when consulting local inhabitants, our specialists must take great care to determine the identity of their informants in order to evaluate the information they provide; this has never been done until now. Depending on their personal experience, they attempt to evaluate the information gathered in order to arrive at the exact and correct form of each toponym. In general, toponyms confirmed by local scholars and elders living in the area are considered valid. In doubtful cases, our specialists request fuller details from local authorities. In regions populated by non-Viet-Namese races, when a geographical name cannot be transcribed directly by our specialists, it is recorded on tape (if possible) and later studied in the office with the co-operation of linguists. Toponyms can be written down either directly by the informant or by our technicians on the basis of the pronunciation which is considered correct. The meaning and background data for each toponym (legends, archaeological remains etc.) should as far as possible be recorded.

In late 1971 the Directorate began compilation in two of the 44 provinces of the Republic of Viet-Nam. The results will be used later in preparing the Dictionary of Geographical Names, as described below.

Standardization of rules for transcription

Work on the standardization of rules for transcription was carried out during the period 1967 to 1972 covered in this report. A seminar on cartographic techniques, including the problem of toponymy, was organized in May 1971 in the Directorate, and the rules for transcription were systematically standardized.

Two procedures for the transcription of toponyms must be strictly followed.

First, in the office, before preparing toponymic plates for the reprinting or first printing of maps on any scale, the Toponymy Section closely examines, checks and transcribes each toponym in accordance with the guidelines laid down by the Directorate (see the conclusion of the report "Transcription of geographical names in the Republic of Viet-Nam", under agenda item 9). No existing toponym will henceforth be reproduced without prior verification.

Toponyms must then be entered in conformity with the special subject and the scale of each map series. For example, the toponymic plate of the geological map on the scale 1:2,000,000 has been completely remade, and the orographic and hydrographic names appearing on it have been completely revised.

In the case of dubious toponyms, the Directorate must seek information either from local authorities or from the Ministry of the Interior to ensure a precise and faithful transcription. Six such contacts were made in 1970, and 96 more in 1971. The forms of the toponyms in question are approved only after careful examination and thorough checking.

Preparations for compiling the dictionary of geographical names

Preparation for compiling a *Dictionary of Geographical Names* is at present one of the main activities of the Directorate. The preparation of such a dictionary for the entire territory of the Republic of Viet-Nam requires much time; for that reason the Directorate has decided first to publish booklets of geographical names with miscellaneous information, one for each province of the Republic of Viet-Nam. These booklets will serve as basic documents for compiling the dictionary. This method may seem illogical, but it is the only way of ensuring early publication of this dictionary. In 1972, six out of the total of 44 pilot booklets will be published.

We hope that in future the work of collection will proceed more quickly and that all the documents necessary for compiling the *Dictionary of Geographical Names* for the entire territory of the Republic of Viet-Nam will have been assembled within five years.

REPORT PRESENTED BY SWITZERLAND*

Following the 1967 Geneva Conference, the Swiss delegation submitted to the Federal Government a final report on the work carried out and the resolutions formulated and adopted by that Conference. The report emphasized particularly the need to establish a national body and to prepare and publish a glossary of geographical names for the whole country. During the period 1967–1971, no steps were taken to carry out this plan.

There is still no national commission, partly because cantonal bodies are responsible for the work now under way. In addition, standardization policy varies among the four linguistic areas. This situation has so far prevented the compilation of a glossary. The idea of an exhaustive work of this nature evokes little interest among specialists. At present the most comprehensive compilation is to be found in the National Map (on the scale 1:25,000), containing a total of approximately 200,000 geographical names. This series of maps, consisting of almost 250 sheets, will be completed for the entire territory of Switzerland in 1974; by the end of 1971, 225 sheets had already been published.

Lists and card indexes exist for all these names and, in addition, a large number of toponyms appear in the Property Register. In order to set them out in a form suitable for general use, automatic data processing will be necessary. The absence of a national body to deal with this is aggravated by a lack of personnel, which has so far made it impossible to undertake this task.

Internationally, Switzerland has participated as far as possible in the work of the Dutch-speaking and German-speaking group, which has held four meetings since the 1967 Geneva Conference. It has not yet been possible to organize the participation of the French-speaking linguistic group in the work of the Group, since no French-speaking body exists which is concerned with problems outside the field of national standardization.

In conclusion, the paper "Compilations and treatment of geographical names in Switzerland", submitted by the Swiss delegation at Geneva in 1967, which provides an over-all picture of the legal position and the work under way, remains entirely valid. Reference might also be made to the republication of the *Schweizerisches Ortslexicon*,[1] which is the most complete and concise source of information for the names of towns and places in Switzerland.

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.12.

[1] Arthur Jacot, *Schweizerisches Ortslexicon* (Lucerne, Verlag C. J. Bucher, 1969).

REPORT PRESENTED BY ISRAEL*

Since the First United Nations Conference on the Standardization of Geographical Names, held in Geneva in 1967, a number of developments have taken place in the domain of toponymy in Israel.

Attempts to formalize and standardize the rules governing the transformation of geographical names from one script to another, as recommended as far back as a century ago by the First General Conference of the International Geographic Union, have, as yet, met with partial success only. Moreover, these attempts have raised two problems: the administrative one of setting up national authorities on geographical names, and the technical problem of constructing rules for transliteration (or transcription, as the case may be). In both respects Israel is in a favourable position. The Government Names Commission, affiliated to the Prime Minister's Office, is the sole authority on geographical names in the country. All Hebrew names have a definite official form which appears on all official maps, and an index system (to be replaced in the future by an automated punch-card and printout register) is in existence. Transliteration rules, and particularly those from Hebrew into Roman script, have been accepted and legalized by the Government. However, the general public still uses some unofficial forms of names as well as a variety of systems of transliteration; hence the multiple forms of, for example, the name אֵילַת — Elat (the official form), Eilat, Eilath, Elath.

The Survey of Israel, as originator of all official maps in Israel and provider of the basic topographic coverage, is consequently the chief "consumer" of the output of the Government Names Commission, being represented on the Commission by the chief cartographer. As an aid to cartographers in training, on the one hand, and to the many institutions using geographical names, as well as to the general public, on the other, a leaflet on the transliteration of geographical names in Israel[1] has been published by the Survey of Israel in its series of Cartographic Papers. This presents all rules pertaining to the script in official maps — except the choice of type face and the positioning of names — under one cover. Brief definitions of the various classes of names, terms, verbal descriptions and other script in maps are followed by detailed instructions for producing name-sheets for the various scales, with notes on the work of the Government Names Commission and the utilization of its index of names. Transliteration rules from Arabic into Hebrew, from Hebrew into Roman script and from Arabic into Roman script

* The original text of this report was contained in document E/CONF.61/L.15.

[1] N. Kadmon and M. Talmi, *Transliteration of Geographical Names in the Topographic Maps of Israel*, Cartographic Papers No. 4 (Tel-Aviv, Ministry of Labour Department of Surveys, 1969).

constitute the main body of the paper, which closes with some notes on the First United Nations Conference on the Standardization of Geographical Names.

In the field of standardization of names, *sensu stricto*, few additions to the existing rules followed by the Commission were needed. One of these governs the case of multilingual areas covered by the work of the Names Commission: whenever a town or other settlement carries an Old Testament name as well as a new name and both are in use, the official Hebrew map will show the former as main and the latter, space perpermitting, as secondary name.

In the domain of geographical terminology one of the decisions of the Government Names Commission pertains to the term "Tel". The Hebrew *Tel*, both as a generic term and as a component of a geographical name, today denotes an archaeological mound, while the Arabic *Tell* has a wider meaning. Whereas in the past Hebrew names of places in Israel that included the Arabic term "Tell" were formed by the translation of تل into תל ("Tel", according to the official transliteration rules from Hebrew into Roman script), local topography is now taken into account, so that *Tell* is translated into either *Har* (mountain) or *Giv'a* (hill). Thus, "Tell Warda' becomes "Har Warda", while the archaeological site "Tell el Qādī" remains "Tel Dan" (*Qādī* = *Dan*, "Judge").

The transliteration systems employed by the Survey of Israel in all authoritative maps have by now become thoroughly crystallized and standardized. The system of transliteration from Hebrew into Roman script based on the "simple" (as against the "exact" or "scientific") method evolved by the Academy of the Hebrew Language[2] has been modified by one addition, namely the use of an acute accent to signify a stressed Hebrew zeré (i.e. é). Thus "Bet Hillél", "Bet Él", but "Elat" (the two former names have stressed, the latter an unstressed, zeré in Hebrew).

The system for transliterating from Arabic into Hebrew used by the Survey of Israel is based, with a few minor modifications, on that evolved by the British Mandatory Government in 1931.[3] This system requires the use of vowel points, which are always included in official maps, as well as a number of diacritical signs. However, the Ministry of the Interior utilizes a somewhat different system,[4] employing Hebrew letters for vowel points. Work by representatives of both offices has already markedly reduced the differences between the two systems.

While transliteration is used for the conversion of Hebrew and Arabic place-names in Israel into Roman script, the European conventional form is employed in a small number of cases. Thus the form used is "Jerusalem" and not "Yerushalayim", "Nazareth" and not "Naẓerat", "Tiberias" and not "Teverya", "Haifa" and not "Ḥefa".

The task of compilation of a complete index of geographical names in Israel has, as yet, been only partially accomplished. A gazetteer of all cities, towns, villages and other settlements accompanies the 1:250,000 map of Israel. A complete list of the approximately 4,500 geographical names appearing in the 1:250,000 map was prepared especially for the English edition of the Atlas of Israel which was published in 1970. A listing of all names treated by the Government Names Commission either in the first instance (new names given by the Commission) or in the second (existing names ratified by the Commission) exists only in the form of card files. This very detailed source material includes, *inter alia*, the type of object named, present and former names, co-ordinates, administrative data such as dates and authorization of changes and references to the issues of the Official Gazette in which they were published etc.

It is intended to transfer the card file mentioned in the previous paragraph onto punch cards, with two aims in mind. First, to facilitate processing; thus it will be possible to generate and point alphabetic files pertaining to specific generic types of objects easily. Secondly, to speed up updating and printing, especially if the computer line-printer prints directly onto repro material.

The chief obstacle to the automation of a Hebrew names file is the need for vowel points, which cannot conveniently be punched or printed in the ordinary way by computer/lineprinter system. One solution is to insert those points in handset type, though this would markedly detract from the greater speed made possible through automation. Another would be the adoption of unpointed orthography in which letters are substituted for vowel points. A combined computer-photosetting system might be the answer. However, the entire problem is still under review, and it is hoped to report on progress in this field at the next Conference.

[2] "Rules for 'simple' and 'exact' transliteration", *Israel Official Gazette*, No. 519, 23 January 1957 (in Hebrew).

[3] *Transliteration from Arabic and Hebrew into English, from Arabic into Hebrew and from Hebrew into Arabic* (Jerusalem, Government of Palestine, 1931).

[4] *Rules for the Transliteration from Arabic into Hebrew and for the Spelling of Arabic Names*, 3rd ed. (Jerusalem, Ministry of the Interior Department of Minorities, 1966) (in Hebrew).

REPORT PRESENTED BY AUSTRIA*

I

In accordance with resolution 4, recommendation A of the First United Nations Conference on the Standardization of Geographical Names,[1] a national and three regional committees for the standardization of geographical names have been established.

* The original text of this report was contained in document E/CONF.61/L.16.

[1] *United Nations Conference on the Standardization of Geographical Names*, vol. 1, *Report of the Conference* (United Nations publication, Sales No. E.68.I.9), p. 10.

National committee

The national committee is the Abteilung für Kartographische Ortsnamenkunde der österreichischen Kartographischen Kommission in der Österreichischen Geographischen Gesellschaft (Department for Cartographic Place-Name Research of the Austrian Cartography Commission of the Austrian Geographical Society), which was founded in 1968. Correspondence should be addressed to this Department marked: Attention Mr. Josef Breu, Österreichisches Ost- and Südost-europa-Institut, Josefplatz 6, 1010 Wien, Austria.

The aims of the Committee are laid down in the statutes, parts of which are quoted below.

"*Section 1.* It shall be the principal aim of the Department for Cartographic Place-Name Research to further the standardization of geographical names in Austria in accordance with the recommendations made by the United Nations.

"*Section 2.* Since, on the one hand, the federal structure of Austria precludes the establishment of a central governmental names authority, whereas, on the other, it is necessary to harmonize the efforts of the various bodies concerned with the spelling of geographical names, it shall be the task of the Department for Cartographic Place-Name Research to act as a co-ordination centre for all the competent federal and provincial bodies and the scientific institutions concerned.

"*Section 3.* The meetings of the Department for Cartographic Place-Name Research shall be conducted as discussions among experts under the chairmanship of the head of the Department, who shall be elected by the Board of the Austrian Geographical Society.

"*Section 4.* The institutions or individuals to be invited to the meetings of the Department for Cartographic Place-Name Research shall be named from meeting to meeting with due regard to the problems under discussion."

Provincial commissions

Burgenland. Nomenklaturkommission beim Amte der Burgenländischen Landesregierung (Toponymic Committee of the Office of the Provincial Government of Burgenland). Correspondence should be addressed: Attention Mr. August Ernst, Landesarchiv–Landesbibliothek, Freiheitsplatz 1, 7001 Eisenstadt, Austria. Founded in 1969.

Extracts from the Statutes are quoted below.

"*Section 1.* The Office of the Provincial Government of Burgenland, Dept. XII/2, Provincial Archives & Provincial Library, includes a Toponymic Committee whose members shall be appointed by the Provincial Government of Burgenland. The Toponymic Committee shall be entitled to appoint additional experts for special problems. Subject to the legislation in force, it shall act as the competent authority for all questions concerning the naming of geographical features in Burgenland. This is to guarantee the correct rendering — both from the technical and from the linguistic points of view — of the geographical names used in Burgenland in official maps, books, lists etc."

"*Section 2.* In the performance of their tasks the members of the Toponymic Committee shall act as experts and shall not in this capacity be subject to directives from the Provincial Government or from any member of that Government responsible under the existing departmental subdivision.

"*Section 3.* It shall be the task of the Toponymic Committee to study thoroughly, and decide upon, any matters brought to its attention. If necessary, expert opinions shall be given and recommendations made to the authorities and agencies of the Province and of the Federation, the communes and other interested parties, on the basis of these decisions."

Styria. Steirische Ortsnamen-Kommission beim Amt der Steiermärkischen Landesregierung (Styrian Place-Names Commission of the Office of the Styrian Provincial Government). Correspondence should be addressed: Attention Mr. Fritz Posch, Steiermärkisches Landesarchiv, Burgergasse 2A, 8011 Graz, Austria. Founded in 1970. This is a special commission which is attached to the Styrian Provincial Archive.

Tyrol. Nomenklaturkommission beim Amt der Tiroler Landesregierung (Toponymic Committee of the Office of the Provincial Government of the Tyrol). Correspondence should be addressed: Attention Mr. Eduard Widmoser, Landesarchiv, Herrengasse 1, 6010 Innsbruck, Austria. Founded in 1969. This is a special commission attached to the Office of the Provincial Government of the Tyrol.

Vorarlberg. The Nomenklaturkommission im Amte der Vorarlberger Landesregierung (Toponymic Committee of the Office of the Provincial Government of Vorarlberg), Montfortstrasse 12, 6901 Bregenz, Austria, was already in existence before 1967, having been founded in 1953.

Extracts from the Statutes are quoted below.

"*Section I.1.* The Toponymic Committee shall review the spelling of field names and of the names of mountains, inhabited places and communes.

"*Section I.2.* Changes in the spelling of names may be examined *ex officio* or at the request of the Committee. Before an opinion is given or a decision made the bearers of the name concerned and, if necessary, the person or persons who requested the change should be heard.

"*Section I.3.* To avoid misunderstandings, names which designate geographical features in a border area and whose spelling is therefore of interest to the neighbouring country as well should retain their traditional generally used form wherever possible unless a solution satisfactory to both countries has been found."

II

As the government agency responsible for te publication of official maps, the Federal Office of Gauging and Surveying has modified its instructions in accordance

with resolution 4, recommendations B and C[2] of the First United Nations Conference on the Standardization of Geographical Names.

These revised instructions include the following specific provisions.

(a) *Preparation of field research.* The required names should be collected from all reliable sources available and entered on a special form. The names may be divided into two groups. The names of settlements should be taken from the official gazetteer of Austria and shall remain binding in this form. The *Taschenbuch der Alpenvereinsmitglieder* (Handbook of Mountaineering Association Members) and the *Verkehrsbuch* edited by the Verband alpiner Vereine Österreichs shall serve as authoritative sources for the spelling of the names of alpine huts, alpine hostelries and mountain inns not listed in the official gazetteer. The other geographical names listed on the form provide the surveyor only with a basic clue. The form should contain names compiled from the following sources: the provisional Map of Austria at 1:50,000, maps of the old Survey at 1:25,000, the cadastre *Flächenverzeichnis der österreichischen Flussgebiete* (area register of the Austrian river basins), the *Wasserbuch* (hydrographic register), the tourist maps of Freytag Berndt and Artaria, forest maps, maps issued by the Mountaineering Association, guide-books, and the like.

(b) *Field procedures.* Although the names of settlements are as a rule taken over directly from the gazetteer, it is still important to check and verify them. First of all, it is necessary to establish to what extent the names listed in the gazetteer are officially authorized. For this purpose mention must here be made of certain facts not discussed in the Report of the Austrian Government to the First United Nations Conference on the Standardization of Geographical Names in 1967[3] (E/CONF.53/4). In Austria the spelling of the names of communes is generally the responsibility of the provinces and requires the approval of the provincial government. Official sanction by the Federal Government must be obtained only in Burgenland. In many provinces the spelling of the names of inhabited places and parts of inhabited places is determined by the communes themselves. Inhabited single buildings are named by the owner. Before every census the Austrian Central Statistical Office sends questionnaires containing the names given in the latest edition of the gazetteer to the communes. The communes are asked to report any changes falling within their competence and are informed that these names will have official character. A review of the names of settlements given in the gazetteer by the surveyor is necessary for two main reasons.

First of all, the communal authorities very often leave unchanged names of parts of inhabited places that have gone out of use although they are given in the census questionnaires. It is, however, the task of the surveyor not to take up names which are meaningless to the map-user. The Federal Office of Gauging and Surveying reports controversial cases to the Central Statistical Office, which will eliminate the discrepancy so that the same name is used in the map and the gazetteer.

Secondly, this review by the surveyor is necessitated by conditions encountered above all in the western part of Austria. In many cases, particularly in Vorarlberg, the main settlement of a commune does not bear the name of the commune, or the proper name which is used for it outside the commune, but some local name which is meaningful and comprehensible only within the particular commune, such as "Hof", "Platz", "Dorf" or "Kirchdorf". These names, which are not given on traffic signs either, would be out of place in a map. It has been the practice to replace them by the name of the commune concerned which is actually used in the region to designate the main settlement of the commune. There has been some tendency in the more recent editions of the gazetteer to adjust the names to practical linguistic usage, e.g. "Hof, auch Andelsbuch", "Platz, auch Bezau" etc., as compared with the former use of "Hof" and "Platz" only.

When there is conflicting usage between the name of an alpine hut as given in the Handbook of Mountaineering Association Members and as given in the *Verkehrsbuch* of the Verband alpiner Vereine Österreichs, the spelling used by the owner is authoritative.

In spite of these few exceptions the names of settlements do not present particular difficulty to the surveyor. The situation is completely different where other geographical names are concerned, i.e. names of bodies of water, glaciers, mountains, passes, valleys and areas of any kind. Although, as may be seen from the Report of the Austrian Government to the First United Nations Conference on the Standardization of Geographical Names in 1967, different official reference sources with varying areas of application exist concerning such names, the surveyor who wants to produce a map which is linguistically as well as in other respects up to modern standards will have to investigate current usage and record it in the map. As has been shown above, the field names given in the cadastre are very often obsolete. For this reason the surveyor has to consult reliable persons living in the area concerned (preferably foresters, teachers, parsons, members of mountaineering associations, farmers etc.) to obtain information on geographical names other than names of settlements. Only such names as are actually used by the local population may be incorporated into the map. Names which occur in written documents but are unknown to the population should not be adopted. Thus the surveyor may make use only of those names which have been confirmed to him by reliable persons. Unconfirmed or unchecked names must not be used.

As a rule the surveying personnel will hear the names in a dialectal form. These dialectal names should be converted into the literary language in all those cases in which the relation between the dialectal pronunciation and the written form of a name is easily recognizable: for example, "Steinberg" not "Stoaberi", "Altenbach" not "Oidenbach". If a word exists only in dialect, a modified dialectal spelling has to be used which takes

[2] *Ibid.*, pp. 10-11.

[3] *Ibid.*, vol. 2, *Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. E.69.I.8), pp. 35-38.

into account local spelling traditions. Here the "Verzeichnis schwieriger in geographischen Namen vorkommender Wörter", edited by J. Breu and distributed by the Federal Office, has proved to be a valuable help (see section IV).[4] Generally a purely phonetic spelling of dialectal words should be avoided. When names are recorded in literary or modified dialectal spelling it is important that their meaning be clear. Names of uncertain meaning for which the surveyor himself cannot find a good spelling form should be taken down provisionally in phonetic spelling. All information required to describe the nature, extent and appearance of the topographical feature concerned should be gathered and handed over to the head of the field group, who will submit the material to experts, e.g. those of the German Department of the University of Vienna.

It is necessary to make a sharp distinction between names of areas, fields, routes etc. Very often names of areas, hydrographic features and routes are at the same time used to designate lands and fields. In such cases the topographical feature which is of greater importance for the map-user is indicated on the map. Examples: mountain and field are both called "Steinberg" — indicate mountain; brook and field both called "Erlbach" — indicate brook; route and field both called "Laaber Steig" — indicate route. Moreover, the fact must be taken into account that triangulation points situated on unnamed elevations used to be designated by the names of adjacent fields, settlements, hydrographic features etc. Therefore the names of these points are very often not real mountain names and should be used with caution. In the field the surveyor should generally write out all the names on the transparent sheet. The only exceptions are abbreviations used in connexion with a symbol (or a ground plan). In no case should the traditional abbreviation "A." be used, which may be read "Alp" or "Alpe" or "Alm". In each case the surveyor should specify which of the three names is locally used.

The surveyor carries with him extracts from the general rules for the German spelling of geographical names from the *Duden Wörterbuch geographischer Namen: Europa*, edited by the Ständiger Ausschuss für Geographische Namen (Mannheim, 1966). These rules, which govern the use of capital and small letters as well as the writing of a particular combination as one word or more than one with or without a hyphen, must be closely observed.

(c) *Evaluation of field work in the Office.* Here the individual surveying maps must be brought in accord with the Map of Austria at 1:50,000. Moreover, all the necessary abbreviations should be in conformity with the official instructions. The standard list of abbreviations takes into account the latest research in this field and follows modern spelling rules. In addition, the Office checks the spelling of names, particularly as regards the use of capital or small letters and the writing of a particular combination as one word or more than one. Moreover, the Office is responsible for the correct description of larger entities such as areas, groups of mountains, large valleys and the like. The standard authority for the spelling of these important names is the *Duden Wörterbuch geographischer Namen.*

(d) *Names in multilingual areas* are treated in accordance with the principles laid down in the paper submitted by the Austrian Government to the First Conference in 1967.[5]

III

In accordance with resolution 4, recommendation E[6] of the First Conference, the Federal Office of Gauging and Surveying has, together with the Department for Cartographic Place-Name Research of the Austrian Cartography Commission, compiled a gazetteer of geographical names in Austria, which will shortly appear in print. This is a first small edition based mainly on the names given in the official *Karte von Österreich 1:500,000* (Map of Austria at 1:500,000). The plan of the book follows the pertinent recommendations of the First United Nations Conference on the Standardization of Geographical Names. The book will include:

(*a*) The rules for the German spelling of geographical names;

(*b*) A glossary of words frequently recurring in cartographic names;

(*c*) An alphabetical gazetteer of all categories of geographical names in Austria with detailed definitions and information on location and pronunciation.

IV

In accordance with resolution 19, recommendation A[7] of the First Conference, J. Breu has compiled the "Verzeichnis schwieriger in geographischen Namen vorkommender Wörter" (list of difficult words occurring in geographical names) mentioned above, section II, which contains 521 entries. It includes recommended spellings and spellings to be avoided, gives the meaning of the words and adds further observations where necessary.

[4] *Ibid.*, pp. 36-37.

[5] *Ibid.*, section V, p. 37.

[6] *Ibid.*, vol. 1, *Report of the Conference* (United Nations publication, Sales No. E.68.I.9), p. 11.

[7] *Ibid.*, p. 14.

REPORT PRESENTED BY CANADA*

In a country such as Canada, with an area of almost 4 million square miles (10 million square kilometres), one finds an endless quantity and variety of topographic features. They must be counted not by the thousands, but by the hundreds of thousands. Those now identified approach half a million. A much larger quantity remain to be named.

Historically, Canada is a very young country. Its centenary celebration coincided with the United Nations Conference on the Standardization of Geographical Names in 1967. We have been fortunate in Canada in having had an authority concerned with geographical names for most of our first hundred years. The Geographic Board of Canada, from which the Permanent Committee has descended, was established in 1897. Each of the 10 provinces of Canada is represented on the national names committee, but each retains jurisdiction over names within its boundaries. Some have established geographical names boards of their own, without detriment to the ideal of nation-wide co-operation. A national gazetteer has been created, with a volume devoted to each province, in which the decisions on names are expressed and made available to the public. The maps produced by national and provincial programmes carefully reflect these rulings.

Since the First United Nations Conference, Canada has been able to produce two new gazetteers, to issue revisions of four others and to add approximately 30,000 new toponyms to our existing stock of names. We have progressed in the development of field collection techniques, so that in two years we have been able to verify the geographical names of the entire province of New Brunswick — an area exceeding 28,000 square miles (62,000 square kilometres). From this survey, a new enlarged gazetteer and an historical study have been derived, which will shortly be published.

In participating in the work of the United Nations leading up to this Conference, we have particularly endeavoured to contribute to the study of the names of undersea features, a subject of much consequence to a country with a mainland coastline extending for 44,000 miles (70,000 kilometres).

Despite these useful accomplishments, many problems and much work remain. Canada has a richly variegated cultural inheritance. While two official languages, English and French, reflect the predominant cultural groups, the native peoples, Indians and Eskimos, are significant elements in the population, and immigrants from many lands have made Canada their home. More than 30 languages are spoken. In this setting, geographical names present especially difficult problems.

Canadian delegates will be presenting several papers based on our experience. We hope they will be useful contributions. We hope also that we can gain helpful guidance and new concepts from the geographers, cartographers, linguists, toponymists, historians and other experts present here.

Pamphlets describing the functions and responsibilities of the Canadian Permanent Committee on Geographical Names, and listing the principles of nomenclature that guide the decisions of the Committee, are available. Also available for examination are samples of the Gazetteer of Canada series, and of the associated semi-annual supplements.

Canada has maintained its interest in the objectives established at the first world conference. We hope that this second conference may make significant progress toward their attainment. They can be realized only by the full and free exchange of information, by mutual helpfulness and by good will. To these ideals Canada pledges her full support.

* The original text of this report, prepared by J. P. Drolet, Assistant Deputy Minister, Department of Energy, Mines and Resources, was contained in document E/CONF.61/L.33.

THE QUEBEC GEOGRAPHICAL BOARD AND THE STANDARDIZATION OF GEOGRAPHICAL NAMES*

The Geographical Board was first established by order in council No. 1373 of 15 November 1912. Act No. 10, chapter 24, assented to on 14 February 1920, authorized the Lieutenant-Governor-in-Council to establish the Board officially, to nominate its members and to assign it its powers and duties. After the Act had been assented to, the first ministerial decree, No. 574, was approved to this effect on 6 April 1920.

The Geographical Board, which is represented on the Executive Council by the Minister of Lands and Forests, is responsible for selecting official geographical names in Quebec. It checks whether place names are correct and in current usage. If necessary, it checks established usage *in situ* by an oral inquiry. It fixes names by spelling them according to the norms of the French language. To supplement information obtained from miscellaneous sources, the Board may be called upon to carry out its own research into certain geographical names, either by communicating in writing with the persons involved (indirect inquiry), or by appointing a representative to interview people on the spot (direct inquiry).

For the last few years the Board has stressed the need for very thorough inquiries into the forms used in both old and new documents, and also into traditional forms, which are among the most valuable of stable elements. In accordance with the provisions of the law, the Board's decisions are subject to the approval of the Minister and become operative after their publication in the *Gazette officielle du Québec*.

* The original text of this paper, prepared by J. Poirier, Secretary of the Quebec Geographical Board, and submitted in French, was contained in document E/CONF.61/L.35.

The most important requirement for a map is that it should faithfully represent the regions of which it is, so to speak, a picture; for this it is necessary to give priority in cartographic papers and documents to names in current usage. A map would rapidly become incomprehensible if amendments or changes were made to geographical names having stable oral forms. The rule that the names to be recorded on maps should be those in local usage is one that should be followed as closely as possible. By so doing, the Board hopes to eliminate any risk of error and of arbitrary establishment of names.

Names to be collected

It is necessary to distinguish between the names of inhabited places and those of natural topographical features. The former are better known, because of the frequency with which they are used. The latter identify geographical features such as lakes, rivers, mountains, hills, capes and, in certain cases, artificial constructions, such as bridges, fly-overs, tunnels and viaducts.

The documentation to be collected should relate to the following items in particular:

(*a*) Localities, hamlets and towns, rows and all kinds of groups of houses;

(*b*) Orography: peaks, hills, rocks, dunes etc.;

(*c*) Hydrography: lakes, rivers, streams, bays, coves, falls, rapids, ponds, pools, marshes etc.;

(*d*) Woods, nurseries, gardens, parks, terraces, crossroads (circuses), paths etc.;

(*e*) Public roads or thoroughfares with well-known names, bridges, dams etc.;

(*f*) A number of other small geographical features, such as viewpoints or scenic attractions.

Names of municipalities

It is important, before the name of a municipality is definitively fixed, to consider the historical events associated with the place or region, the natural topographical details, and the possibility that a name has already been given to some particular spot nearby. In addition, one should avoid as far as possible:

(*a*) The use of a name already found in the *Répertoire géographique du Québec;*

(*b*) Names which are too long;

(*c*) The use of the points of the compass;

(*d*) Names which begin or end with the word "ville", unless it forms an integral part of the name itself, as in Banville, Verville, Villeneuve, Villeroy, Villemontel etc.;

(*e*) Hybrid forms, i.e. those which are made up of elements from different languages;

(*f*) The use of the names of living persons;

(*g*) Appellations made up of given names and surnames.

To sum up, careful research will make it possible, in most cases, to find a name which evokes an important phase in the history of the municipality or is connected with some particular feature of the area. The cadastral survey, in particular, is a source of highly valuable documentation which can be used to great advantage when selecting the name of a municipality.

It may happen that the public or the authorities of a town or an inhabited area show a desire to change the name of the place in which they live or of a local geographical feature. Several reasons may be invoked by municipal administrations, public or private bodies, or the local population, for changing the name of their municipality. In some cases the old name is too long; in others, the name has an unpleasant sound or causes confusion; sometimes, it seems to be pejorative. The growth in importance of the municipality or the elimination of a homonym are also good reasons for the desire to change geographical names which are considered obsolete or inaccurate.

A change of name becomes valid after publication in the *Gazette officielle du Québec* of a notice bearing the signature of the Mayor and of the Secretary-Treasurer of the municipality involved and after publication of the order of the Executive Council. It is not permissible for a change of name to affect the rights or responsibilities of the municipalities or taxpayers.

It is customary for the proposed name or names to have some connexion with local history or with the topography of the area. Research to this end may be easily undertaken by consulting regional monographs, parish archives, local groups and organizations, firms, clubs, chambers of commerce and other associations, as well as elderly citizens.

Lakes, watercourses, islands, hills and other geographical features sometimes undergo a change of name, and this oftens happens unnoticed. It can also happen that the local population or authorities request a change of name, mainly to avoid repetition of commonplace terms such as *long*, *croche*, *gros*, *grand*, or to perpetuate the name of a citizen or some local dignitary. The sponsors of such a move are required to make a written request to the Board, providing adequate information on the exact location of the geographical feature, the correct spelling of the proposed name and the source or origin of the name. It is essential that the applicants provide all available information on the topography of the geographical feature or on established local usage. Wherever possible, a copy of the municipal council resolution supporting the project should accompany the application.

Writing of Amerindian names

On the basis of a resolution of the United Nations Conference on the Standardization of Geographical Names, dated 22 November 1967, the Geographical Board has for the present adopted the principle of transcribing Indian toponyms by a system of phonemic notation. Eskimo place names give rise to several problems, notably that of their transcription. To avoid the difficulties inherent in writing these names, the Board adopted, in 1964, the principle of rational spelling of Eskimo place names, using the standardized system. The basic principle of this standardized orthography is that it conforms to the structure of the Eskimo

language, and it is now applied by the Board to names collected recently.

Names of post-offices

It is, above all, the local population and authorities who should propose new names for post-offices. Those concerned are required to provide precise details on the origin of the names submitted. Where there are several suggestions, the application must indicate which one has the widest support.

Although post-offices come under federal jurisdiction, the Geographical Board receives the proposed names from the central administration department of the Ministry of Posts, and, bearing in mind that the names of post-offices are closely linked to the names of municipalities, it studies them and makes its recommendations to the Ministry.

The names submitted must be distinctive and exclusive in order to avoid any confusion in the processing and dispatch of mail. Additions to place names used to denote post-offices are only permitted when they are necessary to distinguish more clearly between post-offices with identical or similar-sounding names.

In the case of an officially established municipality, the proposal must be supported by the municipal council. In all other cases, it must take the form of a request.

REPORT PRESENTED BY MADAGASCAR*

Past and present situation

Various factors should, in principle, facilitate the standardization of geographical names in Madagascar:

(*a*) The homogeneity of the national language, Malagasy, which is both a written and a spoken language;

(*b*) The simple and phonetically univocal spelling, which uses letters of the Roman alphabet (there are, it is true, some pronunciation features peculiar to Malagasy, but these are few in number and easy to remember);

(*c*) The clarity of the rules of Malagasy grammar;

(*d*) The relative simplicity of names (the reason for this is that the names are essentially descriptive, and closely linked to the various physical, natural, historical, economic and even social characteristics of the features named);

(*e*) The absence from the history of Madagascar of any profound social upheaval, such as mass migration, which would bring about changes in, or the disappearance of names;

(*f*) The publication of names made available by extensive base-map coverage on a scale of 1:100,000, which now covers 89 per cent of the island.

While is most cases acceptable solutions have been found, considerable problems remain.

First, the existence of numerous dialectal variants, which differ only slightly from the national language, gives rise to transcription difficulties. The symbols of the present alphabet are considered adequate to transcribe them, but they have not been used consistently either over a period of time (inevitably, since certain symbols are of recent creation), or between different geographical areas. Topographers must be given linguistic training, however rudimentary. The use of tape-recorders is planned.

In addition, the lack of co-ordination between various official services and private bodies leads to confusion. For example, one village is called Soavina (Ambositra) by the Post Office and Soavina (Ambatofinandrahana) by the Ministry of the Interior.

Ambiguity is also caused by duplication, which is frequent: for instance, there are 70 places named Ambohibary and 35 named Ambatolampy in the province of Tananarive. However, this could be eliminated if it were specified in which administrative districts the places are located.

Problems also arise when there are two names for a single entity, such as "Nosy Alanana" (which is the local form) and "Ile aux Prunes" (which appears on modern maps).

These few examples are sufficient to indicate the extent of the problem and the need for a serious study by an appropriate body. For these reasons, the Geographical Service took up the problem immediately after the First Conference on the Standardization of Geographical Names and, in December 1968, established a Toponymy Commission.

Progress made since the Geneva Conference

The Toponymy Commission deals with questions concerning geographical names which are to appear on cartographic publications of the Geographical Service. One of our principal publications is the base map on a scale of 1:100,000, which at the end of 1971 covered 89 per cent of the island (410 sheets out of a total of 464). However, the work of the Commission also covers other fundamental and detailed studies.

A. Base-map on the scale 1:100,000

Systematic studies are made before the first publication or republication of each updated sheet.

An average of 200-400 names appear on a 1:100,000 base-map covering 18′ of longitude and 24′ of latitude. As part of the preparatory work, all disputed names, which do not normally number more than 30, are listed and annotated with the causes of uncertainty or ambiguity (misspelling, defective transcription, duplication, multiple naming, incorrect specification of locality etc.). All

* The original text of this report, prepared by the Toponymy Commission of the Geographical Service and submitted in French, was contained in document E/CONF.61/L.38.

the necessary documentation is assembled — notebooks and tracings of names provided by topographers, old maps, or any other documents. If necessary, and where possible, morphological and etymological analyses are made of disputed names.

Correct solutions are proposed in most cases, and the few undecided questions are referred, with the observations and any proposals of the Commission, to the official authority in the area concerned, which decides on the name to be given. This method has produced excellent results.

B. Large-scale maps; maps of towns or individual surveys

The above methods for the collecton of names in the field and their treatment and study by the Commission are applied here too, and produce acceptable results.

It should be noted that these studies do not relate to names of communes listed in the official geographical code, which may not be modified except by government decree.

C. Gazetteer of geographical names

The Commission has conducted studies for the publication of a gazetteer of standardized names. In view of the magnitude of such a task, it has been proposed to begin with a gazetteer of the names which appear on 1:1,000,000 maps, and in particular the Map of the World on the Millionth Scale as it relates to Madagascar. That will be followed by gazetteers corresponding to larger scale maps (1:500,000, 1:100,000).

The gazetteer will contain the following information:

Standardized name (or any variants);

Nature of the feature;

Geographical co-ordinates;

Administrative unit in which it is located;

Reference to the sheet of the 1:100,000 base-map which contains the feature.

Although no national names authority yet exists, the standardized name will be the name which appears on cartographic publications of the Geographical Service, which remain the official reference documents.

Because of a lack of staff, the Commission has been unable to start work on this project.

D. Cartographic technical terms and generic terms

The Commission has carried out detailed research on generic terms, with a view to listing all generic terms in the national langage and studying their usage.

More general research on tecnical terms used in cartography is under way. Its aim is to examine whether the technical vocabulary of the national language has the potential for the translation of technical terms which are better known in, for example, French or English.

E. National names authority

The working methods and basic principles adopted by the Toponymy Commission have so far proved satisfactory.

However, its powers of decision-making are limited, which is a handicap. For example, many towns have two names:

Official geographical code	*Local usage*
Tananarive	Antananarivo
Tamatave	Toamasina

The Commission establishes the authenticity of the local usage, which is usually supported on sound historical, grammatical or geographical grounds, but does not have the power to modify such official names, as has been shown in section B above.

In addition, the sphere of research should be broadened by enlisting other members, such as linguists, geographers or historians from public or private bodies engaged in work on geographical names.

There is an increasing need for a national authority with greater powers, adequate numbers of staff and diversified and broad competence, and the Commission has held exploratory meetings with a view to the establishment of such a body. Preparation is at present under way, and it seems probable that the project will succeed.

REPORT PRESENTED BY THE UNION OF SOVIET SOCIALIST REPUBLICS*

Introduction

The standardization of geographical names in a multinational State such as the Soviet Union is a complicated task. A successful solution of the problem of nationalities is one of the achievements of the Union of Soviet Socialist Republics. As a result, one can see the languages of all the nations and nationalities of the Soviet Union developing in every respect. Scientific works, fiction, geographical maps and atlases, newspapers and magazines are published in all these languages in millions of copies. This leads to the necessity of establishing standard and compulsory forms of geographical names in each officially adopted language of the Soviet Union, all of them being equal in rights. Therefore in carrying out domestic standardization we face the problems of both national and international standardization.

In the USSR, the period after the 1967 Geneva Conference was characterized by forther intensive development of toponymic investigations providing scientific and methodical foundation for the practical work on the standardization of geographical names. Such toponymic research in both the development of theoretical problems and the regional study of selected areas is being carried out in the scientific institutions and

* The original text of this report was contained in document E/CONF.61/L.40.

universities of Moscow, the Urals, Siberia, the Ukraine, Latvia, Lithuania, Estonia and elsewhere.

As a result of such investigations, a number of monographs and scientific collections have been published recently. All-Union and regional scientific conferences on toponymic problems are held frequently (for example, the Conference on Oronymy (1967), the Conference on Onomastics of Povolzhye (1968-1970), the Ukrainian republic conference on onomastic science (1967) and the Conference on Toponymy of the Central Regions of Russia (1972)).

The study of vernacular geographical terms and other words producing the toponymy of national districts, regions, Autonomous Republics and Union Republics of the country, as well as of foreign countries, constitutes a substantial part of toponymic investigations. Linguists, geographers, historians, cartographers and other professional people working in central, republic or local scientific institutions and agencies take an active part in it. The work undertaken over the last four years has resulted in the publication of more than 15 glossaries containing the toponymic vocabulary and vernacular geographical terminology of many national territories, such as the north-eastern, eastern and central areas of the Russian Soviet Federal Socialist Republic, the Byelorussian SSR and the Azerbaijan SSR.

A. Development of rules for rendering geographical names of the USSR and foreign countries

The main principles behind the establishment of standard forms of names of geographical entities in the USSR in any official language of the Soviet Union were laid down in the paper "Problems of standardization of geographical names in a multinational State"[1] submitted to the First United Nations Conference on the Standardization of Geographical Names, held in Geneva in 1967. Practical transcription remains as the main method of rendering the geographical names of the USSR and foreign countries into the national languages of the peoples of the USSR.

Since all the nations and nationalities of the USSR have chosen the Russian language as a common language of international communication and collaboration, the elaboration of the rules for rendering non-Russian geographical names into Russian has become a task of primary importance.

A series of special instructions on methods and rules for transferring non-Russian geographical names into Russian is a result of work by the State cartographic and geodetic service. Thus far 62 such instructions for the languages of the USSR and 48 for the languages of foreign countries have been elaborated.

Since 1968 these instructions have acquired nationwide status, i.e. their application has become compulsory not only for cartographic agencies but for all the organizations of the USSR dealing with the publication of books, magazines, newspapers and other kinds of works.

In connexion with the broadening of the sphere of application of the instructions and, consequently, new requirements, a revison of previously published instructions was undertaken during the last four years taking into account the latest achievements in linguistics and toponymy. The instructions are supplemented with a short description of the language and toponymic structure of the region concerned. The lists of generic terms have been expanded considerably.

A new procedure of approval for the instructions for rendering place names of the Union and Autonomous Republics into Russian has been established. The draft instructions are first scrutinized in both central and republic scientific institutions (for example, in the institutes of language and literature of the Republics' academies of sciences) and then co-ordinated with the Republics' supreme legislative bodies (Presidiums of the Supreme Soviets). After that they are considered by the Permanent Joint Commission on Geographical Names and, lastly, submitted for final approval to the Chief Administration of Geodesy and Cartography under the USSR Council of Ministers. After completing this procedure, the instructions go into force and are compulsory throughout the country.

At present the publication of new instructions for rendering the geographical names of all Union Republics is nearing completion.[2]

The instructions for Autonomous Republics and national districts of the USSR are under preparation. The revision of previously published instructions for rendering place names of foreign countries[3] and the elaboration of new ones are also in progress now.

Similar instructions governing the rendering of Russian and other geographical names into the native languages of the peoples of the USSR are being drawn up in our Union Republics. This is connected with the constantly increasing number of maps, atlases, manuals and scientific works published in those languages. National encyclopaedias which are being issued in the Azerbaijan, Armenian, Byelorussian, Moldavian, Uzbek, Ukrainian and other Republics are fundamental works requiring the standardization of geographical names.

Taking account of the experience of many years in rendering foreign place names into Russian, republic scientific institutions have approved and accepted the method of practical transcription for transposing foreign names into their native languages. In doing so the non-Roman-alphabet languages employ Russian as a mediator language, and Roman-alphabet languages (Lithuanian, Latvian, Estonian) develop special rules for the immediate transfer of foreign names. The reference book on orthography and orthoepy of foreign proper

[1] *United Nations Conference on the Standardization of Geographical Names*, vol. 2, *Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. E.69.I.8), pp. 88-90.

[2] Published in 1970-1971 were: instructions for rendering geographical names of the Azerbaijan SSR, Byelorussian SSR, Georgian SSR, Kazakh SSR, Moldavian SSR, Latvian SSR, Lithuanian SSR, Turkmen SSR and Ukrainian SSR.

[3] Published in 1968-1971 were: instructions for rendering geographical names for Burundi, Ethiopia, Iceland, Ireland, Kenya, Malawi, South Africa (from Afrikaans), Zaire and Zambia.

names in the Latvian literary language prepared at the Institute of Language and Literature of the Academy of Sciences of the Latvian SSR can be cited as an example. The reference book is issued in separate booklets, each governing the rendering into Latvian of proper names, including geographical names, from a particular foreign language. Reference books of this type are now being prepared in the Lithuanian SSR and the Estonian SSR.

Simultaneously with the development of rules for rendering foreign geographical names into Russian and other languages of the USSR, the investigation and search for better ways of romanizing Russian place names has been continued during the last four years. In this connexion a comparative study of different romanization systems n use in the country was carried out. The subject is especially dealt with in another paper presented under item 11 (*a*) of the provisional agenda of the present Conference. This work will result in the elaboration of draft State standards which will establish a uniform romanization system for the Russian alphabet mandatory for all the institutions of the USSR. This system will be recommended by us for international use.

B. Collection and treatment of information on geographical names

The most complete initial data on names for geographical features are collected, as a rule, in the course of a topographic survey of a country. With a view towards systematizing this work, guidelines for the collection and establishment of place names in the course of topographical work were elaborated in 1969-1970 and introduced into practice in 1971. They contain recommendations concerning methods of gleaning initial data about names of geographical features in both densely and sparsely populated areas, the assignment of names to features hitherto unnamed and the alteration of existing names, and ways of registering and coordinating collected names with local administrative authorities.

When gathering place-name information in the field, the instructions for rendering geographical names from different national languages of the USSR mentioned in section A of this report are widely followed, as well as the glossaries of local generic terms.

Considerable work in the field collection of toponymic data is performed by scientific institutions. Toponyms, microtoponyms and vernacular generic terms are being collected in different regions and areas. Of interest in this regard is the collection of toponyms in the central regions of the European part of the USSR being carried out on the basis of special guidelines drawn up by the Toponymic Commission of the USSR Geographical Society.

The office treatment of data about geographical names gleaned from various sources and collected in the field includes the selection of names to be standardized, their analysis, and the systematizing and cataloguing of the established names.

The names of features to be standardized are usually selected according to the practical needs of the institutions concerned — cartographic services, bodies of administrative control, transport and communication agencies, and others.

When analysing the names selected to be standardized, all information obtained during the field work is thoroughly examined and checked. The most complicated task here is the analysis of place names occurring in the areas with multinational (and thus multilingual) populations. The analysis in such cases should determine: from which language (among several possible) the name should be transcribed; which is its correct original spelling and what variants it can have; the meaning of the name; and the standard Russian or other-language written form, established in conformity with the rules laid down in those of the instructions mentioned above that are relevant.

The catalogues of established (standard) names of geographical features are usually monitored by the organizations concerned. The volume and form of such catalogues, which should be suitable for practical work, are determined by the organizations themselves. According to the content, the catalogues can fall into two main categories: universal and specialized (thematic). Those of the first kind are usually created and monitored at cartographic services, and contain names of all kinds of features — cultural, economical and natural. Specialized catalogues are created and monitored in individual organizations: these include the names of features of a definite kind only, e.g. those of populated places and administrative units, transport offices or post-offices.

C. Compilation of reference books and dictionaries of geographical names

The names of the geographical entities of various kinds and categories established on the basis of the compulsory instructions are published, for general use, in special reference books and dictionaries.

The names of the populated places and administrative units in the USSR are listed in official reference books on the administrative and territorial divisions of the USSR and of its Union and Autonomous Republics and regions. The names therein are given in Russian and national lettering. Since 1968 over 40 reference books of this kind have been issued.

The passenger railway communication guide and directories of the USSR railway stations are issued annually, and the names in them are considered standard.

Dictionaries of geographical names of the USSR and foreign countries are published for a wide circle of users. Such dictionaries provide the standard Russian transcription (with stress indicated) of many names of man-made and natural features. Standard forms of place names in Russian and Roman characters can be found in the indexes of geographical names to the World Atlas.[4]

[4] *The World Atlas, Index-Gazetteer* (Moscow, 1968).

A special current information bulletin issued annually publishes any changes in names.

Nearing completion is a series of gazetteers providing both the Russian and the original spelling of the feature names of some Soviet Republics and foreign countries.

D. Organization of work on the standardization of geographical names

In the USSR the general organization of naming, renaming and establishing names of geographical entities of various kinds and categories, as well as the responsibility of different State bodies for such work, is regulated by special legislative enactments and governmental decrees (decrees of the Presidium of Supreme Soviet of the USSR and those of the USSR Council of Ministers). According to these decrees, the naming and renaming of populated places of Union and Autonomous Republics is the jurisdiction of the Republic concerned and is performed by special decisions of the Presidiums of Supreme Soviets of the Republics. The problems connected with the naming of other man-made or natural features are resolved on the same basis.

The Permanent Joint Commission on Geographical Names is the central body which co-ordinates the work on the standardization of geographical names carried out by the different institutions and agencies of the USSR. In accordance with a decision of the Soviet Government, the Commission has been set up under the auspices of the Chief Administration of Geodesy and Cartography (GUGK). It is composed of responsible representatives of all the ministries, agencies and scientific institutions interested in the work.

The department of geographical names of the Central Research Institute of Geodesy, Aerial Surveying and Cartography is the executive body which prepares materials to be submitted to the Commission for consideration. The department is also responsible for the elaboration of the instructions and the compilation of the dictionaries of place names mentioned above.

Republic commissions on geographical names, similar to the central Joint Commission, have been set up and are functioning in most Union Republics.

This organization of work on the standardization of geographical names enables both the State and the national interests of the peoples of the USSR to be taken into consideration.

REPORT PRESENTED BY AUSTRALIA*

In Australia there is no national authority for the co-ordination of geographical place naming, except for mapping purposes, when co-ordination is effected, as necessary, by the National Mapping Council.

Place-name authorities. Each of the states (Queensland, New South Wales, Victoria, Tasmania, South Australia, Western Australia) and each of the territories (Northern Territory, Australian Capital Territory) has its own authority for geographical place names. In addition, Papua New Guinea has an authority, and there is also an Australian Antarctic Place Names Committee. Details of these various authorities and their activities during the period 1967-1972 are given in annex I.

Research into place-names. The Australian Academy of the Humanities has set up a Place Names Committee to establish guidelines for research into the origins of Austrialian place-names and to help to co-ordinate work in this field. A number of researchers in the Australian National University (Canberra) have been active in the translation of place names in New Guinea. There has been activity at the University of Adelaide on aboriginal names in Central Australia. Details of these university-based research activities are given in annex II.

Gazetteer action. The Division of National Mapping has produced a gazetteer of all geographical names appearing on its 1:2,500,000 map of Australia and has in course of preparation a gazetteer of all names appearing on the 1:250,000 maps that at present cover the country.

The Federal Bureau of Census and Statistics is producing a list of inhabited places with populations greater than 150 at the time of the 1971 Census.

The State of Victoria has compiled a gazetteer of 15,000 place names in that State.

A gazetteer of geographical place names for Papua New Guinea is being prepared by a Federal department and should be completed toward the end of 1972. At this time, it will be possible to make computer print-out copies of the gazetteer as an official document, but no decision has yet been made.

General summary of the present situation. There is increasing official activity on place names, primarily as a service to map-makers. There is also developing an increasing awareness of the need to record the listing of place names back to early European settlement and to ascertain and preserve aboriginal place names for posterity. However, the research workers in these fields are few, and much greater effort is necessary before the fragmentary knowledge that could be derived from existing records and from the personal recollections of older people now living is lost.

The circulation of technical papers and recommendations emanating from the United Nations work for the standardization of geographical place names may well help to bring about uniformity between Australian place-name authorities and to bring their work into closer uniformity with international practice.

* The original text of this report, prepared by B. P. Lambert, Director, National Mapping, Canberra, was contained in document E/CONF.61/L.42.

Annex I

ACTIVITIES OF AUSTRALIAN GEOGRAPHICAL NAMES AUTHORITIES

STATE OF QUEENSLAND

Authority:
The Queensland Place Names Board,
Survey Office,
Department of Lands,
Brisbane, Queensland.
Australia 4000.

Activities. During the period 1967–1972 there has been increased activity compared with previous years and some 700 proposals have been considered. The Board has been active in making decisions over urban names around the city of Brisbane; in country areas it has given preference to names of aboriginal origin. It has done a good deal of work on place names for topographic maps and hydrographic charts.

STATE OF NEW SOUTH WALES

Authority:
Geographical Names Board of New South Wales,
Department of Lands,
Box 39, G.P.O.,
Sydney, New South Wales.
Australia 2001.

Activities. The inaugural meeting of the Geographical Names Board of New South Wales was held on 5 October 1966. It and subsequent meetings held in 1966 established the framework for economically and efficiently undertaking a systematic review of place names within the entire State. A policy for determining the suitability of names to be assigned was adopted and an outline of the functions and policy of the Board was circulated to all bodies and organizations, both Commonwealth and State, having an interest in mapping. A copy of the policy adopted by the Board is appended.

The review of place names in the State was started in 1967 and has continued up to the present time. The review is closely associated with modern mapping programmes undertaken in the Department of Lands and by Federal Departments. For this reason, it is the usual practice of the Board to examine, as a matter of first priority, place names extracted from provisional topographic maps awaiting publication. Following investigations and approval of the names as geographical names, the map is published bearing the endorsement that all printed place names thereon are geographical names assigned by the Geographical Names Board.

As at 29 February 1972, approximately 70,000 square miles have been reviewed, resulting in the assignment of almost 25,000 geographical place names. It is estimated that about 160,000 geographical names will eventually be assigned.

At the present time all geographical names are alphabetically indexed on cards which record a description of each feature named, the geographical co-ordinates, height above sea level (where applicable), map series, parish, county, and other information which will be required for the compilation of the dictionary of geographical names and the publication of the gazetteer which were provided for by the Geographical Names Act, 1966.

Selective information is extracted from cards already prepared when such information is sought by mapping agencies and defence authorities for the publication of maps or gazetteers. Such a process is uneconomical when performed manually, and a feasibility study has recently been completed into the adoption of a computer-based system to provide pertinent information on all geographical names. The format of this system has been devised so as to conform with the recommendations of the National Mapping Council, which would eventually require data from the Board for the compilation of a national gazetteer.

"*Geographical Names Board of New South Wales: policy adopted on 2 November 1966, on the determination of place names*

"(1) A name suggested for any place, which name owes its origin to the peculiarity of the topographic feature designated, such as shape, vegetation, animal life, etc., may be accepted but, in doing so, care should be exercised in avoiding duplication of names.

"Names such as Sugar Loaf, Sandy, Back, Bald, Deep, Long, Kangaroo, Reedy, Rocky, Spring and Stony are commonly used and should not be further repeated.

"(2) Euphonious names should, as far as possible, be retained.

"(3) Names of aboriginal origin or with a historical background are preferred.

"(4) The changing of long-established place names is generally not preferred, except where necessary to avoid ambiguity or duplication.

"(5) Very rarely should names of living persons be assigned to places and such an honour should be reserved only for persons of great eminence.

"(6) If considered appropriate, the names of eminent persons now deceased may be perpetuated, particularly those of early explorers, settlers, naturalists etc.

"(7) Long and clumsily constructed names and names composed of two or more words should be avoided.

"(8) The multiplication of names for different parts of the same topographical feature such as a stream or mountain range will be avoided and the one name applied to a stream or mountain range throughout its entire length.

"(9) The naming of forks, arms and branches of a river as "North Branch" and "South Branch" is not favoured and generally it is preferable to assign independent names to river branches.

"(10) The use of the cardinal points of the compass as a prefix or suffix to an existing name is not favoured.

"(11) Where names have been changed or corrupted by long-established local usage it is not usually advisable to attempt to restore the original form; that spelling which is sanctioned by general usage should be adopted.

"(12) When a choice is offered between two or more names for the same place, locality or feature, all sanctioned by local usage, the Board may adopt one of such names as is considered appropriate in accordance with the rules outlined above.

"(13) The possessive form should be avoided whenever possible without destroying the sound of the name or changing its descriptive application, e.g. Howes Valley should be written without the apostrophe.

"(14) The use of hyphens in connecting parts of names should, as far as possible, be avoided.

"(15) Names considered offensive or likely to give offence shall not be used."

STATE OF VICTORIA

Authority:
Office of the Place Names Committee,
Department of Crown Lands and Survey,
State Public Offices,
Melbourne, Victoria.
Australia 3002.

Activities. The Committee has compiled a gazetteer of place names in the State, containing approximately 15,000 names.

The Department of Crown Lands and Survey map of Victoria on the scale 1:500,000 and the complete series of maps of the State published at 1:250,000 have been reviewed by the Committee, as well as many of those at 1:100,000 at pesent in course of production.

Decisions have been given on many other place names of local interest.

State of Tasmania

Authority:
The Nomenclature Board of Tasmania,
Lands Department,
36 Davey Street,
GPO Box 44A,
Hobart, Tasmania.
Australia 7001.

Activities. The State authorities are currently engaged on a project to map the State on the scale 1:100,000 as part of a national programme, and the Board has been primarily concerned with the consideration of names for the national 1:100,000 maps.

Names in a map sheet are in the first instance collected from all maps and plans available, other historical documents and local informants; all names received for consideration are then recorded, and those approved by the Board are published in the State Government Gazette.

The Board does not approve an alternative name, nor does it support the use of one, even when shown within brackets, on maps, plans etc. The Board has prepared a draft booklet on its principles of nomenclature, with a view to publication.

State of South Australia

Authority:
Geographical Names Board of South Australia,
Department of Lands,
Box 293A, GPO,
Adelaide, South Australia.
Australia 5001.

Activities. The Board may investigate and determine the form, spelling, meaning, origin or history of any name assigned to any place and the application and usage thereof.

The Board inquires into and makes recommendations on any matters referred to it by the Minister relating to the names assigned or to be assigned to any place.

The Board, from time to time, compiles and causes to be published a gazetteer of geographical names containing such information in relation thereto as the Board may determine.

Generally, the policy of the Board is: to avoid the application of names of living persons to places, except in exceptional circumstances; to accept local nomenclature for post-offices and establishments; to discard the apostrophe and possessive "s" in place names; to oppose the introduction of trade names in South Australian nomenclature; and to recommend the adoption of names with due regard to avoidance of duplication (both within and outside the State) and to historical and geographical significance.

The Board has dealt mainly with names submitted for approval in connexion with urban development schemes and topographic mapping activities.

State of Western Australia

Authority:
Nomenclature Advisory Committee,
c/o Department of Lands and Surveys,
Perth, Western Australia.
Australia 6000.

Activities. Primarily the approval of names in connexion with topographic mapping projects.

Australian Capital Territory

Authority:
Canberra National Memorials Committee,
P.O. Box 158,
Canberra City.
Australia 2601.

Activities. The responsible minister submits proposals to the Committee for approval and then makes recommendations for the nomenclature of public places. These recommendations are subject to parliamentary review.

In determining names the minister must have regard to:

(*a*) The names of persons famous in Australian exploration, navigation, pioneering, colonization, administration, politics, education, science or letters;

(*b*) The names of persons who have made notable contributions to the existence of Australia as a nation;

(*c*) The names of Australian flora;

(*d*) The names of things characteristic of Australia or Australians;

(*e*) The words of the aboriginal natives of Australia.

Every determination of the nomenclature of public places is published in the Commonwealth Government Gazette.

Northern Territory

Authority:
Place Names Committee,
Lands & Survey Branch,
N.T. Administration,
Darwin, Northern Territory.
Australia 5790.

Activities. During the period 1967–1972 the Committee has investigated a large number of place names in support of topographic mapping and hydrographic charting operations, including in some instances arranging for the field investigation of proposals for previously unnamed features.

Papua New Guinea

Authority:
Place Names Committee,
Department of Lands, Surveys & Mines,
Konedobu, Papua New Guinea.

Activities. The principal activity has been the formalizing of names submitted for approval by local government councils and by mapping authorities.

Antarctica

Authority:
Antarctic Place Names Committee of Australia,
c/o Antarctic Division,
Department of Supply,
568 St. Kilda Road,
Melbourne, Victoria.
Australia 3004.

Activities. During the period under review, the Antarctic Names Committee of Australia met three times and also carried out a considerable amount of work by correspondence between the Secretary and members.

The Committee accepted many names in the Soviet *Atlas Antarktiki* published in 1966, and in the second and third editions of

Gazetteer No. 14: Antarctica published in 1966 and 1969 respectively by the United States Board on Geographic Names. The Committee also approved a number of new names for features explored by the Australian National Antarctic Research Expeditions, especially those in the Prince Charles Mountains, MacRobertson Land, which have been the focus of intensive topographic and geological surveys since 1969.

Decisions of the Committee have been published in ANCA Papers 68/1, 70/1 and 70/2.

Annex II

RESEARCH INTO GEOGRAPHICAL PLACE NAMES

NEW SOUTH WALES

The Place Names Committee set up by the Australian Academy of the Humanities initiated a pilot project for research into the origins of place names in the Walcha district of New South Wales, which is now being expanded into a wider project to cover the north-east portion of that State. This project is being undertaken by the University of New England, Armidale, N.S.W. A great deal of relevant data has been gathered together from various sources and a map archive established. These collections will be expanded, and a history of the evolution of names built up.

SOUTH AUSTRALIA

T. G. H. Strehlow, Professor of Australian Linguistics at the University of Adelaide (Adelaide, South Australia), has published a map of central Australia at approximately 1:1,000,000 showing aboriginal place names, and has provided a gazetteer on the back of the map. He will continue with the publication of further maps showing some thousands of such names.

PAPUA NEW GUINEA

The Research School of Pacific Studies of the Australian National University (Box 4, P.O., Canberra, A.C.T., Australia 2600) is very active in the study of the languages of Papua New Guinea and in the course of these studies records a considerable number of geographical place names.

D. C. Laycock of the Department of Linguistics has supplied the following information:

"The linguists working on languages of New Guinea have published, or are in the process of publishing, a number of area surveys giving detailed information on language names and distribution, and further information can be found in the various journals dealing with languages of New Guinea, including our own publication *Pacific Linguistics*. (For extensive bibliography, see my article (with C. L. Voorhoeve) 'History of Research in Papuan Languages' in T. Sebeok (ed.), *Current Trends in Linguistics*, vol. 8 (Mouton, The Hague, 1971).)"

Mr. Laycock also supplied a list of published surveys of languages in Papua New Guinea, of which copies can be made available on request.

He concludes by giving the following criteria which he has tried to follow in establishing names for languages:

"(1) The name should be as meaningful as possible to the people who speak the language — preferably, their own group designation for themselves;

"(2) It should not duplicate the name given to any other language in PNG;

"(3) It should not contain English words ("Rocky Peak language", "Sepik Plains etc.);

"(4) It should be spellable in the Roman alphabet without diacritics;

"(5) It should not be that of a village, clan, or locality, that is significantly smaller than that of the language area, or that is not accepted by the whole group without feelings of rivalry;

"(6) It should be the name by which the group is most commonly known, in both published and unpublished sources;

"(7) The name chosen may be arbitrary, or it may be a phrase in the language that translates some word or phrase, but where that is the case, the origin should be specified;

"(8) The name should not be a hyphenated form (e.g. Ulau-Suain).

"As you will see, some of these criteria will often conflict, and I cannot claim to have always achieved the perfect answer."

REPORT PRESENTED BY FINLAND*

FIELD COLLECTION AND STANDARDIZATION

Finnish names

The field collection and standardization of Finnish-language geographical names in Finland is undertaken by the Finnish Name Archives (Suomen nimiarkisto), which has a staff of 15 persons (12 linguists and 3 historians).

The main functions of the Archives are to collect, store, study and standardize Finnish geographical names. At the end of 1971, there were about 1.7 million cards in the files of the Archives. Each card contains the name (or names) and name forms of one geographical feature. The estimated total number of named geographical features in Finland is 2.2 million.

During 1967-1972, about 400,000 new cards were added to the collection. More than 80 per cent of the field work has been done by trained people, mainly students of the Finnish language, who have received scholarships for this purpose. The task is made urgent by rural depopulation.

The Archives also collect Finnish and Carelian names of places situated outside the territory of Finland. The main sources are historical Russian documents.

The principal users of the standardized names are the various central bureaux of the State, such as the National Survey Board (Maanmittaushallitus). Other users are book publishers, planning authorities of communes and others.

Swedish names

Geographial names in the Swedish-speaking parts of Finland (representing 6.5 per cent of the country's popu-

* The original text of this report was contained in document E/CONF.61/L.47.

lation) are collected and studied by the Name Archives (Namnarkivet) of the Swedish Society of Literature in Finland. The work is supervised by the linguistic committee of the Society. The committee, assisted by the archive personnel, functions as an advisory board on matters of name standardization and is consulted by State and local authorities.

The total number of geographical names in the Swedish-speaking communes has been estimated at some 230,000. By January 1972, about three quarters of these names had been collected. It is hoped that the collecting of names will be completed in a few years' time.

Lappish names

In the 1960s, the Finnish Name Archives started a systematic collecton of Lappish geographical names in Enontekiö, Inari and Utsjoki, the three northernmost communes of Finland (with a Lapp population of about 3,000 persons). The work has been almost completed in Enontekiö (2,100 cards of Lappish and 1,900 cards of Finnish names). Some work is still needed in Inari where 4,100 cards of Lappish and 2,100 cards of Finnish names have been collected.

The principles of standardization of Lappish names unfortunately differ in Finland from those applied in Norway and Sweden. Scandinavian notations, such as the letter å, have been considered disturbing, for example, for Finnish map-users.

Exonyms

A practical result of the First United Nations Conference on the Standardization of Geographical Names was an attempt to inventory and standardize Finnish exonyms, i.e. conventional Finnish names of foreign geographical features. The names treated were derived from geographical books, encyclopaedias and other sources, both old and recent.

A standardized form for all these names was then decided on by representatives of the Finnish Name Archives, the Language Board of the Finnish Academy of Sciences and the Geographical Society of Finland. The recommended names, together with variant forms, were published[1] as a practical guide for editors of Finnish atlases, school books and the like.

Of a total of 1,065 standardized names, there were:

(*a*) 263 single exonyms, e.g. "Lontoo" (London);

(*b*) 333 compound exonyms in which both generic and specific term are conventional, e.g. "Iso Orjajärvi" (Great Slave Lake);

(*c*) 380 compound exonyms in which only the generic term is conventional, e.g. "Khybersola" (Khyber Pass); and

(*d*) 89 exonyms previously used but not recommended, and now standardized in the original form, e.g. "Chile".

[1] *Terra*, Journal of the Geographical Society of Finland, vol. 81, No. 2 (1969).

Names on maps

The Basic Map compiled and published by the National Survey Board on the scale 1:20,000, which will cover the whole country by 1975, is the most extensive printed source of information on geographical names in Finland. The orthography of the names has been checked by the Finnish and Swedish Name Archives.

At the end of 1971, geographical names had been collected by the National Survey Board for the Basic Map from 92 per cent of Finland. The mean density of names on this map is about 2.8 per square kilometre. The estimated density of named geographical features in Finland is about 7 per square kilometre.

When maps are updated, their names are again examined. It is then possible to add new names and change former ones if research or other factors render this necessary. Mapping thus assists in the constant updating of information about geographical names.

The 1:200,000 or 1:400,000 road map, the largest-scale map covering the whole of Finland at present, also constitutes a reliable source of information about geographical names. As new sheets of this map appear every two to four years, they provide up-to-date information about new names and name-changes.

Names and terms in gazetteers

Between 1967 and 1972, four gazetteers of geographical names were published in Finland, *viz*, a gazetteer attached to the 1:1,000,000 Post and Railway Map of Finland, with some 8,000 names,[2] a gazetteer of the Finland Handbook, with some 16,000 names, [3] the Post and Telegraph Administration address list, with some 60,000 names,[4] and a gazetteer containing names of villages and parishes in the Finnish-language area.[5] A gazetteer of 4,500 Swedish-language geographical names in Finland was published previously.[6]

A gazetteer inspired by the First United Nations Conference on the Standardization of Geographical Names is at present being produced in the National Survey Board. It will contain about 12,000 names. The grid reference and designation of each named feature will be given. The planned main classes of designation are: (*a*) administrative unit; (*b*) populated place; (*c*) establishment (farm, mine, railway station, post-office etc.); (*d*) land feature; (*e*) water feature.

Tourist attractions are also included. Each class will be indicated by a graphic symbol.

[2] *Suomen posti- ja rautatiekartta 1:1,000,000* (Helsinki, Maanmittaushallitus, 1969).

[3] Jussi Keinänen (ed.), *Suomi-käsikirja* (Helsinki, Otava, 1968).

[4] *Posti- ja Lennätinlaitoksen osoitehakemisto* (Helsinki, 1968). The names in this gazetteer are not standardized.

[5] Viljo Nissilä, Matti Sarmela and Aino Sinisalo, "Ethnologisches Ortschafts- und Dorfregister des finnischen Sprachgebiets in Finnland, Karelien, Ingermanland, Norrbotten, Finnmark und auf der Halbinsel Kola", *Studia Fennica: Revue de linguistique et d'ethnologie finnoises*, vol. 15 (1970).

[6] Åke Granlund and Kurt Zilliacus for the Svenska folkpartiets ortnamnskommitté, *Svenska ortnamn i Finland med finska motsvarigheter*, 3rd ed. (Helsinki, 1963).

REPORT PRESENTED BY THE UNITED STATES OF AMERICA*

Domestic names. Since September 1967, more than 4,000 domestic names have been the subject of formal decisions and published in quarterly lists. Another 50,000 that have been processed enough to show that they present no problem have been used on maps. No additional gazetteers of domestic names have been issued. The quarterly decision-lists are now prepared by automated composition and the automated part of the domestic-name files is growing.

A separate Conference document will describe special lists of coastal names that are now in preparation.

Foreign names. Since 1967, the Board on Geographic Names (BGN) has published 26 new or revised gazetteers, containing in all more than a million entries, on the following countries (with number of entries in thousands and year of publication):

Afghanistan	(10; 1971)	Mongolia	(13; 1970)
Antarctica	(13; 1969)	Morocco	(55; 1970)
Argentina	(48; 1968)	Mozambique	(33; 1969)
China	(108; 1968)	Nigeria	(42; 1971)
Gambia	(2.4; 1968)	Panama	(19; 1969)
Indonesia	(61; 1968)	Portuguese Guinea	(8.9; 1968)
Israel	(7.4; 1970)	Republic of Viet-Nam	(24; 1971)
Jordan	(22; 1971)	Spanish Sahara	(3; 1969)
Khmer Republic	(22; 1971)	Syrian Arab Republic	(29; 1968)
Lebanon	(37; 1970)	Undersea features	(1st ed.: 3.6; 1969) (2nd ed.: 5.6; 1971)
Liberia	(4.3; 1968)	USSR	(400; 1970)
Malawi	(10; 1970)	Zambia	(1972)
Malaysia, Singapore, Brunei	(62; 1970)		
Malta	(2.3; 1971)		

In addition, there were issued a gazetteer of conventionals (0.9; 1972) and three supplements containing accumulated corrections to the existing most recent editions of BGN gazetteers of countries in Europe (1.7; 1971), the Americas (0.9; 1971) and Asia (2; 1972). All BGN foreign-name gazetteers and domestic-name decision-lists are distributed free, and any rational request is honoured as long as the supply lasts. Sample lists of some of the recipients, to illustrate the distribution, will be placed on exhibition.

Names and name information were also supplied in response to inquiries by mail and telephone covering more than 70,000 names. While the bulk of the inquiries came from agencies of the Government in Washington, significant numbers came from publishers, institutions and private citizens in the United States and other countries as well.

Foreign co-operation. Bilateral co-operation with other countries has continued. Negatives of the gazetteers of Kenya and the United Republic of Tanzania, which were compiled in co-operation with those countries, were furnished for their use. The material for the gazetteer of Malaysia was reviewed by that country before publication. The United States Board on Geographic Names and the Canadian Permanent Committee on Geographical Names continued to exchange information and to co-ordinate action on names of features along the boundary between Canada and the United States. The exchanges related to undersea terminology were initiated only recently and have not been completed, as will be noted from differences in papers in the L. series submitted by the two countries.

Antarctic names. With the aid of its Advisory Committee on Antarctic Names (ACAN), a special group of experts that was started in 1943, and with active co-operation and informal exchange of information with other interested countries, the Board on Geographic Names continued to keep up with and assimilate new naming resulting from Antarctic exploration and research. There continues to be, among all interested countries, a high degree of agreement on names and a willingness to pursue in concert solutions for the few remaining unsolved problems and for new ones as they arise.

The current (third) edition of the *Antarctica Gazetteer* was issued in the regular gazetteer format of the Board on Geographic Names. A new edition with textual descriptions of the features and the circumstances of naming, like the 1956 edition, is in preparation.

A significant by-product of decades of intensive work on this area is *Americans in Antarctica 1775-1948*, by Kenneth J. Bertrand, published late in 1971 by the American Geographical Society in New York. Mr. Bertrand is the current chairman of the Advisory Committee on Antarctic Names.

Undersea names. Another special expert advisory committee has worked since 1960 on both the names of undersea features and undersea terminology. A second edition of the *Undersea Features Gazetteer* has recently been published.

Conferences of the Board on Geographic Names and the Permanent Committee on Geographical Names. The biennial talks with the Permanent Committee on Geographical Names (PCGN) of the United Kingdom were continued in London in 1970, and at Washington in 1968 and 1972. Information was exchanged on a wide range of practical problems; differing approaches were explored; and new joint BGN/PCGN romanization systems and refinements or options in existing ones were worked out and adopted, as will be noted from the new edition of the *Romanization Guide*.

Administrative support of foreign names standardization. In March 1968, the administrative support of the foreign-name standardization activity of the Board on Geographic Names was transferred from the Department of the Interior to the Department of Defense. The Department of the Interior's Office of Geography, the foreign-name staff for the BGN, became the Geographic Names Division in the then Army Map Service, which subsequently became the United States Army Topographic Command (USATOPOCOM) — which will in turn become a constituent part of the newly created Defense Mapping Agency (DMA). The Board's Executive Secretary will be in the headquarters staff of the Defense Mapping Agency.

* The original text of this report was contained in document E/CONF.61/L.49.

REPORT PRESENTED BY CYPRUS*

Work on the geographical names of Cyprus is being conducted officially in Cyprus in two Departments: the Cyprus Research Centre and the Department of Lands and Surveys. The work being done at the Cyprus Research Centre consists of collecting and cataloguing, checking, classifying and studying the geographical names; and the work done at the Department of Lands and Surveys consists of collecting and registering, checking, classifying and mapping the geographical names. The work of the two departments coincides in many cases, because they are co-ordinating their activities.

The collection of geographical names by the Cyprus Research Centre is carried out through field work by its research fellows; and by the Department of Lands and Surveys through land-surveying employees. The geographical names are registered in conformity with prevailing pronunciation, and subsequently a check is made in order to test their accuracy. The Department of Lands and Surveys has without exception collected the geographical names of the island on the actual site: in some cases, this method of collection requires a further check, because names were written in Roman letters, so that the true pronunciation is uncertain. For purposes of mapping, a new check is beng made by the Department of Lands and Surveys by sending lists of geographical names with its land-surveying employees to the various parts of the island. Besides this work, historical research is being done at the Cyprus Research Centre in cataloguing and classifying all the geographical names of Cyprus in chronological periods, from the most ancient times to the present day. Thus both ancient and later inscriptions and records are being catalogued, as well as ancient and later writers, lexicographers, codices, manuscripts, documents, old maps and relevant source material. The geographical names thus assembled are classified and studied phonetically, etymologically and historically. The work of the Cyprus Research Centre on the geographical names has not yet been completed.

It is hoped that these preliminary investigations will develop into more comprehensive studies of geographical names, the compilation of a dictionary of geographical names, and the compilation of maps. A recent edition of studies on geographical names was made by the Cyprus Research Centre in re-publishing and bringing up to date relevant Studies by Professor Simos Menardos under the title *Toponymic and Folkloric Studies* (publications of the Cyprus Research Centre, IV, Nicosia, 1970), in which a list of nationally standardized Cypriot geographical names is included. A copious list of geographical names from old registers is to be found in another publication of the Cyprus Research Centre, by Theodore Papadopoullos, entitled *Social and Historical Data on Population (1570-1881)* (Texts and Studies of the History of Cyprus, I, Nicosia, 1965 — see pp. 215-234). And in the *Annual* of the Cyprus Research Centre studies on geographical names are published and relevant works are listed in a bibliography in sections 4.32 ("Material concerning geographical names") and 4.86 ("Research and studies concerning geographical and (other) names").

Mapping is the task of the Department of Lands and Surveys. This applies modern technical methods and has compiled maps of Cyprus on various scales in Greek and English; a map is also being prepared showing the Turkish pronunciation. Thus maps of Cyprus have been compiled on the scales of, for example, $^1/_4$ inch to 1 mile and $^1/_2$ inch to 1 mile, and one is being compiled at 1:50,000; there are maps of towns at 1:25,000; and surveying maps of the whole island at 1:5,000, 1:2,500, 1:1,250, 1:1,000 and 1:500. As well as surveying maps, these include administrative, road, topographical, hydrological, geological and soil maps.

The nation-wide standardization and transliteration of the geographical names is performed by the Cyprus Research Centre. The standardization takes place according to historical principles, in some cases avoiding the divergent contemporary dialect pronunciation, which varies between the regions of the island, as well as the pronunciation of persons who speak another language than the language to which the geographical names belong. We believe that the rendering of geographical names strictly according to the varying dialect pronunciations of today is a work requiring specialized research and necessitating a dictionary of geographical names. The same applies to other geographical terms too, which are divided into official terms (derived from tradition) and popular terms.

In the transliteration of Cypriot geographical names and other geographical terms into the Roman alphabet, the system used almost coincides with that of the *Romanization Guide, 1967, Based on the Systems as used by the United States Board on Geographic Names; of the Duden Wörterbuch geographischer Namen*; and of André Mirambel for use by the United Nations and the official geographical organizations of England and France.

In conclusion we mention that, in order to co-ordinate all the work, a Committee for Standardizing the Geographical Names of Cyprus has been formed, constituted of scientists and senior officers of the Cyprus Research Centre, the Department of Lands and Surveys and the Ministry of Education.

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* The original text of this report was contained in document E/CONF.61/L.56.

REPORT PRESENTED BY NORWAY*

National standardization

The work on national standardization of geographical names for official use has progressed in accordance with the officially adopted rules for writing Norwegian place-names. The official rules are in near-conformity with resolution 4, "National standardization", adopted by the United Nations Conference on the Standardization of Geographical Names held at Geneva in 1967.[1]

The major work on standardization of geographical names is carried out in conjunction with the national topographic mapping programme on the scale 1:50,000 and the hydrographic charting programme on the Norwegian coast and continental shelf. For the latter programme both hydronymics and names of undersea features are treated, particularly in connexion with the publication of new fishery charts in the North-Sea–Skagerrak area.

Lappish names

The Lapps are an ethnic minority group in the northern regions of the Norden countries. The largest number of Lapps is to be found in Norway, where they today number about 20,000 people. The Lapp population extends as far south as the Trøndelag area, but the majority is settled in the two northernmost provinces of Troms and Finnmark. Their language is of Finno-Ugric origin.

The place names in areas with Lapp settlements may be exclusively Lappish or, in areas with a mixed settlement, a mixture of Lappish and Norwegian. In the boundary areas one also finds composite names containing a Lappish and a Norwegian component. Older topographic maps of the northernmost regions often showed Norwegian translations of Lappish place names in areas where Norwegian names never had been in use. In several cases the translations show mistakes and misinterpretations. In the present national topographic mapping programme, considerable efforts are being made to delineate the areas for which pure Lappish names only should be shown on the maps. Tape-recorders are being used in the field collection of geographical names in order to register important pronunciation details. This facilitates the identification of the various components of the names, and the generic terms. The names are written in accordance with officially adopted rules for the spelling of the Lappish language.

Dictionary of place-names

The preparation of a dictionary of Norwegian place names has been in progress since 1971. The work is being done by the Nordic Section of the University in Trondheim. Among other details, the dictionary will give a linguistic explanation of the names.

Common Nordic spelling of names

In 1956, the Nordic Linguistic Council initiated action for introducing a common Nordic spelling of Russian (Slavonic) names. Some of the background papers have been published in issues of the periodical *Nordiske språkspørsmål*, Oslo, 1961, 1962 and 1963. In 1970, the Council issued the publication *Russian Names: Common Nordic Spelling and List of Names*. The publication is 96 pages long and contains approximately 2,250 geographical names and names of persons. The Council has also published listings of the names of other countries in common Nordic orthography. Further work is in progress on a common Nordic spelling of names in other parts of the world.

Common Nordic data-processing of names

The Sixth Nordic Onomastic Congress in 1971 organized a Nordic committee for the purpose of co-ordinating Nordic onomastic research. The committee is at present engaged in the drafting of common Nordic rules for the data-processing of names.

* The original text of this report is contained in document E/CONF.61/L.59.

[1] Vol. 1, *Report of the Conference*, pp. 9-10.

REPORT PRESENTED BY FRANCE*

The standardization of geographical names is a matter the importance and necessity of which are becoming more and more evident, both nationally and internationally. This is primarily because of the great growth of opportunities in communications and trade, which since the beginning of the century have helped to develop and expand relations of every kind between the nations of the world.

Throughout French territory, national standardization is tackled at two levels. One level comprises the identification of names of municipalities, i.e. the names of the basic administrative districts. Under an order of 2 November 1945, names of municipalities cannot be altered except by a decree issued by the Minister of the Interior at the request of the municipal council after the general council has been consulted about the request and the Council of State has reported on it. A body known as the Commission for the Review of Municipality Names, which is competent to handle both the scientific and the administrative aspects of toponymy, has been set up to advise the Minister of the Interior on the implementation of the order.

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.64.

On the other level is the identification of names other than those of municipalities. The authority responsible for toponymy in this field is the National Geographical Institute, which is represented on the advisory body mentioned above. In 1942, immediately after the establishment of the Institute — the successor to the Army Geographical Service — the Toponymy Commission was set up as part of the Institute to deal with problems arising in the collection of place names in metropolitan France and the fixing of the spellings to be used for those names. The National Geographical Institute was able to draw on the results of previous cartographic work and on the experience of government services such as the Cadastral Survey and the national education authorities. This enabled it to elaborate a method of work and general and special instructions which its operating staff could use in constructing, from numerous and often conflicting items of information, the best and most correct form of identification for each geographical feature in the light of the local context and national requirements.

The National Geographical Institute has not confined its toponymic activities to metropolitan France and has sought to contribute as far as it can to the standardization of overseas toponyms as well. The Institute has continued this work since the granting of independence to the overseas countries, either under general agreements for co-operation on cartography with particular Governments or under agreements for special services concluded with national technical authorities.

As far as the transcription and transliteration of toponyms are concerned, agreements were concluded in the period before the 1967 session of the Conference at Geneva with the competent authorities of the Central African Republic, Chad, the Congo, Gabon, the Ivory Coast, Lebanon, Morocco and the Upper Volta.

Since that session of the Conference, the French Government has been represented at all sessions of the *Ad Hoc* Group of Experts on Geographical Names, but has not participated in any regional activities of the division representing the Romance-language area except for Latin America, having received no information on their organization. The present Conference should provide an opportunity for remedying that situation for the future. However, since the toponymic authorities of foreign countries — in any of the divisions — are represented on national cartographic bodies, agreements for exchanging publications between these bodies and the National Geographical Institute help in the circulation of the practical results of national standardization activities to foreign countries.

Also between 1967 and 1971, the National Geographical Institute participated, because of its interest in national standardization, in the verifications undertaken in connexion with the preparation of the Official Geographical Code published in 1971 by the National Institute of Statistics and Economic Research. The Official Geographical Code gives the names of all French municipalities. The main activities of the National Geographical Institute have been the field collection of toponyms for use on the maps published by the Institute and the standardization of their spellings. This work covers an area of some 76,720 square kilometres, mapped on the 1:25,000 scale, and relates to the basic map, from which the smaller-scale maps are derived. A number of sheets containing standardized toponymic spellings have been published on the 1:20,000, 1:50,000 and 1:100,000 scales for the New Hebrides, French Polynesia and the French Southern and Antarctic Territories.

Outside French territory, the work of collecting toponyms and standardizing their spellings has been carried out by the National Geographical Institute under aid or co-operation programmes relating to map series on the 1:200,000 scale for Cameroon, the Central African Republic, Chad, the Congo, Dahomey, Gabon, the Ivory Coast, Mali, Mauritania, the Niger, Senegal, Togo and the Upper Volta. These activities cover a total of 115 sheets on the 1:200,000 scale in the sheet format of the International Map of the World. Similar work has been undertaken with a view to the publication of maps on the 1:50,000 scale for Cameroon, the Central African Republic, Chad, Dahomey, Gabon, the Ivory Coast, the Niger and Togo, either at the request of the State concerned or under aid or co-operation programmes. This involves 98 sheets on the 1:50,000 scale.

Lastly, under cartographic co-operation agreements concluded with the official authorities of Algeria, the National Geographical Institute has collected and standardized the names used on the 1:25,000 map series (which covers an area represented by 97 sheets) and on the 1:50,000 and 1:200,000 series (which each cover an area represented by 15 sheets). All three series are sets of basic maps appropriate for areas with well-defined characteristics, but only in the case of the 1:25,000 and 1:50,000 maps has there been any recent field work on name-collection.

REPORT PRESENTED BY BRAZIL*

At the national level, responsibility for decisions on matters involving geographical names lies with the National Committee on Planning and Standards for Geography and Cartography (CONPLANGE), a body set up as part of the I.B.G.E. Foundation (which comprises the Brazilian Institute of Geography and the Brazilian Institute of Statistics) by Legislative Decree No. 161 of 13 February 1967, and consisting of representatives of various federal and state authorities.

At its plenary meeting in July 1971, the National Committee on Planning and Standards discussed and adopted modifications to the nomenclature appearing on the sheets of the *International Map of the World on the Millionth Scale* which cover Brazilian territory.

* The original text of this report was contained in document E/CONF.61/L.69.

The Committee has established a sub-committee on geographial information which is responsible for considering questions on geographical names and toponymy, as well as related matters.

Within the framework of the IBGE Foundation, the Department of Geographical and Cartographic Documentation and Information considers and gives rulings on the spelling of geographical names and on toponymic matters.

The Department receives many applications for such rulings, particularly over the nomenclature of geographical features of direct concern to railways. The functions in question are co-ordinated by the Division for Information Co-ordination of the Department, which maintains specialized staff for this purpose.

Special mention should be made of the activities of the Brazilian Technical Standards Association, which since 1970 has been co-ordinating action by various public and private bodies in the field of geographical terminology.

In this connexion, the Association has established a committee to study urban planning terminology. The committee consists of representatives of the Institute of Architects of Brazil, the Brazilian Institute of Municipal Administration, the IBGE Foundation, the Engineering Association, the Faculty of Architecture and Urban Planning of the Federal University of Rio de Janeiro, the Ministry of Industry and Trade, the Administration of the State of Guanabara, and other authorities; and also of eminent personalities connected with architecture and town planning, such as Lúcio Costa, Oscar Niemeyer, Burle Marx, Henrique Mindlin and Maurício Roberto, to mention only a few.

The Brazilian Institute of Geography has prepared a paper entitled "Léxicos sobre urbanismo" (Urban planning glossaries) as a basis for the committee's work.

In 1970, the IBGE Foundation set up a committee to consider outstanding cases of disputed spellings of names of Brazilian towns and villages, on the basis of the work previously undertaken by the Foundation, and to submit suggestions for adoption as the criteria to be observed in the examination of existing or future problems.

An index of the toponyms appearing on the sheets of the *International Map of the World on the Millionth Scale* which cover Brazilian territory was prepared by the University of São Paulo and published in 1968.

In 1971, the Brazilian Institute of Geography republished the index of toponyms in the light of more detailed research and in conformity with the agreements reached at the United Nations Technical Conference on the International Map of the World on the Millionth Scale held at Bonn in 1962.

Annex

DECISION No. 18/70, 3 NOVEMBER 1970, OF THE BRAZILIAN INSTITUTE OF GEOGRAPHY AND STATISTICS

The President of the Foundation styled Brazilian Institute of Geography and Statistics, pursuant to the powers conferred on him by article 19 (*e*) of the Statute, and in the light of the contents of IBG Proceedings No. 1845/69, and further.

Considering the advisability and necessity of establishing rules to ensure the satisfactory standardization of spellings of names of Brazilian towns and villages appearing in publications sponsored by the IBGE Foundation.

Decides to appoint Professor Orlando Valverde, Assistant Professor (4-C), a former staff member of the National Geographical Council, of the Department of Geography of the Brazilian Institute of Geography, Henrique de Azevedo Sant'anna, Chief of the Division for Information Co-ordination, and Maria Baker de Andrade Botelho, Chief of the Map Library, both of the Department of Geographical and Cartographic Documentation and Information of the Brazilian Institute of Geography, Paulo Augusto de Alencar, Chief of the Documentation Division, and Nélia Leão Dos Santos, Chief of the Periodicals, Photograph and Records Section, both of the Centre for Statistical Documentation and Information of the Brazilian Institute of Statistics, to form a committee under the chairmanship of the first member above-named to consider outstanding cases of disputed spellings of Brazilian towns and villages, on the basis of the work previously undertaken by the IBGE Foundation, and to submit a detailed report on their findings in the form of suggestions for adoption as the criteria to be observed in the examination of existing or future problems.

REPORT PRESENTED BY GUATEMALA*

The following is a brief description of activities undertaken by Guatemala since the First United Nations Conference on the Standardization of Geographical Names, held at Geneva in September 1967.

National Geographical Names Authority

The Joint Commission on Geographical Names was established in 1959 by Alfredo Obiols Gómez, who was then Director General of the National Geographical Institute, and laid the basis for the standardization of geographical names in Guatemala. On 2 March 1968, pursuant to note No. 420 of the Director General of the National Geographical Institute, the name of the Commission was changed to the National Geographical Names Authority of Guatemala.

National standardization

National standardization is the responsibility of the National Geographical Names Authority of Guatemala. The standardization procedures introduced by Alfredo Obiols Gómez on 22 July 1960 have been up-dated and expanded in the light of resolution 4 adopted by the 1967 Geneva Conference.

A document entitled "National standardization", prepared by Francis Gall, has been submitted as a working paper of the present Conference under item 9 of the provisional agenda. It describes the procedure

* The original text of this report, submitted in Spanish, was contained in document E/CONF.61/L.72.

followed for the national standardization of geographical names, more than 120,000 of which have now been studied with a view to their inclusion in the second edition of the Geographical Dictionary.

In addition to the national standardization of geographical names, 19 of the major native languages of Guatemala, or rather of those of their alphabets which have so far been officially approved, are being standardized with the help of advice from the National Indian Institute and assistance from the Instituto Lingüistico de Verano (Summer Linguistic Institute). The officially approved alphabets will appear in an appendix to the Geographical Dictionary. The appendix will contain a general introduction to the Mayan scripts, a general explanation of Mayan graphic signs (vowels and consonants), and the Caribe alphabet. The appendix will also be published apart, as separates, for each alphabet as follows:

1. Achí;
2. Aguacateco;
3. Cakchiquel;
4. Caribe;
5. Chuj;
6. Ixil;
7. Jacalteco;
8. Kanjobal (two dialects);
9. Kekchí;
10. Mam;
11. Mopán Maya;
12. Pocomchí;
13. Pocoman;
14. Quiché (four dialects);
15. Rabinal Achí;
16. Tzutujil;
17. Chortí;
18. Itzá;
19. Uspanteco.

Terms and definitions are under consideration. A paper entitled "Some geographical terms and definitions used in Guatemala" has been submitted to the Conference as a separate document. These terms and definitions will appear in the second edition of the Geographical Dictionary.

Supplement to the Geographical Dictionary of Guatemala

In 1968, Guatemala published the *Suplemento del Diccionario Geográfico de Guatemala*, consisting of two volumes, 288 and 279 pages long. A copy of this work has been provided at the present Conference for information purposes.

Geographical Dictionary of Guatemala

A considerable demand exists for a new edition of the two-volume geographical dictionary of Guatemala, the first volume of which, containing 499 pages, was published in 1961 and the second, containing 450 pages, in 1962. That edition ran to 2,700 copies and is out of print. The material for the second edition of the *Diccionario Geográfico de Guatemala* is now in the final stages of collection.

The new edition, with accompanying maps, will consist of six volumes and will contain all the geographical names, numbering more than 120,000, which have so far been standardized, together with information drawn from the broad area of human geography.

To facilitate consultation, the dictionary will be cross-referenced to give both present and past names. Examples of the latter are Santa María Magdalena del Patulul, now Patulul, in the department of Suchitepéquez; Tecpán Atitán or Tecpán Atitlán, now the town of Sololá, capital of the department of the same name; San Sebastián del Texar, now the municipal capital of El Tejar, in the department of Chimaltenango; Thequaco, now San Juan Tecuaco, a municipal capital in the department of Santa Rosa; Trapiche de los Reyes, now the village of Lo de Reyes in the municipality of El Chol, department of Baja Verapaz.

It should be noted that the dictionary will not merely contain references to the principal chroniclers and historians from the middle of the sixteenth century onwards, but will also give quotations from their writings. This will provide the most accurate picture possible of populated places, their inhabitants at various periods, their principal industries, former routes of communication, traditions, and so on. Much of the information included will of course come from the General Archives of Central America, and use will also be made of a very rich collection of private records. Mention has been made elsewhere in the pesent report to other material which this important work will contain.

The questions of technical assistance to foreign countries and other aspects of standardization are dealt with in a separate report by the United Nations expert on geographical names for Latin America.

REPORT BY THE EXPERT FOR LATIN AMERICA OF THE UNITED NATIONS GROUP OF EXPERTS ON GEOGRAPHICAL NAMES*

A brief account of activities which have taken place since the Geneva Conference of September 1967 is given below. It is expected that the Chairman of the United Nations Group of Experts on Geographical Names and representatives of countries participating in the Second Conference will provide additional information on national activities.

First session of the Central American Conference on Geography and Cartography, San Salvador

The first session of the Central American Conference on Geography and Cartography, convened by the

* The original text of this report, prepared by F. Gall, submitted in Spanish, was contained in document E/CONF.61/L.73.

Organization of Central American States (OCAS), was held at San Salvador in February 1968. The Conference, on the proposal of the writer, adopted various important resolutions based on resolution 6, "Technical assistance", and resolution 7, "Regional meetings", of the First United Nations Conference on the Standardization of Geographical Names.

First Regional Meeting on the Standardization of Geographical Names

The First Regional Meeting on the Standardization of Geographical Names, which was sponsored by the secretariat of the Organization of Central American States (OCAS), was held at Guatemala City from 7 to 11 October 1968. This important gathering was organized in response to resolution 7 of the first session of the Central American Conference on Geography and Cartography. The Meeting was attended by official delegations from Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. Meredith F. Burrill, Chairman of the United Nations Group of Experts on Geographical Names, was among the international officials present.

In due course, the expert for Latin America of the United Nations Group of Experts transmitted copies of the report of the First Regional Meeting to the United Nations; he also made copies of it available when the Group met. It may nevertheless be of interest to the Conference to note the following subjects of resolutions adopted at the Regional Meeting:

2. Transmission of copies of pertinent official material through the national sections of the Pan-American Institute of Geography and History (PAIGH).
3. Creation of the Central American Committee on Geographical Names.
4. Establishment of standardization procedures.
5. Adoption of the 20 resolutions passed by the First United Nations Conference on the Standardization of Geographical Names.
6. Integration of national geographical names authorities.
7. Technical assistance by the United Nations Group of Experts.
8. Official standardization principles.
9. Forms used in connexion with domestic geographical names.
10. Sizes of lettering used on maps to indicate populated places.
11. Spelling of names derived from aboriginal languages.
12. Participation in the Second United Nations Conference on the Standardization of Geographical Names.
13. Transmission of resolutions to the Pan-American Institute of Geography and History and to the United Nations.
14. Alphabets of majority aboriginal languages of the region.
15. The Instituto Indigenista Nacional (National Indian Institute) and the Seminario de Integración Social (Social Integration Bureau) of Guatemala.
16. 1970 censuses.
17. Definition of the term "standardization".
18. Place of next meeting.

Second Regional Meeting on the Standardization of Geographical Names

In connexion with resolution 18 of the First Regional Meeting, the Government of Panama offered to act as host to the Second Regional Meeting.

At the First National Historical Congress, held at Panama City on 15 August 1969 to commemorate the 450th anniversary of the foundation of Panama City, the Guatemalan delegation, led by Francis Gall, submitted a draft resolution, which was adopted by acclamation, indicating to the Government of Panama that the Second Regional Meeting on the Standardization of Geographical Names should take place as soon as possible and requesting that the Panamanian Ministry of Foreign Affairs should issue the necessary invitations.

In August 1970, with the agreement with the Panamanian Government, the Organization of Central American States (OCAS) sent out invitations to the Second Regional Meeting, which was held from 19 to 23 October 1970.

For the third session of the Group of Experts on Geographical Names, held at United Nations Headquarters in New York in February 1971, the expert for Latin America made available an original copy of the report on the Second Regional Meeting, signed by the officers of the Meeting and the heads of delegations. As indicated in the report of the Group on its third session, Meredith F. Burrill, who had been present at the Second Regional Meeting, amplified the statement made at that session by the Expert for Latin America. A list of the subjects of the principal resolutions adopted by the Second Regional Meeting is reproduced below for the information of the Conference:

2. The first South American subregional meeting on the standardization of geographical names.
3. Toponymy in Panamanian text-books and the establishment of chairs of toponymy and toponymic studies at universities in American countries.
4. Establishment of chairs of geography.
5. Preparation of theses on glossaries of geographical terms at universities in American countries.
6. Up-dating of census cartography and use of official geographical names.
7. Repetition of toponyms in the names of populated places in Panama.
8. Publication of guides to officially approved alphabets of minority languages.
9. Geographical names and current methods of writing.
11. Participation in the Second United Nations Conference on the Standardization of Geographical Names.
13. Place of next meeting.
14. Geographical dictionaries.
15. The Central American Committee on Geographical Names.
17. The Inter-American Geodesic Service.
21. Establishment of standardization procedures.
22. Technical assistance by the Expert for Latin America of the United Nations *Ad Hoc* Group of Experts on Geographical Names.
23. Adoption of the 20 resolutions passed by the First United Nations Conference on the Standardization of Geographical Names.

At the third session of the Group of Experts, it was agreed that resolutions 21, 22 and 23 in particular would be translated into English and circulated to the Group. In addition, the Chairman of the Group reported on the results of the visits he had made to various Latin America countries since the Second Regional Meeting.

In resolution 2, which deals with first South American subregional meeting on the standardization of geographical names, the Second Regional Meeting recommended that the South American meeting should be

held between October 1971 and April 1972 in Venezuela or Peru, both of which had offered to act as host to the meeting. It proved impossible, however, for the meeting to be held in either of those countries.

The representative of Panama is able to provide full information on the action taken to comply with the resolutions which relate expressly to his country.

Although a decision had been taken at the First Regional Meeting, in resolution 12, on the question of participation in the Second United Nations Conference on the Standardization of Geographical Names, the matter was taken up again in Panama, on the initiative of Meredith F. Burrill. It forms the subject of resolution 12 of the Second Meeting, which urged Latin American Governments to accredit delegations to the Conference in response to the official invitation and preferably to choose their representatives from among national technical experts on geographical names. In addition, at the request of the United Nations, the Expert for Latin America contacted the Directors-General concerned in each of the Latin American countries at the end of 1971 and sent them a copy of the official invitation from the Secretary-General of the United Nations to participate in the London Conference.

In resolution 13, concerning the place of the Third Central American Regional Meeting, the Second Regional Meeting accepted the Salvadorian offer to act as host to the Meeting at San Salvador. The Panamanian representative, José A. Sáenz G., will report on this point in his capacity as Chairman of the Second Regional Meeting.

In resolution 15, the Second Meeting established the Central American Committee on Geographical Names and elected the following officers to serve on it: Francis Gall (Guatemala), Chairman: José A. Sáenz G. (Panama), Vice-Chairman; Roberto López Meyez (El Salvador), Co-ordinator. It was agreed that the Secretary would be appointed by the Organization of Central American States (OCAS).

The other resolutions of the Second Regional Meeting are self-explanatory. It may be mentioned that the working papers submitted to the Second Meeting include a document by the writer dealing with toponymy in the teaching of geography and history and in cartography and literary history, and related anthropological topics. The text of this paper has been communicated to the secretariat of the Second Conference and representatives desiring a copy of it in the original language (Spanish) can obtain one on application.

First South American Regional Meeting on the Standardization of Geographical Names

Since the South American meeting could not be held in either Venezuela or Peru, the Expert for Latin America has approached the Government of the Federative Republic of Brazil, which has offered to act as host to this important gathering, the first of its kind in South America, at Brasilia. The meeting will take place in October 1972 in the auditorium of the Palácio Itamaraty of the Ministry of Foreign Affairs.

The above information has been passed on to the United Nations and the Chairman of the United Nations Group of Experts on Geographical Names. Both will be notified of any further developments.

Second United Nations Conference on the Standardization of Geographical Names

At the request of the United Nations, the Expert for Latin America contacted the various Latin American geographical and cartographic institutions. His purpose was to follow up the invitation from the United Nations Secretary-General, a copy of which he forwarded to those institutions, to participate, either directly or through the individuals responsible for matters of geographical nomenclature, in the Second United Nations Conference on the Standardization of Geographical Names.

The Expert for Latin America, with permission, also approached the Director of the Inter-American Geodesic Service at Fort Clayton, Canal Zone, Panama, with a request that his Service should retransmit the Secretary-General's invitation to those Latin American countries in which the Service maintained accredited consultants.

On the occasion of his visit to Guatemala, the Chairman of the Mexican National Section of the Pan-American Institute of Geography and History, who by virtue of his position has connexions with the Mexican Ministry of Foreign Affairs, has his attention drawn to his country's invitation to participate in the Second United Nations Conference.

Technical assistance and progress to date

Some details have already been given on this subject. Further information will doubtless be furnished at the Second Conference, by the Chairman of the United Nations Group of Experts on Geographical Names and national representatives, on the national activities of the various countries within the writer's area of responsibility. Particular attention is directed to the work in the following countries.

Brazil

In addition to the information given in paragraph 4 above, it should be noted that the National Committee on Planning and Standards for Geography and Cartography, set up in 1957 as part of the Brazilian Institute of Geography and Statistics (IBGE), is responsible for deciding questions connected with geographical names.

The Brazilian Technical Standards Association undertakes the co-ordination of activities by various bodies in the field of geographical terminology and has established a committee to study geographical and urban planning terminology.

The Brazilian Institute of Geography gives rulings on the spelling of geographical names and on toponymic matters. In 1970, it set up a committee to examine disputed spellings of names of Brazilian towns and villages. An index to the toponyms appearing on the map of Brazil on the millionth scale was prepared by the University of São Paulo and published in 1968. The

Brazilian Institute of Geography republished this index in 1971 on the basis of the Bonn discussions.

The writer is glad to be able to make available to the Second Conference the *Indice dos Topônimos contidos na Carta do Brasil a: 1000000 do IBGE* and the *Indice dos Topônimos da Carta do Brasil ao milionesimo*.

Costa Rica

The Costa Rican respresentative will present a detailed report on the subject-matter of this section. In addition, technical advice has been supplied to the National Geographical Institute, San José, and information on national standardization in Costa Rica has been transmitted to the United Nations by the writer and is reproduced in document E/CONF.61/L.13. Moreover, the writer has forwarded to the Chairman of the United Nations Group of Experts on Geographical Names a communication from the Director of the National Geographical Institute of Costa Rica enclosing a copy of the proposed regulations on the organization and functioning of the Costa Rican Committee on Nomenclature. The Minister of Culture, Youth and Sports will submit these proposals to the Executive Authority for consideration.

The writer has been informed that Costa Rica continues to make progress in toponymic matters and that the first volume of the publication on geographical names, dealing with the coastal and island names of Costa Rica and containing more than 1,000 toponyms, is in the final stages of printing and will be made available to the Conference.

El Salvador

The writer has the honour, at the request of the Director-General of the National Geographical Institute, San Salvador, to inform the Conference that Salvadorian activities have included a study for the establishment of a geographical names authority.

In addition, the writer, in response to a request, has furnished technical advice to the National Geographical Institute, San Salvador. In 1971, the Institute published particulars and maps of the departments of Ahuachapán, Santa Ana and Sonsonate as the first volume of the Geographical Dictionary of El Salvador, a work dedicated to the memory of the Institute's former Director, Pablo Arnoldo Guzmán. As requested, this volume was forwarded to the United Nations and to the Chairman of the United Nations Group of Experts on Geographical Names.

Honduras

The Director-General of the National Geographical Institute of Honduras was present at the First Central American Congress of History and Geography, held in Guatemala in December 1971 and organized by the writer. He was able on that occasion to obtain the information which he required on the standardization of geographical names. The Director-General, who is a personal friend of the writer, is attending the Conference and will doubtless report on activities in Honduras connected with the standardization of geographical names.

Nicaragua

The Director of the National Geographical Institute, Managua, asked the writer to represent Nicaragua at the Second Conference and sent him the necessary papers. The writer had to decline, however, since United Nations practice does not allow a representative of one country to represent another country at the same time. It was suggested that the diplomatic representative of Nicaragua in the United Kingdom should be accredited to the Conference and he will no doubt report on the considerable progress achieved by Nicaragua on standardized geographical names, especially in connexion with the National Cadastre.

In September 1971, the National Geographical Institute, Managua, published the first volume of the *Indice Geográfico de Nicaragua*, dealing with the country's rivers, lakes and coasts. The second volume will comprise the geographical nomenclature of Nicaragua's orographic features, and the third will deal with its human communities and the areas covered by its political divisions, provinces, cantons, municipalities and departments.

The first volume contains marine, inland water and coastal features; it consists of an introduction, numerous photographs, 231 pages of text and, as appendices, an index of the 1:50,000 topographical maps published before September 1971 and a hydrographic map on the scale 1:1,000,000.

The information ultimately embodied in the three volumes described will be incorporated in the future *Diccionario Geográfico de Nicaragua*, an important work of reference for which a great need already exists.

The writer has pleasure in making available to the Conference a copy of the first volume of the *Indice Geográfico de Nicaragua*.

Panama

Information on Panama is given above in connexion with the Second Central American Regional Meeting on the Standardization of Geographical Names, which was held there. Particulars on national activities will be given by the director of the Tommy Guardia National Geographical Institute. In addition, in March 1972, the Department of Geography of the Faculty of Philosophy, Letters and Education of the University of Panama published Volume I of the Geographical Dictionary of Panama, together with the accompanying maps: this consists of 329 pages and covers the letters A to Ch.

Work on the Dictionary began in 1939 under Professor Angel Rubio; he was convinced of the need, importance and usefulness of the Geographical Dictionary and regarded it as the most effective way of providing information on the richly varied toponymy of Panama.

Guatemala

Particulars of activities in Guatemala are contained in

the report of the Government of Guatemala and in the information papers submitted to the Conference by the writer.

It should be noted that the geographical names of Central American countries which appear on the 1:2,000,000 map of Central America published by the National Geographical Institute of Guatemala, a copy of which has been made available to the Conference, were taken from the revised official maps of the various cartographic agencies of the Central American region, in accordance with the decision taken at Geneva in December 1967.

The writer will be glad to give any further information that may be required.

REPORT PRESENTED BY EGYPT*

Introduction

In recent years, in particular since the First United Nations Conference on the Standardization of Geographical Names held at Geneva in 1967, the problem of rendering geographical names from one language into another has become of great interest to Arabic-speaking countries.

The importance of the accumulation and recording of geographic names is realized and the activity on the national level is encouraged and accelerated by the activities of international organizations. It is clear that the nation-wide standardization of geographical names is of relevance to international cartographic work.

Basic maps and the collection of names

Adequate coverage by maps and charts on different scales is the basic condition for careful and systematic work on geographical names. They enable geographic co-ordinates to be determined and the suitability of generic terms to be assessed.

The map scale which is suitable for displaying all named features in desert areas ranges between 1:100,000 and 1:500,000, while in populated areas the suitable scale varies between 1:50,000 and 1:25,000. The maps on the scale 1:2,500 are used in cultivated areas and for property registers. A large number of toponyms appear in maps of these kinds.

The collection of names recorded on a map is made by a surveyor, with the help of a guide in the desert areas or a representative of the local authorities in towns and villages. The help of the inhabitants is indispensable. Then the first edition of an up-to-date map on a convenient scale becomes a most useful work of reference. The inclusion of names in such a map gives it a certain official character.

In Egypt and other Arab countries most of the place names are a part of the countries' cultural heritage, and constitute valuable historical material.

A thorough study of geographical entities included in official maps leads us to classify them as follows:

(*a*) Hydrographic entities;
(*b*) Relief features;
(*c*) Political, administrative and cultural divisions, tribal concentrations, towns and villages;
(*d*) Single buildings;
(*e*) Roads, railways, airports etc.

Personnel concerned

In Egypt the question of geographical names is the concern of the National Geographical Society through its committees on geographical nomenclature. These committees are composed of geographers, cartographers, historians, toponymists, linguists and archaeologists. The establishment of close co-operation between these experts is essential.

The following bureaux, among others, are concerned with the problem of geographical names:

1. Central Statistical Department;
2. Survey of Egypt;
3. Land and Property Register survey;
4. Hydrographic Survey;
5. Toponymists' Committee.

Extension of the Arab world

It is a known fact that the Arabic-speaking countries occupy a vast area extending between longitudes 10° west and 60° east and between parallels 4° and 37° north. They thus cover about one sixth of the circumference of the globe from east to west and about one tenth of its circumference through the poles.

This area includes several different countries where different dialects of the classical language are spoken.

Two different romanization systems are employed in the transliteration of geographical names for official use. It is found that the use of two different systems — one based on French orthography and the other on English — proves to be practicable.

Regional conferences

It is believed that regional conferences have to be held at appropriate intervals under Arab League auspices at which Arab countries are represented, in order to discuss common problems connected with the standardization of geographical names. There should be a uniform system for all Arab countries based on classical Arabic. It would probably be helpful for observers from countries with other writing systems to attend such conferences. The standardization of geographical terms and names depends on international co-operation between all countries.

* The original text of this report was contained in document E/CONF.61/L.77.

Taking into account the resolutions and recommendations of the United Nations Conference on the Standardization of Geographical Names held in Geneva in 1967, a meeting of Arab experts from 15 Arab countries was held in Beirut in 1971 and arrived at some rules for transliterating Arabic into Roman characters.

The Arabic-speaking countries have to provide complete documentation for all geographical names, including all the vowels and indicating the unvowelled and double consonants by means of Arabic diacritical marks such as vowel points, "shaddahs", "hamzahs" and "sukuns". The full indication of short vowels is necessary for rendering the spelling of Arabic names into other languages.

The attached annex is a list indicating the results of the study by Arab experts at the conference held in Beirut in 1971.

There is still a need for more detailed study through more co-operation between the Arab League countries. The next step will be the compilation of gazetteers and glossaries.

In conclusion we should like to state that we are following with interest the work of the Second United Nations Conference on the Standardization of Geographical names and paying much attention to problems and progress in this field. We hope to learn more at the Conference about modern techniques of processing geographic names by computers.

The present conference may provide an opportunity for taking the following steps:

1. The approval of the transliteration system drawn up at the Beirut conference;

2. Forwarding a resolution to the Arab countries with a view to the preparation of a gazetteer and a map of their geographical names according to the new system of transliteration;

3. Suggesting a future Arab gathering to produce a regional gazetteer and a map of the area, applying the new system.

Annex

RESULTS OF THE STUDY BY ARAB EXPERTS AT THE CONFERENCE HELD AT BEIRUT IN 1971

Examples		*Roman letters*	*Arabic letters*
Arbīl	أربيل	A	أ
Banhā	بنها	B	ب
Tadmur	تدمر	T	ت
Tharthār	ثرثار	Th	ث
Jabal	جبل	J	ج
Hims	حمص	H	ح
Khaybar	خيبر	Kh	خ
Dammām	دمام	D	د
Dhahbān	ذهبان	Dh	ذ
Rafah	رفح	R	ر
Zabīd	زبيد	Z	ز
Sīnā'	سيناء	S	س
Shibīn	شبين	Sh	ش
Safad	صفد	S	ص
Dabah	ضبه	D	ض
Tantā	طنطا	T	ط
Zhahran	ظهران	Zh	ظ
Ákkā	عكا	Á	ع بالفتحة
Irāq	عراق	Í	بالكسرة
Úmān	عمان	Ú	بالضمة
Bá'labak	بعلبك	·̓·	ع بالسكون
Ghadīr	غدير	Gh	غ
Fālūjah	فالوجه	F	ف
Qatar	قطر	Q	ق
Kūt	كوت	K	ك
Lībyā	ليبيا	L	ل
Misr	مصر	M	م
Najd	نجد	N	ن
Hīt	هيت	H	ه
Wahrān	وهران	W	و
Yaman	يمن	Y	ى
	وتوضع على الحروف المطلوبه في الوسط وفى آخر الكلمة مثل بئر	·̓·	
Bir Karbalā	— كربلاء		الهمزة
Tall	تل	A	الفتحه
Irbid	إربد	I	الكسرة
Al Quds	القدس	U	الضمه
Bāb Al Mandab	باب المندب	Ā	الفتحةمع الالف
Al Modīnah	المدينه	Ī	الكسرة مع الياء
Sūr	صور	Ū	الضمه مع الواو
Tarhūnah	ترهونه	H	التاء الموبوطه فى آخر الكلمة ه التاء المربوطه
Birkat as-Sabā	بركة السبع	T	فى الكلمه المركبة

أل للتمريف:

بالنسبة للكلمات الشمسية يكتب الحرف الاول مكرر مع فاصل (شرطه) بين الحرفين مثل

as-Syyidah	السيده
ash-Shāriqah	الشارقه

وبالنسبة للكلمات القمرية تكتب الالف واللام ال — مثل

Al Jabal	الجبل
Al Wādī	الوادى

REPORT PRESENTED BY ROMANIA*

The delegation of the Socialist Republic of Romania welcomes the furthering of the United Nations initiative to standardize geographical nomenclature, and considers that the broadening of the community of the United Nations in between the two sessions will favour the elaboration of recommendations acceptable to all nations; the Romanian delegation also takes for granted that an international effort of this scope requires the participation and contribution of all countries involved.

The Romanian delegation reaffirms its point of view expressed at the first session of the United Nations Conference in Geneva, namely that standardization of geographical nomenclature is exclusively within the competence of the State in whose territory the features named lie; consequently international standardization of geographical names should be based solely on formal national standardization. We hope that the proceedings of this conference will develop in this spirit.

In Romania this point of view has been championed by the Romanian Geographical Society ever since the beginning of this century. The development of geographical and cartographic activities in this country within the last hundred years, while widening the range of geographical information, has required rigorous standardization of the graphic representation of geographical names. Yet, despite this constant attention, some inconsistencies did slip into the Romanian cartographic and geographical documents. The preparation of some vast geographical and cartographic works in the past fifteen years, for example *A Geographical Monograph of the Romanian People's Republic* (1960), the *Concise Geographical Atlas* (1962, 1967), the *National Atlas of the Socialist Republic of Romania* (in preparation since 1969), the *World Atlas* (1972), and the *Historical Atlas* (1972), called for he application of some clear principles to eliminate these inconsistencies. The activity manifested in Romania in this field has therefore been in keeping with the recommendations and resolutions of the First United Nations Conference on the Standardization of Geographical Names.

In 1970 a Commission on Geographical Nomenclature was set up within the organization of the Geographical Institute of the Academy of the Socialist Republic of Romania for the preparation of the National Geographic Atlas of the Socialist Republic of Romania. The Commission made some recommendations for both the spelling of geographical names (oronyms, hydronyms, oikonyms) occurring in the territory of Romania and the transliteration of foreign names, in order to do away with the inconsistency that had been present in the spelling of certain geographical names. These recommendations became normative rules as soon as they were accepted by the Commission for Promoting the Romanian Language set up in 1970 within the organization of the Academy of the Socialist Republic of Romania. This Commission included many linguists, geographers, cartographers, historians, and representatives of the State administration and of other central bodies. The composition of this permanent body is such that it can be assimilated with a national decision-making forum for standardizing geographical nomenclature for Romanian territory.

Similar initiatives have been taken recently by the Romanian Geographical Society and the Commission on Geographical Terms of the Romanian National Committee of the International Geographical Union. It was suggested that an Index of geographical names for the territory of the Mehedinţi county be compiled for the occasion of the centenary of the Romanian Geographical Society (1975). This index would be a preliminary experiment for the preparation of a full geographical dictionary of Romania.

When standardizing the geographical terminology of the base-map on the scale 1:1,000,000 for the National Geographical Atlas of the Socialist Republic of Romania, distinct glossaries were produced for oronyms, hydronyms and oikonyms and a definitive written form was arrived at for many names (300, 400 and 1,500 in the respective categories). It is intended that besides the 300 maps included into the 76 plates of the Atlas, a further 1,000–1,500 names will be listed in a supplement, so that all in all this will be the most comprehensive index of geographical names for Romania's physical features and localities.

As a matter of fact, when in 1968 a new division of the country into administrative districts was made, a complete and graphically unified index of all of Romania's localitities (some 15,000 names) was appended to the law that put it into effect. After a few corrections to obvious errors, this formal index was taken over as it was for the preparation of the National Geographic Atlas. Although the Romanian language has no regional or social dialects with differences in spelling or pronunciation, it being a unitary language, yet variations and inconsistencies do exist in the written form of some names (of hydronyms and oronyms in particular), most of which have been recorded.

The standard adopted at present does away with the arbitrary element, setting forth a unitary written form in the spirit of the cultivated language.

In conclusion, it may be assumed that, once geographical nomenclature has been unified and spelling standards established that can be applied to all the cartographic and geographical work required for producing the National Geographic Atlas of the Socialist Republic of Romania, the task of standardizing these names on the territory of this country will have been fulfilled.

Standardization of foreign geographical names has been a permanent concern of Romanian geographers, and the official forms established by each State have been consistently adopted. This standard approach was formally sanctioned by the Concise Orthographic and Orthoepic Guide published in 1960 by the Academy of the Socialist Republic of Romania, and subsequently applied in the Concise Geographical Atlas (1962, 1967). The Romanian cartographic works already published, as well as forthcoming ones, establish this as standard

* The original text of this report appeared as document E/CONF.61/L.80.

procedure. The geographical nomenclature of the map of the world on the scale 1:2,500,000, established by the cartographic institutes of several European socialist countries, was based on these same fundamentals. For the purpose of transliterating Cyrillic letters into Romanian, the pattern adopted was that of the ISO system following the Croatian alphabet, whence the State standard No. 5309/1970.

Standardization of geographical names on a national scale was required not only of small-scale cartographic material but also of topographic surveys. Topographers now no longer look upon topical names as mere terminological appendices; they carry on small field surveys, and the results obtained are checked out and testified to by local administrative bodies. Names are being collected by means of questionnaires providing for: geographical names, spelt according to pronunciation; category (locality, isolated settlement, type of ground, watercourse, planimetric detail etc.); meaning and significance of the name; name and place of respondant; name finally established; observations. In some instances the scope of the questionnaire was enlarged. For checking, some earlier surveys are also consulted. The use of rapid procedures, such as aerial photography, to update maps does not mean that field verification and investigation of geographical names is no longer resorted to.

To preserve the standard form for most names and to contribute to the final standardization of all names, topographers and cartographers work in collaboration with geographers, linguists, ethnologists, historians and other specialists from central administrative State bodies. Together they intend to provide the most comprehensive toponymy for the country's basic maps, this being required by ever broadening social, economic and scientific activity of Romania.

To this end, the Geographical Institute of the Academy of the Socialist Republic of Romania has prepared a complete series of county maps (in the press) on the scale 1:200,000 with a standardized nomenclature; these maps are to be appended to the monographs on the new administrative units of Romania in the "Romania's Counties" series.

We consider that the Commission for International Geographical Terminology of the International Geographical Union should also be granted fuller support by the organizations responsible for standardizing geographical terms for its task of working out a polyglot dictionary of geographical terms. The publication of such a work is awaited with great interest.

In keeping with its policy of promoting collaboration with all states, based on the observance of the principles of national sovereignty and independence, non-interference in domestic affairs, and equality of rights and mutual benefits, Romania supports the broadening of international co-operation in standardizing geographical names and exchanging experience and information gathered the world over. International recognition of the graphic forms standardized by each country can be obtained only through permanent co-operation among the States.

In this spirit of co-operation Romania is ready to place formally at the disposal of all countries participating in this Conference a map of the country on the scale 1:850,000, which gives, in standardized form, the basic toponymic nomenclature — that of the orographic and hydrographic features and of the network of major localities. We considered that such a map should be useful for those departments of geography and cartography which plan to produce material (atlases, and geographical, touristic and other maps) covering Romania's territory.

We consider it useful for any country to provide or recommend a map of its national territory that includes geographical names standardized by that country's responsible national body in conformity with the recommendations made at the two Conferences. When that is done, such a map would be the standard cartographic document for the country's geographical nomenclature.

THE CONTEMPORARY STATE OF WORK IN THE FIELD OF GEOGRAPHICAL TERMINOLOGY IN CZECHOSLOVAKIA

Report presented by Czechoslovakia*

Work on the geographical names used in cartographic publications in the Czechoslovak Socialist Republic is performed by the Commission on Terminology of the Czech Board of Geodesy and Cartography and the Slovak Commission on Terminology of the Slovak Board of Geodesy and Cartography.

The following comments are offered in relation to individual items of the proposed programme for the Second United Nations Conference.

ITEM 9

(*a*) In compiling Czechoslovak geographical terminology the Commission on Terminology (NK) co-operates with district terminology boards that have been established at survey centres as advisory authorities;

(*b*) The Czechoslovak geographical names are compiled within the scope of the Czechoslovak Basic Map on the scale 1:50,000. The total number of names is about 50,000; these will be issued as regional lists of major geographical names;

(*c*) In multilingual areas the version used on official maps shall be preferred; alternative forms may be added where appropriate;

* The original text of this report was contained in document E/CONF.61/L.85.

(*d*) The Commission on Terminology has set down principles for the compilation of geographical and historical names in cartographic works. A list of names of geographical features in Arab countries is under preparation. The list of names of the world's States and countries, as well as the list of towns with a population of over 100,000, has already been issued.

The list of names of the world's States and countries is divided by continents, and gives the abbreviated (cartographic) names in Czech, Slovak, the form used on the 1:2,500,000 Map of the World, Russian, English, French, German and Spanish, together with the official name in the national language and the Czech official name. The list of towns with a population of over 100,000 also includes some smaller settlements of particular importance: in all, it presents 3,000 towns, with their position determined by geographical co-ordinates. The terminology observes the accepted principles of compilation of geographical names. Czech alternative forms are not shown. In the near future the Commisson on Terminology plans to review and re-publish "The principles of the compilation of geographical and historical names on maps", "The principles of the activities of district terminology boards", "List of customary Czech and Slovak geographical names", "List of geographical abbreviations used on maps", "List of geographical names in Arab countries", "List of names of orographical Features in Czechoslovakia", "List of major peaks in Czechoslovakia" and "List of major streams and water surfaces in Czechoslovakia";

(*e*) The Commission on Terminology (NK) of the Czech Board of Geodesy and Cartography (ČÚGK) has been established to collect geographical names for maps published in the Czech Socialist Republic, and the Slovak Commission on Terminology (SNK) of the Slovak Board of Geodesy and Cartography (SSGK) acts as an advisory board to the latter in problems concerning the names used on Slovak maps.

ITEM 10

The Commission has approved the project of the International Dictionary of Map Geographical Names, which is to unify geographical terms used on general geographical maps. The present programme is concerned with the 1,000 or so terms of greatest importance (the project is submitted to the Second United Nations Conference).

ITEM 11

As regards the principles set down by the Commission on Terminology, foreign geographical names are presented in their international version in accordance with the documents in force establishing the political and administrative position of the country concerned. The names from languages using the Roman alphabet are transcribed with all diacritical marks, with the exception of Viet-Namese. The transcription of names from other languages uses the Czech alphabet and meets the principles approved by the Commission on Terminology.

Certain changes are being considered for the compilation of the 1:2,500,000 Map of the World. The Commission on Terminology also plans to issue lists of geographical names by individual states and countries, containing about 40,000 terms.

ITEM 14

(*a*) Where the feature is shared by two or more countries, the name taken is that used in the country in which the largest part of the feature is situated; or, exceptionally, the customary Czech name may be used;

(*b*) In descriptions of maritime features, sovereignty over territorial waters is taken into account, and the customary Czech name may be shown where appropriate;

(*c*) A list of names of undersea features has been published. The names have Czech forms. The list gives about 400 names;

(*d*) Celestial bodies are designated by international astronomical data, or by their Czech names.

ITEM 15

(*a*) An agreement on the exchange of publications, information and experience has been made with socialist countries;

(*b*) In October 1971, a regional meeting of the Seventh and Eighth Regional Groups was held in Prague with the participation of representatives of the German Democratic Republic. The purpose of this meeting was to exchange information on the present state and organization of terminological activities in the countries concerned, and to make preparations for the Second International United Nations Conference on the Standardization of Geographical Names;

(*c*) The Commission on Terminology is preparing a bibliography of terminological works.

CONDITION AND PROBLEMS OF THE STANDARDIZATION OF GEOGRAPHICAL NAMES IN BULGARIA

Report presented by Bulgaria*

The People's Republic of Bulgaria took part in the First United Nations Conference on Geographical Names in Geneva in 1967. Our country supports and actively helps international co-operation in the standardization of geographical names, fully aware of the fact that this is one of the ways in which peoples can come closer together culturally and establish better contacts and understanding as a factor making for world peace.

In the spirit of this basic idea, we hope that the partici-

* The original text of this report, prepared by B. Koen, I. Duridanov, M. Glovnia, A. Kyurkchiev, and M. Daneva of the Council of Orthography and Transcription of Geographial Names at the Central Administration of Geodesy and Cartography, was contained in document E/CONF.61/L.93.

pants in the Second Conference will do all they can still further to widen co-operation in the field of standardization of geographical names among all nations wishing to achieve this goal.

In the national report presented by our country in 1967, a brief historical review was made of the development of the problem of geographical names from Bulgaria's liberation in 1878 down to our own days. We think it expedient now to discuss only the developments which have taken place and the problems which have arisen in Bulgaria in this field since 1967.

The significance of the Geneva Conference for the work on the standardization of geographical names in Bulgaria

Before the 1967 Geneva Conference a long and fruitful road had already been traversed in our country in the study and standardization of geograhical names. The substantial work done at the University of Sofia, at the Bulgarian Academy of Sciences and by the cartographic services in Bulgaria led in a natural way to the setting up of the Council on the Orthography and Transcription of Geographical Names as a unifying, super-departmental body to achieve unity in this field. We should emphasize that the calling of the Geneva Conference and the recommendations adopted by it substantially helped our work. This help came mainly in the following ways.

An international significance was given to the activity which we were performing on a national scale. An important international evaluation was made of the work in this field, which naturally helped to give it a still higher standing within our national frontiers. Nor should the increased self-confidence and assurance be underestimated with which, it seems to us, specialists in other countries, too, began to look upon their work.

The Geneva Conference was held several years after our Government had independently become aware of the significance of unification in the field of geographical names and had established an organ for this purpose — the Council on the Orthography and Transcription of Geographical Names. The recommendations of the Geneva Conference helped us in checking and determining the main trend of our activity in this field. The resolutions of the Geneva Conference helped us to fulfil still more consistently the originally adopted programme for standardizing geographical names in Bulgaria.

The First Conference not only reaffirmed the line adopted by us but also set new problems. It is necessary to mention in this connexion the problems of national standardization, including the question of standardization in rendering the geographical names in Roman characters, as well as the resolution of terminological differences, standardization of the names of features extending into the territories of several countries, standardization of names in the world's oceans etc. All this enriched and widened the scope of our activity.

International co-operation and intensified contacts after 1967 were among the very important results of the Geneva Conference. It is clear to every worker in this field that a large proportion of the work on the standardization of geographical names is directly related to efficient international co-operation. The improvement which took place in our work after 1967 is an eloquent proof of this.

The evaluation made so far by our country of the results of the 1967 Geneva Conference on Geographical Names has revealed that they formed a substantial contribution which greatly helped our work during the period 1967-1972.

Basic results and problems accompanying the unification of geographical names in Bulgaria in the period 1967-1972

In the period 1967-1972 in Bulgaria the work on the problem of geographical names was continued mainly by three centres: the Council on the Orthography and Transcription of Geographical Names at the Central Administration of Geodesy and Cartography, as a unifying centre charged with the function of regulating the unification of orthography and transcription; the University of Sofia, in its special departments of linguistics, Bulgarian language, Slav and Western philology and geography; and the Bulgarian Academy of Sciences — mainly the Bulgarian Language Institute and the Geography Institute, as well as the editorial board of the Bulgarian Encyclopaedia.

1

The first centre in which work on geographical names is carried on is the Council on the Orthography and Transcription of Geographical Names at the Central Administration of Geodesy and Cartography (CAGC). The organizations guided by the Central Administration of Geodesy and Cartography, which do both large-scale and small-scale cartographic work, perform a practical job, substantial in volume, on geographical names for cartographic purposes. In many instances the work of the Council on the Orthography and Transcription of Geographical Names is usefully supplemented and helped by these organizations.

Thus, a considerable amount of work on the establishing of correct local geographical names in the country for large-scale map-making is performed by the design organization *Geoplanproject*. In the instructions for topographic projecting on the scales 1:2,000, 1:5,000 and 1:10,000, issued by the Central Administration of Geodesy and Cartography,[1] there are special sections on the rendering of local geographical names.

A large volume of practical work on geographical names is done by the Institute of Cartography, which publishes most of the small-scale maps and atlases in Bulgaria. It is a practical necessity that the systematization and study of geographical names, both on the territory of Bulgaria and in other countries — which is closely connected with the making of maps — should take place at this particular Institute. This work is guided by a special Reference Cartographic Service, where all

[1] *Instruktsiya za topografsko snimanye v mashchbi 1:10 000, 1:5 000 i 1:2 000*, second edition (Sofia, GUGK, 1967).

materials on geographical names are collected. It is interesting to note the themes of the card indexes kept by, and used in the practical work of the Institute of Cartography: there is, for instance, a general card index of the tourist objectives in Bulgaria, in which the names are arranged by kind and in alphabetical order, each name being transcribed in 10 languages — Bulgarian, Russian, French, German, English, Spanish, Czech, Polish, Hungarian and Esperanto; a card index of the highest and the well-known mountain peaks, sections and ranges, and the foothills, plateaux, hills and mounds in Bulgaria; and a card index of the archaeological, historical and cultural monuments in Bulgaria. From these and other card indexes a number of reference files and handy maps have been made, by means of which the unification of geographical names is being implemented in Bulgarian cartographic publications.

The work on the standardization of geographical names in Bulgaria is mainly concentrated in the Council on the Orthography and Transcription of Geographical Names. Working with a minimum number of staff members, the Council avails itself of the co-operation of all the above-mentioned institutes and organizations in Bulgaria.

The main trends in the activity of the Council on the Orthography and Transcription of Geographical Names are these:

(*a*) The scientific transcription of foreign geographical names and their complete standardization in all national publications, radio, television, the press etc. For this purpose the Council publishes obligatory general lists of transcribed geographical names. In the period after 1967, the Council made such transcriptions for most of the European countries and published a great part of them.[2] Considerable work has been done, and not only have tens of thousands of Bulgarian names been transcribed, but also a rational system for their composition, reviewing, discussion and printing has been established;

(*b*) The elaboration of general rules and the issuance of instructions on the orthography and transcription of geographical names. A basic task which the Council succeeded in carrying out was to issue a general instruction on the orthography and transcription of geographical names,[3] as a foundation for the practical work of transcribing geographical names in Bulgaria.

A brief set of instructions, containing the rules for transcribing geographical names from the language of the country concerned into Bulgarian, is attached to every list. With this the reader is enabled to transcribe on his own names which are not included in the list. We have already published instructions on the transcription of geographical names in Albania, Austria, Italy, Hungary, Greece, Yugoslavia, the German Democratic Republic, the Federal Republic of Germany and Mexico, among others, which contain indications for transcribing from all the official languages of the country (e.g. French, German, Italian and Rhaeto-Romanic for Switzerland);

(*c*) The examination of the problems connected with the national standardization of geographical names. There are two main problems: the exact rendering of local geographical names in Bulgarian, and their appropriate rendering in Roman characters.

The Council on the Orthography and Transcription of Geographical Names treats of a number of problems in rendering local geographical names, above all in connexion with the large-scale (1:5,000 and 1:10,000) maps. A number of toponymic and cartographic questions had arisen in practice connected with the rendering of local geographical names. It was necessary to emphasize the need to provide a real and not an artificial toponymy on the maps. To this end, the Council recommended first of all that the exact phonetic and morphological form of local geographical names, and their word-order, should be preserved.[4]

The problem of the exact rendering in Roman characters of geographical names written in the Bulgarian alphabet was also — in fulfilment of the recommendations of the Geneva Conference — taken up by the Council on the Orthography and Transcription of Geographical Names, and a satisfactory solution to it was found. The existing systems of rendering Bulgarian names in Roman characters were examined and an appropriate system drawn up. The system approved by the Council was attached to a list containing the most important geographical names from Bulgaria in their standardized form, which the Council also published;[5]

(*d*) The theoretical problems connected with the uniform rendering of geographical names — the basic problems of transcription and orthography, as well as the great number of problems of cartographic toponymy and toponymic cartography, the questions of traditionalism in rendering geographical names etc. — have naturally become some of the central problems in the work of the Council on the Orthography and Transcription of Geographical Names. Many of these problems had to be solved in closest connexion with the practical work of the Council. In order to make this experience generally available and to provide theoretical solutions to many of the practical questions of rendering geographical names, the Council decided that it would be useful to publish a special Collection of Materials on the Orthography and Transcription of Geographical Names. The first issue of the Collection contained the more important materials from the Geneva Conference,[6] such as resolutions and reports; the second was devoted mainly to the problems of transcribing foreign geo-

[2] For example: *Spisk na transkribirani geografski imena ot Republika Avstriya* (Sofia, 1969); *Spisk na transkribirani geografski imena ot Narodna Republika Albaniya* (Sofia, 1969); *Spisk na transkribirani geografski imena ot Ungarskata Narodna Republika* (Sofia, 1969); *Spisk na transkribirani geografski imena ot SFR Yugoslaviya* (Sofia, 1971).

[3] *Obshcha instruktsiya za pravopis i transkriptsiya na geografskite imena* (Sofia, 1969).

[4] B. Koen and M. Mladenov, "Geografskite imena v yedromashchabnata karta na Bulgariya (1:5 000-1:10 000)", *Izvestiya na GUGK*, No. 4 (1970), pp. 24-29.

[5] *Spisk na geografskite imena ot NR Bulgariya (predadeni s bulgarska i latinska azbuka)* (Sofia, 1971).

[6] *Sbornik ot materiali po pravopis i transkriptsiya na geografskite imena* (Sofia, 1971).

graphical names into Bulgarian.[7] We have tried to make the content of these collections accessible to a certain extent even to the foreign reader. For this purpose, the articles are accompanied by summaries in Russian and in one Western language. The editorial office of the Collection would be glad also to publish material on the subjects treated in it by foreign authors, as it wishes to help in this way the establishment of closer contacts between workers in this field. We readily place this publication at the disposal of the bodies concerned with the orthography and transcription of geographical names in other countries;

(*e*) International co-operation in the field of geographical names is one of the constant and important tasks which the Council has successfully undertaken in the last few years. After the Geneva Conference, the Council on the Orthography and Transcription of Geographical Names in Bulgaria established useful contacts with many of the participants in the Conference, to whom it sent some of the materials published in our country, receiving in exchange material from other nations on geographical names. Closer and more successful ties were established with the participants in the East European Group, with the Republic of Austria and with the German Democratic Republic. Our country became the initiator of or a joint participant in the implementation of certain international undertakings in this field, such as the making of internationally unified lists of geographical names in the Danube river basin and the Black Sea coastal zone, the compilation of an international dictionary of geographical terms used in general geographical maps, and the convening of the regional meeting of the East European region and the USSR on geographical names in 1971 in Prague.

2

The second centre is the University of Sofia, which has definite traditions in this field. In the philological departments of the Clement of Ohrid University of Sofia there is a lively interest in the question of the transcription and orthography of foreign geographical names into the Bulgarian language. In the past, similar questions were discussed in articles and brief notes by linguists at the University—Stefan Mladenov, Stoyan Romanski, D. Dechev, B. Gerov and others. In more recent times there have been systematic treatments of questions of the pronunciation and transcription of names from a wide range of the world's languages (in articles by L. Andreychin, V. Georgiev, M. Vuglenov, A. Milev, G. Batakliev *et al.*).

Questions of transcription and pronunciation of foreign names in the Bulgarian langage are treated in the magazines *Bulgarski Ezik* and *Ezik i Literatura.* Changes of geographical names resulting from the migration of populations and ethnic changes are examined in the pages of the magazine *Balkansko Ezikoznanié* (*Linguistique Balkanique*), published by the Bulgarian Academy of Sciences.

Most recently there have been articles by philologist lecturers at the University of Sofia who have made contributions in the field under discussion. Questions about the pronunciation and transcription of Ukrainian and Byelorussian names were examined thoroughly in two articles by L. Andreychin, published in *Bulgarski Ezik.*[8] The author proceeds from the desideratum of a correct rendering of the pronunciation of foreign names in Bulgarian, taking into consideration the phonetic structure of our language. The rendering of ancient Greek names in Bulgarian constitutes the subject of an article by G. Batakliev, also published in *Bulgarski Ezik* magazine.[9] M. Vuglenov and I. Kunchev have written about the pronunciation and transcription of Korean names.[10] The authors proceed from their personal observations and knowledge of the Korean language and offer an acceptable solution to the questions these produce, in spite of the great difficulties arising from differences between the phonemic systems of Korean and Bulgarian.

On the transcription of foreign names articles have also been published by the lecturer in Serbo-Croatian, Angel Igov. And a number of materials have been published by I. Duridanov,[11] A. Nichev[12] and others on theoretical and practical problems of the exact rendering of geographical names.

For the rendering of geographical names on large-scale maps, the investigations of the toponymy of particular parts of the country are important. In the *University of Sofia Annual* (*Annuaire de l'Université de Sofia*) three toponymic monographs have been published so far, by I. Duridanov, K. Popov and B. Simeonov.[13]

The work of the professors in the philological departments at the University of Sofia in recent years has in general been oriented towards the solution of both theoretical and practical problems in the transcription and orthography of geographical names.

Considerable work on geographical names is also done in the Geology and Geography Department of the University of Sofia, where the lecturers and specialists in geography are trained for different branches of our scientific, cultural, political and economic life. In the university courses in cartography — and especially

[7] *Sbornik ot materiali po pravopis i transkriptsiya na geografskite imena* (Sofia, 1972).

[8] L. Andreychin, "Izgovor i transkriptsiya na ukrainski imena", *Bulgarski Ezik*, No. 19 (1969), pp. 171-175; ————, "Izgovor i transkriptsiya na beloruski imena", *Bulgarski Ezik*, No. 20 (1970), pp. 38-40.

[9] G. Batakliev, "Izgovor i transkriptsiya na starogrutskite imena v bulgarski ezik", *Bulgarski Ezik*, No. 17 (1967), pp. 543-550.

[10] M. Bugleńov and I. Kunchev, "Izgovor i transkriptsiya na koreyski imena v bulgarski ezik", *Bulgarski Ezik*, No. 19 (1969), pp. 280-287.

[11] Iv. Duridanov, "Za imeto Magurata", *Turist*, No. 15 (1970), pp. 10-11.

[12] Al. Nichev, "Za bulgarskite sobstveni imena na tr. — lat.", *Bulgarski Ezik*, No. 19 (1969), pp. 554-556.

[13] Iv. Duridanov, "Toponimiyata na purvomayska okoliya", *Godishnik na Sofiyskiya universitet, Filol. fakultet*, vol. 2 (1958); K. Popov, "Mestnite imena v Belolatinsko", *Ibid.*, vol. 4 (1960); *B. Simeonov, "Toponimiyata na godechko", ibid.*, vol. 9 (1965), and vol. 10 (1966).

in those in the regional physical and economic geography of Bulgaria and of other countries and continents — special hours are provided for the study of the principles of transcription and orthography of Bulgarian and foreign geographical names. The main and essential part, which is particularly effective, is above all the systematic practical application of these principles by the professors during the whole course of lectures, in the exercises and the pedagogical practice of students, and in the preparation and defence of dissertations and diploma works in cartography and geography.

Great importance for the exact mastery of geographical names during the educational process in our schools and establishments of higher learning is attached to questions of the correct pronunciation (orthoepy) of geographical names and of their origin, history and meaning. In geographical textbooks for schools of general education and the University, an accent is often placed over foreign names of orographic or hydrographic features and regional designations, in order that they should be correctly pronounced, as they are officially pronounced in the country concerned; and the meaning of the names is also explained. The same approach has been applied in the Geographical Dictionary of Foreign Countries, published in 1970, and in the five volumes of the Short Bulgarian Encyclopaedia, published in 1969.

In introducing principle of phonetic transcription and orthography of geographical names, a contribution has been made by the Scientific Council of Professors in Geography, who took part as consultants and as reviewers in the preparation of the geographical maps, atlases, slides and films on geographical subjects which have been issued by the Committee on Methodological and Study Aids at the Ministry of Education.

With a view to improving and making more effective the educational work connected with questions of the orthography and transcription of geographical names in the special Department of Geography at the University of Sofia, it is envisaged that a special elective course in toponymy will be introduced in the near future. This course would be useful to students in geology, history, botany, zoology and philology.

3

The third centre is the Bulgarian Academy of Sciences, in which it is mainly the Bulgarian Language Institute and the Geography Institute which are concerned with geographical names. But very often, too the Institute of History and the Institute of Balkan Studies have comments to offer in connexion with geographical names.

At the Bulgarian Language Institute great and profound work has been done for many years on Bulgarian geographical names and toponymy. As a result of this activity, a number of works and monographs have been published by V. Georgiev, I. Duridanov, Y. Zaymov, G. Kristov, N. Kovachev, S. Ilchev[14] and others. One of the major works of the Bulgarian Language Institute in recent years has been the publication of Volumes 1 and 2 of the Bulgarian Dialects Atlas,[15] which contains more than 600 maps. We mention this work in dialectology, because the link between dialectology and toponymy is obvious and the former practical use in topography and cartography.

For its publications the Bulgarian Encyclopaedia Service established its own system of transcription of personal and geographical names for all States, making use of the common characteristics of the two kinds of names and of the different languages. The historical development of local names and their transcription is reflected in the Atlas of Bulgarian History,[16] produced by a group of associates at the Institute of History at the Bulgarian Academy of Sciences and the Central Administration of Geodesy and Cartography. Card indexes are kept at the History Institute for all changes in the name and status of inhabited localities in Bulgaria during the last 100 years.

The Geography Institute at the Academy of Sciences also works on the study and systematization of geographical names in Bulgaria. At the Institute several important card indexes are kept of geographical names in Bulgaria. Studies are conducted at the Institute, and a card index is kept, on the orographic objectives in the country, and the historical development of the most substantial changes in their names is followed. This work is intended to be of practical use in the naming and renaming of the more important geographical objectives.

An important aspect of mutual co-operation is the exchange of information and material. This must be based on full bibliographical information, which could be achieved with the help of the United Nations Council of Experts and with the active co-operation of all interested parties.

The Bulgarian delegation thinks that the Second United Nations Conference will have a favourable effect on future work on geographical names, and that it will help to increase useful contacts among the national standardization bodies, leading to a better understanding among nations.

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[14] Bl. Georgiev, *Bulgarska etimologiya i onomastika* (Sofia, 1960); Iv. Duridanov, *Mestnite nazvaniya ot Lomsko* (Sofia, 1952); Y. Zaymov, *Mestnite imena v Pirdopsko* (Sofia, 1959); G. Kristov, *Mestnite imena v Madansko* (Sofia, 1964); P. Kovachev, *Mestnite nazvaniya ot Sevlievsko* (Sofia, 1961); *Mestnite nazvaniya v Gabrovsko* (Sofia, 1965) and *Toponimiyata na Troyansko* (Sofia, 1969); St. Ilchev, *Mestnite imena v Botegradsko* (Sofia, n.d.).

[15] *Bulgarski dialekten atlas* (Sofia, vol. 1, 1964; vol. 2, 1966).

[16] *Atlas po bulgarska istoriya* (Sofia, GUGK, BAN, 1963).

REPORT ON PROGRESS IN THE STANDARDIZATION OF GEOGRAPHICAL NAMES IN THE GERMAN DEMOCRATIC REPUBLIC

Report presented by Czechoslovakia and the Union of Soviet Socialist Republics*

On the occasion of the Second United Nations Conference on the Standardization of Geographical Names, 10-31 May 1972, in London, the following report is submitted on the progress made in the standardization of the spelling of geographical names in the German Democratic Republic since the First United Nations Conference on the Standardization of Geographical Names held in September 1967, in Geneva.

I

The commission for the spelling of geographical names on maps, which is attached to the Council of Ministers of the German Democratic Republic, Ministry of the Interior, Administration for Surveying and Cartography, has made use of the recommendations given at the First United Nations Conference on the Standardization of Geographical Names for its own activities.

The commission for the spelling of geographical names on maps acts as an advisory body to the head of the Administration for Surveying and Cartography on basic questions of the spelling of geographical names on maps compiled in the German Democratic Republic. Its members are representatives of state authorities, cartographic enterprises and scientific institutions. Its task is to lay down the principles for a standardized spelling of geographical names on maps published in the German Democratic Republic.

The commission submits recommendations for the transliteration of geographical names from non-Roman characters, works out suggestions for principles to be followed in the transliteration of names, and suggests transliteration systems and rules for application in exceptional cases.

In laying down principles for the spelling of geographical names, the commission sees its special task not only as safeguarding its own national interests but, to the same extent, as taking into account the interests of other peoples as well.

The principles governing the activities of the commission have been set forth in the report of the German Democratic Republic submitted on the occasion of the First United Nations Conference on the Standardization of Geographical Names. The documents prepared by the commission are endorsed by the Head of the Administration for Surveying and Cartography after having been thoroughly discussed, and thus become binding.

II

Following resolution 4 of the First United Nations Conference on the Standardization of Geographical Names, which concerned national standardization, the commission for the spelling of geographical names on maps has revised the *General Directions for the Spelling of Geographical Names in the German Democratic Republic* in a second edition (Berlin, 1970), which has been considerably supplemented and extended. This new edition has a wide range of application. These general directions contain the names of the most important mountain ranges, peaks, lakes, rivers, regions etc. on the territory of the German Democratic Republic. For the spelling of names of localities the *Dictionary of Localities of the German Democratic Republic* (Berlin, 1970) is binding. Article 40 of the Constitution of the German Democratic Republic requires that geographical names in areas inhabited by citizens of Sorbian nationality shall be given in both German and Sorbian. The spelling of these names is laid down in the *Register of Localities in the Bilingual Districts of the Dresden and Cottbus Counties*, Bautzen.

Furthermore, a fourth revised edition of the *Regulations for the Spelling of Geographical Names on Maps compiled in the German Democratic Republic* has been published (Berlin, 1972). These regulations are the binding document for the standardized spelling of geographical names on all maps published in the German Democratic Republic. They are also a major aid for all those holding responsible positions in the publishing trade and in the press, radio and television of the German Democratic Republic, and they are used in many State bodies and institutions. The regulations contain general directions for the spelling of geographical names; rules concerning the transliteration of foreign-language names from States using the Roman alphabet as well as from States using non-Roman alphabets; rules applicable in exceptional cases; a list containing the spelling of the names of States and of dependencies and other territories; the German spelling of the names of towns, mountain ranges, regions, peninsulas, islands, seas and parts thereof, rivers, lakes and undersea relief forms; and a selecton of other States' abbreviations that are in current use.

For a number of European States general guidelines for the spelling of geographical names have been published. These guidelines include information on the documents that determine the spelling of names on maps; general rules for the spelling of geographical names; rules applicable in exceptional cases; and generic names and registers of geographical names. A register of abbreviations has also been added. So far such guidelines have been published for Belgium (1967), the Netherlands (1967), Italy (1968), Denmark (1968), France (1969), Spain (1969), Portugal (1969) and Iceland (1970). Guidelines for Norway, Sweden, Czechoslovakia and Poland will be appearing shortly.

* The original text of this report, prepared by the Council of Ministers of the German Democratic Republic, Ministry of the Interior, Administration for Surveying and Cartography, was contained in document E/CONF.61/L.95.

III

The principles and rules contained in the above documents have proved most useful in solving cartographical problems. In preparation for new editions, these documents are being continuously supplemented. An example of how the principles of standardizing geographical names have been consistently applied in the German Democratic Republic is the *Haack Large World Atlas* (Gotha, 1968-71.

In view of the experience gathered so far in the German Democratic Republic in the field of standardizing geographical names on a national as well as on an international level, the prerequisites, exist for active international co-operation. Experts from the German Democratic Republic attended the Seventh and Eighth Regional Groups' discussion on the standardization of geographical names which took place in October 1971 in Prague.

REPORT BY THE HUNGARIAN COMMITTEE ON GEOGRAPHICAL NAMES*

Most of the work of standardization of geographical names in Hungary is connected with he Committee on Geographical Names, established in 1963 in he framework of the National Office of Lands and Mapping in the Ministry of Food and Agriculture (formerly the State Office for Geodesy and Cartography). The Committee is responsible for every geographical name in Hungary with the exception of administrative names (names of counties, districts, cities, towns, as well as those inside inhabited areas).

Following standardization, two lists of names have recently been published. The first one, *List of Names of Countries*, includes the shorter and full names of 227 countries and dependent territories. The list gives not only the Hungarian pronouns and adjectives for each title, but also a sort description of the entity listed, the two kinds of name in the language of the territory concerned, as well as the English, French, German, Spanish and Russian equivalents. A short index helps the user to find the variants occurring in the various languages or in consequence of changes.

The second publication, *Gazetteer of Hungary, part 1, The More Important Names of the Regions and the Relief and Hydrographic Features*, contains 715 geographical names of mountains, peaks, regions of various size, rivers, streams, lakes and other similar features. Each title is accompanied by several data, including the type of feature, its situation and variants. An English-language introduction helps those unfamiliar with the Hungarian language.

As a continuation of this Gazetteer county lists will be published. These lists will be based on name-collections carried out and published under the supervision of linguists of the Institute for Linguistics of the Hungarian Academy of Sciences. The geographical names of the county Zala were prepared for approval by the Committee on Geographical Names in 1971, and this material will form the second volume of the Gazetteer of Hungary. It will possibly appear in 1973. As the collection of linguistic data proceeds, further volumes will be prepared. Parallel to this work, directives have been drawn up for the presentation and use of geographial names on large-scale topographic maps. This is necessary until gazetteers appear for all the counties, as these maps at present serve as the main source for the geographical names identifying smaller physical features.

In consequence of a Government decree of March 1971, the range of "administrative names" has been restricted to names of counties, districts, cities and towns. Thus a considerable number of names of settlements — those referring only to an outskirt of a city or a town — have been transferred to the Committee on Geographical Names. Before work can actually be started on this group of names, legal machinery has to be established, which is now happening.

As our country is responsible for geographical names on the 1:2,500,000 World Map, we have several tasks related to international standardization as well. These include the preparation of the third edition of the guide "Rendering of Geographical Names on the 1:2,500,000 World Map", which will appear this year. This guide is now being revised in accordance with new transcription systems in particular, those approved by the First United Nations Conference on the Standardization of Geographical Names.

Work is now starting on standardizing Hungarian exonyms used conventionally in domestic cartography and geographical literature. As a first step, lists of exonyms appearing on maps and in the literature of the last few decades covering the area of Australia and the Pacific have been compiled and will be submitted for approval to the Committee. Lists for other areas will be compiled and considered in the near future.

* The original text of this report was contained in document E/CONF.61/L.100.

PROGRESS MADE IN TROPICAL AFRICA*

Committee IV at the Geneva Conference divided the world into 14 linguistic/geographic divisions (see document E/CONF.61/L.57). Division 14 was termed "Africa South of the Sahara", which is sometimes shortened to "Sub-Saharan Africa". It is now suggested that this division be termed "Tropical Africa". In the

* The original text of this report, presented by the Expert representing linguistic/geographic division 14, Africa South of the Sahara, was contained in document E/CONF.61/L.101.

north the Tropic of Cancer crosses the Sahara and divides us from the Arabic division; in the south the Tropic of Capricorn approximately divides us from South Africa. The reason for his suggestion is that many of the factors common to the States of Tropical Africa are not shared by South Africa.

This report, then, covers Tropical Africa, which comprises 35 Member States of the United Nations. It is notable that only eight have responded to the invitation to attend this Conference and that, on the second day of the Conference, when this report is being delivered, only three (Nigeria, Uganda, Kenya) have arrived and are seated.

Among the factors common to the States of Tropical Africa are that they are all members of the Organization of African Unity and within the operational area of the United Nations Economic Commission for Africa; they are all developing countries, and, according to statistics published by the United Nations, they form the largest single block of States with a low gross national product. This, in practical terms, means that they all have pressing problems of basic needs in such fields as health, education, food production, the creation of communications and industry. It follows that they find it difficult to spare either funds or suitably skilled manpower for low-priority projects, among which, regrettably, toponymy must be included.

Hundreds of different languages are spoken in the region. Fortunately for our work, they fall into recognizable groups—thus south of the equator most of them belong to the Bantu group, in which Swahili (or Kiswahili) is the most widely used as a *lingua franca*. Furthermore, they nearly all use English or French for the daily business of government. It has been suggested that the division is too large and should be subdivided; there is, however, no obvious way of doing this. Such division as exists tends to be between anglophone and francophone States; this is neither an ethnic nor a geographic grouping and must in time disappear.

The convening of a divisional conference has also been considered. However, it seems unlikely at the present time that many Member States would attend. A circular questionnaire was sent out by the United Nations Secretariat on behalf of the Divisional Expert and evoked only 13 replies. From these it appeared that few of the Member States have active toponymic organizations. The States represented at this Conference are, of course, among those few which do actively engage in toponymic processing.

It appears that anglophone States tend to set up their own organizations, whereas work in francophone States is carried on with the aid of the IGN in France (see the Report by the French Government, document E/CONF.61/L.64).

The field for toponymic work in Tropical Africa is still immense, and if significant progress is to be made, external aid, particularly in the provision of finance, and possibly also with processing, will be needed. The Group of Experts has made tentative approaches to some possible sources of aid, but thus far without success. The search will continue.

REPORT PRESENTED BY IRAN*

Introduction

The present report is an attempt briefly to review progress made in Iran during the period since the First Conference on the Standardization of Geographical Names, held in Geneva in September 1967. Throughout the report, as far as possible, the various questions have been dealt with in the order of the resolutions of that meeting.

National standardization

In line with resolution 4 a national authority on geographical names was established as early as 1968. This authority is the Geographical Sub-Committee of the Iranian Academy, whose structure has been modified in such a way as to include, in addition to the members already there, representatives of the National Geographic Organization, geographical institutes and university geography departments, as well as outside scholars whose scientific background or research activities entitle them to membership.

The Sub-Committee holds regular weekly meetings at the headquarters of the National Geographic Organization, where the secretariat and office of the Sub-Committee are located. The Sub-Committee has divided its time and efforts equally between two main functions, namely, the standardization of geographical names and the establishment and standardization of geographic terms. In fulfilling its first function the Sub-Committee, through the various facilities provided by the National Geographic Organization, takes full account of the guidelines and recommendations adopted by the Conference and outlined in the Report of the Conference.[1] By April 1972 no less than 1,000 Geographic names had been thus treated, standardized and placed on file for inclusion in the Gazetteer of Iran. A sample sheet of a questionnaire relating to this gazetteer, one devoted to the province of Khuzestan, is shown in annex I.

The activities of the National Geographic Organization

Although there are a number of Government agencies engaged in geographical activities which play their part in the standardization of geographical names, it is the

* The original text of this report was contained in document E/CONF.61/L.102.

[1] *United Nations Conference on the Standardization of Geographical Names*, vol. 1, *Report of the Conference* (United Nations publication, Sales No. E.68.I.9).

National Geographic Organization that has the main responsibility as well as the most effective means for carrying out the objectives. It is therefore considered necessary to refer to the various activities of this Organization, especially in the areas directly related to functions of the Conference.

Revision of existing geographical information through the interpretation of aerial photographs has been the main objective of this Organization over the past 15 years. Photographs have been classified, and existing maps brought up to date by means of aerial observations carried out by reconnaissance aeroplane or helicopter flights, and also with extensive ground surveys, and journeys in motor vehicles and even on horseback to the various parts of the country. As a result about 90 per cent of the work is already done, and the project is expected to be completed in two years time.

Along with this activity all information necessary for bringing the existing village and country files up to date is collected systematically and stored for proper utilization. Maps and records are revised regularly and corrected information is disseminated amongst government agencies and the general public.

A recent scheme for the standardization of names and proper recording of local usages as been introduced and is sucessfully operational in the south-east of Iran. A phonetic archive has also been started, in which recordings of all names will gradually be filed away for future needs.

In addition to the above efforts, which are primarily concerned with names of individual villages, monographs are compiled at various levels covering counties and districts. These are prepared and checked by senior university students and are intended to supply the necessary material for the new Geographical Dictionary of Iran.

The role of the Literacy or "Knowledge" Corps

The tremendous role played by the youth of Iran, who under an ingenious scheme spend the major part of their compulsory military service in combating illiteracy in Iranian villages, is a well-known fact.

The National Geographic Organization has exploited the unique opportunity offered by the Military Education Corps for the fulfilment of its various geographical objectives. Annually no less than 15,000 of such young men, who comprise the main body of the Literacy or "Knowledge" Corps, are dispatched to remote villages all over the country. They are by nature educated, energetic and progressive in outlook, and ready to co-operate with all government agencies.

The National Geographic Organization supplies them with the special questionnaire form shown in annex II of this report. In time the conscripts fill in and mail the completed form to the Organization headquarters, where the information supplied is checked and transferred to cards for systematic treatment. The process goes on from year to year, so that numerous questionnaires are filled in for each village. The system not only supplies up-to-date information but provides a good system for cross-checking names and related data. Already some 20,000 villages have been thus surveyed and the information gathered has been utilized very effectively.

Romanization of geographical names

The system developed by the National Geographic Organization for the romanization of place-names and adopted by the Conference under resolution 13 is now in wide use throughout Iran. Government agencies, as well as private publishers and cartographers, make use of this system in their publications (see annex III).

Since the First United Nations Conference two tremendously valuable atlases have been published using the same method of romanization. These are the "Climatic Atlas of Iran", preparation of which was reported to the Conference previously[2] and the "Historical Atlas of Iran" published on the occasion of the 2,500th anniversary of the Persian Kingdom observed in 1971. The National Geographic Organization, aided by the kind co-operation of the Government, is of the United Kingdom at present engaged in the preparation of a standard general atlas of the world, in which some 20 maps of Iran will replace maps of England.

International activities

It has been previously brought to the attention of the Conference that Persian script is used outside the political boundaries of Iran — notably in Afghanistan. The Persian linguistic/geographic group therefore covers a wide expanse of territory in the Middle East and south-west Asia. It has not been possible to hold intergovernmental meetings for the purpose of standardizing the transcription of geographical names, but a good deal of correspondence has been exchanged on this subject and the road is now paved for holding a meeting. It is realized, and generally admitted, that the present system of transliteration used in Afghanistan differs slightly from the standard approved by the Conference, but there is no reason to think that the slight differences that do exist cannot be removed once delegates from the two countries get together at a conference table.

It is gratifying to note that the United States Board on Geographic Names has recently published an official Standard Name Gazetteer of Afghanistan (publication No. 212432) containing no less than 10,000 place-names. This gazetteer is prepared exactly along the lines suggested in Transliteration of Farsi Geographic Names to Latin Alphabet, the subject of resolution 13 of the First Conference, and it is therefore fully confirmed by this delegation.

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[2] *Ibid.*, vol. 2, *Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. E.69.I.8), p. 7.

REPORT PRESENTED BY KENYA*

A report on progress up to 1967 was submitted to the First Conference at Geneva.[1] Since that date the basic mapping of Kenya at the scales 1:50,000 or 1:100,000 has been completed, and more names have been collected.

The United States Board on Geographic Names (USBGN) Gazetteer of Kenya published in 1964 is in need of revision and expansion. Many new names have been collected and existing names revised. The Government of the United States of America has supplied to the Survey of Kenya a set of negatives of the Gazetteer pages to facilitate the revision and the publication of te Gazetteer in Kenya. The same source has also supplied a set of 26,400 cards, each carrying one entry from the Gazetteer. These cards form an essential basis for recording information on the names for revision. Other cards are being added for new names.

It is hoped to reactivate district committees for the purpose of obtaining decisions on doubtful spellings. It will then be necessary to convene the Standing (Central) Committee to approve such findings and pass lists of names for publication.

Amended names appear on new editions of published maps in advance of the publication of approved lists of names.

After 21 years of association with the toponymic work of the Survey of Kenya, John Loxton retired from the Government service in 1970. However, he is still available for consultation at the University of Nairobi.

* The original text of this report was contained in document E/CONF.61/L.104.

[1] *United Nations Conference on the Standardization of Geographical Names*, vol. 2, *Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. E.69.I.8), pp. 33-34.

REPORT PRESENTED BY NIGERIA*

In Nigeria the national mapping agency, the Federal Surveys, which now forms part of the Federal Ministry of Works and Housing, is responsible for the standardization of geographical names. This is done in close collaboration with the survey departments of the states of Nigeria. It might be mentioned that each state in Nigeria has a survey department responsible for large-scale and cadastral mapping, while the Federal Survey Department is responsible for topographical mapping and geodetic surveys and also for co-ordinating the survey activities of the states.

Before Nigeria attained independence the spelling of geographical names was based on the system of the United Kingdom Royal Geographical Society. This created a problem, because the spelling of some names on published maps did not agree with the local spelling — for example, Idogo and Sawonjo were shown as "Idawgaw" and "Shawanjaw". This problem was solved by adopting the local spelling for all geographical names on published maps.

Nigeria is already covered by a map series on the scale 1:500,000. This series was originally published in 1924: it is a compilation from data supplied by military intelligence officers, administrative officers, explorers' sketches and the then existing records of the survey departments of Nigeria. It was on this map — whose accuracy could not be relied upon — that the compilation of the first edition of the *Gazetteer of Place Names* in Nigeria was based.

Some parts of Nigeria have been mapped on the scale 1:100,000, but the whole country is now being accurately mapped on the scale 1:50,000 and it is from these maps that smaller scale maps are compiled. The standardization of geographical names is now based on these map series.

The National Committee on the Standardization of Geographical Names, of which the Director of Federal Surveys is chairman, includes all the surveyors-general, representatives of the surveying and geography departments and related disciplines of universities, and representatives of government ministries and agencies interested in maps. A similar committee also exists at state level, with the state surveyor-general as chairman.

All geographical names are obtained in the field and are based on the local spelling. The names are then submitted to the surveyor-general of the state in which the area lies, and through him to the state committee on standardization of geographical names. The names are then certified before they are accepted for publication on maps.

A second edition of the Gazetteer of Geographical Names was published in two volumes in 1965. This gazetteer is based on the 1:50,000 and 1:100,000 map series. As soon as each map sheet is published the names are extracted and, through automatic data processing, are arranged for publication. Work on the revision of the gazetteer was suspended during the Nigerian civil war. A third edition of the gazetteer is now in press and will soon be published.

* The original text of this report was contained in document E/CONF.61/L.105.

REPORT PRESENTED BY SWEDEN*

At the First Conference in Geneva the Swedish delegate gave a report on the progress made in the standardization of geographical names in Sweden. To this report we now wish to add the following points.

Since 1967 the authorities on toponymy have been reorganized, and a new body named Styrelsen för dialekt- och ortnamnsarkiven m.m. (the Board of Dialect and Toponymy Archives) was constituted in 1970. This Board has responsibility for the development of research on Swedish place names. It functions through one of its archives, Ortnamnsarkivet i Uppsala (the Place Name Archives of Uppsala, formerly the Swedish Place Name Archives), as an advisory authority on the standardization of the place names in property registers and on official maps of Swedish territory. Place names used by railways and post-offices are usually also checked by this authority, while names of roads and charts are not usually referred to it. As a result of the advisory work of the authority, the place-names which are confirmed for the property registers by the Kungliga Lantmäteristyrelse (National Land Survey Board) and for maps by the Rikets allmänna kartverk (Geographical Survey Office) may be considered as officially adopted and standardized.

Standardization of geographical names outside a single sovereignty. Co-operation between Denmark, Norway and Sweden on the spelling of te name "Skagerrak" was initiated by the Swedish delegate in Geneva and has now resulted in a common agreement on the spelling shown.

In Swedish place-name standardizaton a new problem has arisen in connexion with the data-processing of names in property registers. It has been proposed that, for reasons of economical data processing, only place names which do not exceed a certain number of letters ought to be permitted. For the same reason, the number of names would also be limited. The acceptance of this proposal would result in the disappearance of certain traditional and well-known place names as official names for property registers.

For the place names which are original in either of the two minority languages in Sweden, Finnish and Lappish, different solutions have been tried. On official maps Finnish place names are as a rule spelt in official Finnish orthography. In earlier times some Finnish names for larger villages, post-offices and railway stations, however, were translated into or adapted to Swedish orthography. Lappish names on official maps are usually standardized in a special Swedish orthography, which has been drawn up by Björn Collinder and revised by Bo Wickman. Older Lappish names, however, have been swedicized in the same manner as the Finnish names. As a special problem in this context we wish to mention the Lappish place names which have been finnicized in the dialects of Finnish-speaking colonists. In this case in particular, and also in the cases where Swedish names are involved, it has been proposed that two names should be used on maps and on road signs.

* The original text of this report was contained in document E/CONF.61/L.109.

REPORT PRESENTED BY THE KHMER REPUBLIC*

Since the First United Nations Conference on the Standardization of Geographical Names, the national geographical service of the Khmer Republic has shown a keen interest in the standardization of geographical names in the former Kingdom of Cambodia and also continues its research work to complete its map on the scale 1:50,000.

The Khmer Republic opposes strongly any transcription or changes of the names of localities in this former Cochin-China, and requests that the names of localities known by he Khmer Krom population before the establishment of the map of 1864 by the French administration on Cochin-China be the only ones recognized.

* This report, submitted in French, was presented too late for distribution during the Conference; it was contained in document E/CONF.61/L.111.

REPORT PRESENTED BY CUBA*

The presence of a Cuban delegation at this Second United Nations Conference on the Standardization of Geographical Names is in itself evidence that the Revolutionary Government of Cuba views the Conference and the scope of its work as being of the greatest importance, and is prepared to co-operate in all matters of a reasonable and logical nature which it is to discuss.

Cuba did not participate in the First Conference, held at Geneva in 1967. We have nonetheless been actively working in this field and are able to state that in Cuba the work on the standardization of geographical names has many interesting aspects.

Our country is a geographical entity clearly delimited by its continental shelf, situated south-south-east of the mouth of the Gulf of Mexico, at the north-western extremity of the arc described by the Antilles. Our people have common historical roots, and a single official language, which is the language spoken by the population; and we have no land frontier with any other State. The social situation is entirely satisfactory from the standpoint of development, and we are moving along the path we have chosen. Thus we shall be in a position to comprehend fully the social, political and

* The original text of this report, submitted in Spanish, was contained in document E/CONF.61/L.113.

economic factors that have influenced and still influence the phonemes and the spelling of Cuban toponyms; and to analyse the situation with regard to geographical names — the actual location of the places they designate, their structure and earlier forms, the changes they have undergone, their nature and their basic meaning. In short, we can determine the origin and the evolution of the terms which serve to define, situate and differentiate the various geographical elements that comprise the features of the land and waters of our territory.

Naturally, we realize that the task is not at all easy, that there are countless difficulties inherent in the complex of problems posed in this important Conference and that the objective and subjective phenomena involved are full of infinite subtleties that could lead to certain inaccuracies. Nevertheless, we hope to attack these problems and succeed in resolving them.

Before 1959, no work had been done on toponymy or the standardization of geographical names as such. It was regarded as of secondary importance and there was only one published index of geographical names contained in the military map of Cuba which had been compiled between 1933 and 1943.

However, important advances were made in this field after the triumph of the Revolution in 1959. A good example of this is the index of names which appears in the "National Atlas of Cuba", an excellent achievement made with the generous co-operation of the Soviet Union. No less important is the work currently being done in the mapping of Cuba by the Cartography, Toponymy and Drafting Group, the population and housing census conducted in Cuba in 1970 (which covered the whole of the country and contains detailed information on toponymy, territorial divisions etc.), and the work of the Institutes of Linguistics and Geography of the Academy of Sciences, the School of Geography of the University of Havana etc.

In other words, substantial progress in this field has been made since 1959.

ACCOUNT OF WORKS ON TOPONYMS IN GREECE

Report presented by Greece*

Since 1833 an official committee on the study of Greek toponyms has been operating under the Ministry of the Interior. Its work consists in studying place names from a historical point of view — whether they are attested in old writings, or are recent formations.

The first task here is to gather all the country's place names (names of towns, villages, mountains, valleys, coastlines, headlands, gulfs, islands, roadsteads, rocks and so forth) as they are given by the people; they must then be transferred on to maps.

A large number of toponyms found in texts or collected from the oral tradition are processed and classified in the archives of the editing centre of the Historical Dictionary of the Modern Greek language, and also in the archives of the Mediaeval Hellenism Research Centre: both are institutions attached to the Academy of Athens.

The Regional Administrative Autonomy Directorate of the Ministry of the Interior has issued a series of 50 volumes, one for each of the country's departments, under the title *Data on the Formation and Evolution of Demes and Communes in Greece since 1912*. The work lists the official name and the popular name of each commune and the names and population of the populated places which make it up.

The General Statistical Service of Greece has published maps of the country's departments on various scales.

Progress in historical, archaeological and linguistic studies in Greece has contributed considerably to solving the problems raised by our toponyms. It has been shown that a large number of toponyms and geographical terms (gulf, river, mountain, stream, spring etc.) have remained the same from the time of Homer to the present. It is thus possible to observe the continuity of Greek thought through the ages as far as the way in which various places in our territory have been named is concerned.

In a 350-page volume, *Essay on Toponymic and Anthroponymic Studies in Greece, 1833-1962*, the Director of the editing centre of the Academy of Athens' Historical Dictionary of the Modern Greek Language, Dicéos Vayacacos, the author of this report, has published a general bibliography of studies on Greek place- and personal names. Mr. Vayacacos also publishes annually a bibliography of Greek toponymy in *Onoma*, the bulletin of the Internatonal Committee of Onomastic Sciences (Louvain). This material offers a guide to everything done in Greece in the field of onomastic studies. Anyone interested in carrying out a study of place names or personal names may find in these bibliographies everything which relates to the subject.

* The original text of this report, submitted in French and prepared by Dicéos Vayacacos, was contained in document E/CONF. 61/L.112.

AGENDA ITEM 8

Standardization of the terminology of geographical names

GLOSSARY OF TECHNICAL TERMINOLOGY EMPLOYED IN THE STANDARDIZATION OF GEOGRAPHICAL NAMES*

PREPARED BY THE WORKING GROUP ON DEFINITIONS OF THE UNITED NATIONS GROUP OF EXPERTS ON GEOGRAPHICAL NAMES**

INTRODUCTION

The following definitions of terminology are intended for employment in discussion and exposition in the field of toponymy. They are set forth not as prescriptive rules of usage but rather as guidelines which may serve to enhance clarity and precision in communication.

It is generally recognized that the semantic range of any given term may vary from person to person and from community to community. It is further recognized that cognate terms tend to vary in meaning to a still larger degree from language to language. Furthermore, the semantic ranges of terms often change with usage and with the passage of time. Although it is not possible in such circumstances wholly to avoid arbitrary delineations, a sincere effort has been made to reduce these to a minimum.

Equivalent terms are provided for most entries in English, French and Spanish and the definition of each term is given in English. Where synonymy of two or more terms is indicated, no order of preference is intended.

An index has been included in order to aid users in locating particular terms without introducing an excessive number of cross-references in the main body of the definitions.

The terms defined by the First United Nations Conference on the Standardization of Geographical Names at Geneva in 1967, and subsequently modified by the United Nations Group of Experts on Geographical Names, are indicated with an asterisk (*).

* The report was before the Conference as document E/CONF. 61/L.1/Rev.1.

** The members of the Working Group are: J. Breu (Austria); F. Gall (Guatemala); P. Hovda (Norway); H. A. G. Lewis (United Kingdom of Great Britain and Northern Ireland); E. Meynen (Federal Republic of Germany); C. Page (United States of America) (*Chairman*); D. N. Sharma (India).

TECHNICAL TERMINOLOGY EMPLOYED IN THE STANDARDIZATION OF GEOGRAPHICAL NAMES

	ENGLISH (unless otherwise designated)	FRENCH	SPANISH
1.	*allomorph*	*allomorphe*	*alomorfo*
	A form of a morpheme which differs in phonological structure from another allomorph or allomorphs of the same morpheme.		
2.	*allonym*	*allonyme*	(————)
	One of two or more names employed in reference to a single topographic feature.		
3.	*allophone*	*allophone*	*alófono*
	A phonetic variant of phoneme.		
4.*	*alphabet*	*alphabet*	*alfabeto*
	A specific set of graphic symbols which may be employed in representation of the phonological elements of a language.		
5.*	*alphabetical sequence*	*suite alphabétique*	*orden alfabético*
	1. The order in which the letters or characters of an alphabet are customarily cited. 2. A body of items listed in such order.		
6.	*article*	*article*	*artículo*
	A morpheme which makes explicit the definite or indefinite nature of another morpheme or morphemes.		
7.	*authority, names*	*autorité toponymique*	*autoridad de nombres geográficos*
	A person or body assigned power of decision in toponymic matters by legally constituted entity.		

8. *character* — *caractère* — *carácter*
A segmental graphic symbol particularly of a script other than Roman script (see *letter*)

9. *character, abbreviated* — *caractère abrégé* — *carácter abreviado*
A variant character which is less complex than another, and which resembles it in some particular (see *character, variant*).

10. *character, modified* — *caractère modifié* — *carácter modificado*
(see *character, variant* and *character, abbreviated*)

11. *character, variant* — (————) — *carácter optativo*
One of two or more characters employed in a writing system in representation of the same phonological and/or morphological item or items.

12.* *community, linguistic* — *communauté linguistique* — *comunidad linguística*
The totality of those individuals who communicate with relative ease in a single dialect, language or writing system.

13.* *community, speech*
The totality of those individuals who communicate orally with relative ease in a single dialect or language.

14. *context* — *contexte* — *contexto*
The body of material within which a particular item appears.

15. *conventional* — *usuel* — *convencional*
That which is sanctioned by current and widespread usage.

16. *conversion* — *conversion* — *conversion*
The process of recording in terms of a given writing system the phonological and/or morphological elements of a language, or the graphic symbols of another writing system. (see *transcription* and *transliteration*)

17. *creole* — (————) — (————)
A stable form of speech derived from a pidgin, which has become the sole or principle language of a linguistic community.

18.* *designation* — *désignation* — *designación*
A term employed in such a manner as to encompass a specific range of feature types.

19. *dialect* — *dialecte* — *dialecto*
A variety of a language which is distinguished by phonological and/or morphological characteristics which give it a distinctive identity.

20. *dictionary, geographical terms* — *dictionnaire géographique* — *diccionario geográfico*
A list of and/or names pertaining to the field of geography, which presents relatively extensive and definitive information concerning the items listed.

21.* *digraph* — *digraph* — *dígrafo*
Two letters or characters which are together employed in a particular order in representation of a single phonological and/or morphological element of a language.

22. *diglossy*

23. *element, generic* — *élément générique* — *elemento genérico*
That part of a name which consists of a generic term, and which may include modifiers, articles and/or particles as well (see *term, generic*).

24. *element, specific* — *élément spécifique* — *término específico*
That portion of a name which does not contain a generic element (see *element, generic*).

25. *entity, geographical* — *objet géographique* — *entidad geográficá*
(synonym: *feature, geographical*, q.v.)

26. *entity, topographic* — *objet topographique* — *entidad topográfica*
(synonym: *feature, topographic, q.v.)*

27. *exonym* — *exonyme* — *exónimo*
A geographical name used in a certain language for a geographical entity situated outside the area where that language has official status and differing in its form from the name used in the official language or languages of the area where the geographical entity is situated.

28. *feature, cultural* — (————) — *accidente geográfico cultural*
A topographic feature made or significantly modified by human effort.

29. *feature, extraterrestrial* — *accident topographique extra-terrestre* — *accidente topográfico extraterrestre*
On any planet or satellite other than the earth, a portion of the surface which has a recognizable identity.

30. *feature, geographical* | *accident géographique* | *accidente geográfico*
A portion of the surface of the earth which has a recognizable identity.

31. *feature, natural* | (————) | *accidente natural*
A topographic feature not made or significantly modified by human effort.

32. *feature, physical* | (————) | *accidente físico*
(synonym: *feature, natural*, q.v.)

33.* *feature, topographic* | *accident topographique* | *accidente topográfico*
A portion of the surface of any planet or satellite which has a recognizable identity.

34. *feature, undersea* | (————) | *accidente submarino*
A portion of that part of the earth which lies directly beneath an ocean or sea, and which has a recognizable identity.

35.* *form, printing* | *présentation typographique* | *presentación tipográfica*
The size, shape and stle of the graphic items in a printed document.

36.* *format* | *présentation générale* | *formato*
The size, shape and general arrangement of a written document.

37. *gazetteer* | *nomenclature toponymique* | *lista de topónimos*
A list of toponyms which presents relatively brief information regarding the items listed.

38.* *gazetteer, index* | *index toponymique* | *índice toponímico*
A list of toponyms which presents relatively brief information regarding the items listed, and which serves as a guide to the source from which it has been compiled.

39. *glossary* | *glossaire* | *glosario*
A relatively brief list of items pertinent to a limited field of interest, which may present information concerning the items listed.

40.* *hydronym* | *hydronyme* | *nombre hidrográfico*
A toponym applied to a hydrographic feature.

41.* *index, place name* | (————) | *índice de nombres geográficos*
(synonym: *gazetteer, index*, q.v.)

42.* *index, toponymic* | (————) | *índice toponímico*
(synonym: *gazetteer, index*, q.v.)

43. *information, map* | *renseignement cartographique* | *información cartográfica*
An item written on a map, which does not constitute a toponym, but which serves to describe a topographic characteristic in the area where it appears.

44.* *key, transcription* | *tableau de transcription* | *quadro de transliteración*
A table which sets forth descriptions and/or graphic representations of the phonological and/or morphological elements of a language together with corresponding representations in terms of a particular writing system.

45.* *key, transliteration* | *tableau de translitération* | *cuadro de transcripción*
A table which sets forth the graphic symbols of one writing system together with the corresponding graphic symbols of another writing system or systems.

46. *language* | *langue* | *idioma*
A system which provides a means by which the members of a community carry on conscious thought, and in terms of which they communicate orally and/or graphically.

47.* *language, colloquial* | *langue courante* | *lengua coloquial*
A form of the speech and/or writing of a language which is employed in informal communication in a given area, and which, where a standard or literary language exists, significantly differs from it.

48.* *language, literary* | *langue littéraire* | *lengua literaria*
A form of the speech and/or writing of a language which is employed in formal speech and/or writing.

49.* *language, national* | *langue nationale* | *lengua nacional*
A language which has official status throughout a nation, including any constituent state(s), republic(s) and/or other legally defined constituent part(s).

50. *language, non-official* | *langue non-officielle* | *lengua inoficial*
A language which lacks official status in a particular legally constituted entity.

51. *language, official* | *langue officielle* | *lengua oficial*
A language which has official status in a particular legally constituted entity.

52. *language, principal* | *langue principale* | *lengua principal*
In a linguistic community where more than one language is in use, that language which has greatest currency.

53.* *language, standard*
That form of the speech and/or writing of a language which is specified as correct by an officially designated or widely recognized authority, or in the absence of such an authority, which is in general recognized as correct in a linguistic community.

54.* *language, state*
A language which has official status in a constitutent state, republic, or other legally defined constituent part of a nation, but which lacks such status throughout that nation.

55.* *language, vehicular* | *langue véhiculaire* | *lengua vehicular*
A language which serves for intercommunication between members of different linguistic communities.

56. *letter* | *lettre* | *letra*
A segmental graphic symbol, particularly of Roman script (see *character*).

57.* *lettering, multilingual* | (————) | *rotulación, multilingüe*
The writing of geographical names in the individual countries which appear on a map in accordance with their official recognized spellings.

58. *lexicon* | *dictionnaire* | *léxico*
A relatively exhaustive compilation of items, generally in alphabetical order, pertinent to a particular sphere of interest, which may present information concerning the items listed.

59.* *lexicon, logographic* | *lexique logographique* | *léxico logográfico*
A body of graphic symbols, each symbol typically (but not necessarily) representing a morpheme, which may be employed in the writing of a language or languages.

60. *mark. diacritical* | *signe diacritique* | *signo diacrítico*
A non-segmental graphic symbol which does not in itself represent a phoneme, and which is employed in conjunction with a letter or character.

61. *marker* | (————) | *signo auxiliar*
A graphic symbol or combination of graphic symbols (segmental, non-segmental or combined), which represents one or more phonemes of a language, and which is employed in conjunction with a character or letter.

62. *morpheme* | *morphème* | *morfema*
A unit in the grammatical structure of a language which has a specific phonological form or range of forms, a particular grammatical function or set of functions, and a limited semantic range.

63. *name* | *nom propre* | *nombre propio*
An oral or written item which is recognized as designating a particular entity.

64. *name, alternative* | (————) | *nombre propio alternativo*
One of two or more standardized names for a single feature.

65. *name, conventional* | (————) | *nombre propio convencional*
A written form of a name which is widely and currently used in a given linguistic community, and which does not coincide with any local official form of the name.

66. *name, feature*
(synonym: *toponym*, q.v.)

67. *name, geographical* | *nom geographique* | *nombre propio geográfico*
A name applied to a geographical feature.

68. *name, lunar* | *nom lunaire* | *nombre propio lunar*
A name applied to a feature on the surface of the moon.

69.* *name, map* — *nom porté sur une carte* — *topónimo cartográfico*
A toponym which appears on the face of a map.

70. *name, place* — *nom de lieu* — *nombre propio de lugar*
(synonym: *toponym*, q.v.)

71. *name, populated place* — *nom de lieu habité* — *nombre propio de lugar habitado*
A name applied to an inhabited feature.

72.* *name, standardized* — *nom normalisé* — *nombre propio normalizado*
A name which has the official sanction of a legally constituted entity.

73. *name, variant* — *variante* — *nombre propio optativo*
A name other than that or those standardized for a feature.

74. *non-official* — *non-officiel* — *inoficial*
Lacking explicit sanction by a legally constituted entity.

75. *normalization* — *normalisation* — *normalización*
1. The establishment of a specific set of orthographic criteria or norms.
2. The writing of an item in accordance with such criteria or norms.

76. *official* — *officiel* — *oficial*
Explicitly sanctioned by a legally constituted entity.

77. *onomastics* — *onomastique* — *onomástica*
A science which has as its object the study of proper names.

78.* *oronym* — *oronyme* — *orónimo*
A name applied to a feature of elevation.

79. *orthography* — *orthographie* — *ortografía*
(synonym: *system, writing*, q.v.)

80.* *particle* — *particule* — *partícula*
A morpheme which serves to identify and/or to delimit the grammatical function of another morpheme or other linguistic construction.

81. *phoneme* — *phonème* — *fonema*
1. A functionally irreducible unit in the phonological structure of a language.
2. That limited range of quality, tone, stress, pitch and/or duration of sound, which corresponds to the above.

82. *pidgin* — *(————)* — *(————)*
A relatively stable form of speech learned as an auxiliary language, whose vocabulary and sphere of employment are narrowly limited, and whose phonological and morphological structures tend to be simpler than those of the languages of derivation.

83. *point, vowel* — *point-voyelle* — *moción*
A term which designates a vowel marker in an alphabet or Arabic or Hebrew script.

84. *romanization* — *romanisation* — *romanización*
1. The process of recording in Roman script either the phonological elements of a language or the graphic symbols of a non-Roman writing system.
2. An item of a language which has undergone this process.

85. *script* — *écriture* — *escritura*
A set of graphic symbols which may be variously employed in representation of the phonological and/or morphological elements of a language or languages.

86. *sound* — *son* — *sonido*
An oral symbol which, in a given linguistic context, conveys a specific item of information.

87.* *speech* — *parole* — *habla*
An oral manifestation of language.

88.* *spelling* — *graphie* — *grafía*
A graphic symbol or ordered sequence of graphic symbols which represent a particular expression in a given language.

89. *syllabary* — *syllabaire* — *silabario*
A specific set of graphic symbols, each symbol typically (but not necessarily) representing a particular syllable, which may be employed in representation of the phonological elements of a language.

90. *syllable* — *syllabe* — *sílaba*
An arbitrary unit composed of one or more phonemes of a language, only one of which may be a vocalic nucleus.

91. *symbol, graphic* — *symbole graphique* — *signo gráfico*
A written mark which, in a given linguistic context, conveys a specific item of information.

92. *system, writing* — *système d'écriture* — *sistema de escribir*
A structure which employs in representation of the phonological and/or morphological elements of a language or languages both:

1. An alphabet, syllabary and/or logographic lexicon; and
2. A systematic manner of application of the alphabet, syllabary and/or logographic lexicon.

93.* *term, designatory* (————) *término designativo*
(synonym: *designation*, q.v.)

94.* *term, generic* *terme générique* *término genérico*
A term included in a name which indicates the type of the named entity, and which has the same meaning in current local usage (see *element, generic*).

95.* *topography* *topographie* *topografía*
The surface configuration of a planet or satellite, or of a portion thereof.

96. *toponym* *toponyme* *topónimo*
A name applied to a topographic feature.

97. *toponymy* *toponymie* *toponimia*
1. A science which has as its object the study of toponyms.
2. A coherent body of toponyms.

98. *transcription* *transcription* *transliteración*
1. The process of recording the phonological and/or morphological elements of a language in terms of a specific writing system.
2. The result of this process.

99.* *translation* *traduction* *traducción*
1. The process of rendering an expression of one language in terms of a corresponding expression of another language.
2. The result of this process.

100. *transliteration* *translittération* *transcripción*
1. The process of recording the graphic symbols of one writing system in terms of corresponding graphic symbols of a second writing system.
2. The result of this process.

101.* *trigraph* *trigraph* *trígrafo*
Three letters of caracters which are together employed in a particular order in representation of a single phonological and/or morphological element of a language.

102. *tetragraph* *tétragraph* *tetrágrafo*
Four letters or characters which are together employed in a particular order in representation of a single phonological and/or morphological element of a language.

INDEX

	See
abbreviated character	character, abbreviated
accidente geográfico	feature, geographical
agglomération	place, populated
alternate name	name, alternate
apóstrofo	apostrophe
colloquial language	language, colloquial
contexte	context
contexto	context
conventional name	name, conventional
cultural feature	feature, cultural
designatory term	term, designatory
détail hydrographique	feature, hydrographic
détail topographique	feature, topographic
diacritical mark	mark, diacritical
dialecte	dialect
dialecto	dialect
diccionario geográfico	dictionary, geographical
dictionnaire géographique	dictionary, geographical
écriture	script
escritura	script
extraterrestrial topographic feature	feature, extraterrestrial, topographic
feature name	name, feature
fonema	phoneme
generic element	element, generic
generic term	term, generic
geographical dictionary	dictionary, geographical
geographical entity	entity, geographical
geographical feature	feature, geographical
geographical name	name, geographical
glossaire	glossary
glossario	
graphic symbol	symbol, graphic
hydronyme	hydronym
ideographic lexicon	(synonym: lexicon, logographic, *q.v.*)
index gazetteer	gazetteer, index
internacional	international
langue	language
langue nationale	language, national
langue non-officielle	language, non official
langue officielle	language, official
langue principale	language, principal
langue vernaculaire	language, colloquial
lengua	language
lengua nacional	language, national
lengua oficial	language, official
lengua principal	language, principal
lengua vernácula	language, colloquial
letra	letter
lettre	letter
léxico	lexicon
lexique	lexicon
lieudit	locality

linguistic community	community, linguistic
literary language	language, literary
logographic lexicon	lexicon, logographic
lugar	locality
lunar name	name, lunar
map informaton	information, map
map name	name, map
mention cartographique	information, map
modified character	character, modified
multilingual lettering	lettering, multilingual
nacional	national
names authority	authority, names
natural feature	feature, natural
nom	name
nombre	name
nombre geográfico	name, geographical
nombre hidrográfico	name, hydrographic
nomenclature	gazetteer
nom géographique	name, geographical
nom lunaire	name, lunar
non-official language	language, non-official
objet géographique	feature, geographical
official language	language, official
place name	name, place
place name index	index, place name
physical feature	feature, physical
principal language	language, principal
printing form	form, printing
specific element	element, specific
speech community	community, speech
standardized name	name, standardized
standard language	language, standard
toponymic index	index, toponymic
topographic entity	entity, topographic
topographic feature	feature, topographic
transcription key	key, transcription
transliteration key	key, transliteration
undersea feature	feature, undersea
variant character	character, variant
variant name	name, variant
vehicular language	language, vehicular
vowel point	point, vowel
writing system	system, writing

SPANISH TERMINOLOGY FOR GEOGRAPHICAL NAMES*

Report presented by Spain

The meetings of the First United Nations Conference on the Standardization of Geographical Names showed the need to review and refine the meanings of some technical terms. Many of the comments made in this paper stem from those meetings and from a conviction of the importance of technical terms to the development of a common approach. The experience of the past four years and the work that has been done will be reflected in the various points made in this report, when their subject-matter relates to them.

The list of selected technical terms in Spanish, taken from the English original, is the one which appears in the report of the Group of Experts on Geographical Names.[1] The 41 terms in the list, with the suggested new versions in Spanish, appear in annex I.

The definitions of "geographical name", "toponym" and "conventional name" do not reflect the way in which the corresponding terms are used in Spanish. According to the list, "toponym" means "the name of a natural feature", but in Spanish *topónimo* is used in its broader etymological sense as "a proper place name",[2] whether the place is natural or artificial; for example, "Río Guadarrama", "San Lorenzo de El Escorial" and "el Embalse de Entrepeñas" are toponyms. On consulting the English writer Aurousseau, one reads that "place-names (toponyms) are the names of places in particular countries and geographical names are the names of places in particular languages".[3] This would mean that toponyms are the conventional names and that geographical names are the names in the official language. It would be desirable to achieve a precise definition of these three terms. The Spanish Academy's rules state in this connexion: "We must call attention to the difference between the foreign name of a place and the Spanish name of a foreign place":[4] as examples of the latter it mentions "París", "Alejandría" and "Moscú", which are the conventional names. The work carried out by the United Nations and by these Conferences has been useful, since now, if one consults modern Spanish publications, one finds on maps "Paris (París)", "el Iskandarīya" (Alejandría)" and "Moskva (Moscú)" — although in the indexes, to facilitate identification, such names are listed alphabetically according to the traditional Spanish spelling, with their equivalents in national systems following the Spanish name.

Spanish place names (*nombres de población)* are given in the gazetteer issued by the National Institute of Statistics; for the 1970 census, some 100,000 *topónimos* were included. Since 1969 it has also been possible to consult *España, Términos Municipales*,[5] which includes three indexes: an alphabetical index by provinces, a numerical index, and a general index of all Spanish municipalities. The term "nombre de población" is the

* The original text of this report, submitted in Spanish, was contained in document E/CONF.61/L.8.

[1] Geneva Conference, 1967, E/CONF.53/L.2, Extracts from World Cartography, Volume VII, p. 15.

[2] Spanish Royal Academy, *Diccionario de la Lengua Española*, 19th ed. (Madrid, Espasa Calpe, 1970), p. 1276.

[3] M. Aurousseau, *The Rendering of Geographical Names* (London Hutchinson, 1957), p. 3.

[4] Spanish Royal Academy, *Nuevas normas de prosodia y ortografía* (Madrid, 1952), p. 116.

[5] Institute of Applied Geography, *España Atlas e Indices de sus Términos Municipales* (Madrid, Spanish Federation of Savings Banks, 1969).

one most widely used, both administratively and in academic circles; each year some municipalities merge or are expanded, and such events are recorded in the *Memoria General* of the Superior Geographical Council. Correct usage and research began with the *Gramatica Castellana* of Antonio de Nebrija in 1492 and was subsequently continued by the royal interrogatories for topographic lists in 1575.

According to the list, the comprehensive expression referring to any place which has a geographic name is "geographic entity". However, the essential geographic entities (*entidades geográficas*) of Spain are the population units (*entidades de población*); the preliminary work for the 1970 census, which was authorized by the Presidency of the Government,[6] uses the following definitions of *entidades*:

"*Entidad singular de población*: an inhabited place, distinct from the *término municipal* (territory of a municipality) and designated by a recognized name;

"*Entidad colectiva de población*: a unit intermediate between the above unit and the municipality, including *parroquias, diputaciones, hermandades, anteiglesias, concejos, cuadrillas* etc.;

"*Categoría de la entidad de población*: this is the term given to or traditionally used for a population unit, such as *ciudad* (non-agricultural municipality), *villa* (town), *lugar* (hamlet) or *aldea* (village), or, failing that, a term describing its origin and characteristics, such as *caserío* (a rural population-cluster consisting of a very small group of houses), *poblado* (town, village or settlement), *barrio* (district or ward of a town), monastery, camp, tourist centre, tourist area, permanent or seasonal housing development etc.;

"*Entidad local menor*: a unit governed by a *junta vecinal* (neighbourhood board) or *consejo abierto* (open council)."

Entry 9 in the list, "populated place", should preferably be rendered in Spanish not by *lugar poblado* but by *núcleo poblado*, which echoes the term "population nucleus" (*núcleo de población*) used in the census, and is clearer in meaning in view of the term's definition as "any inhabited place".

The term in entry 12, "información cartográfica" normally means all information provided by a map; in view of the restricted definition given here, it should be replaced by "nomenclatura cartográfica".

The Permanent Commission of Geographical Experts has not yet reached a final decision over the terms referred to in entries 13 and 14. The Spanish Academy gives the following definitions:[7]

"*Transliteración*: representation of sounds of one language by the alphabetic symbols of another;

"*Transcribir*: to write in one system of characters something which was written in another."

By relating transliteration to phonetics and transcription to spelling, the *Diccionario de la Lengua Española* retains the etymological sense of the words better. It should also be borne in mind that, because Spanish is perfectly phonetic, the need to spell out words seldom arises, and sounds can be recorded in a straightforward way. Because of the importance of these definitions, they should be revised in order to make the terms in question as apt as possible. It is to be hoped that the studies made since Geneva, where these differences were considered, will make it possible to approve definitions which are compatible with the different schools of thought.

With regard to entries 15-20, dealing with language, no reference is made to geographical documentation. When te body known as the Superior Geographical Council was organized in Spain by Royal Decree on 26 December 1923, it was laid down that "all cartographic publications henceforth issued by official or subsidized private entities shall be lettered in the Spanish language".[8]

Entry 24, "signo diacrítico", includes tone-marks, thus helping to reduce the number of terms. In Spanish, there is a distinction between the term "diacrítico", which refers to orthographic marks used to give a letter some special value,[9] as in "Agüeira" and "Agüela en Lugo", and the term "acento", which means the major stress placed on a given syllable when a word is pronounced.[10] The mark representing this stress is known as the *acento ortográfico*, although, for the sake of brevity, and following the example of almost all scholars in the Americas, it is called a *tilde*;[11] examples of its use are Málaga, Cádiz and Alcalá.

Entry 26 in the list calls a mark placed below or inside a letter to indicate a vowel, in e.g. Arabic or Hebrew, a *signo vocálico*. In Spanish, this mark is known as a *moción*, which according to the Academy is "the name given to vowels in the Semitic languages".[12]

The English term "standardize" has been translated "uniformar", which is used also in its substantive form, "uniformación"; however, the "normalizar", which refers to regulating or putting in order something which was not so ordered, would be more appropriate. Entry 27 should thus read: "Normalización nacional de los nombres geográficos".

For entry 28, "nombre opcional" would be more correct than "nombre optativo", since it makes it clear that the term refers to a name which can be freely chosen, and also retains the morphology of "nombre convencional" (conventional name).

Under entry 31, "autoridad toponímica nacional" should be replaced by "organismo nacional de nombres geográficos", in accordance with the terminology used in the resolutions of the Geneva Conference.[13] In Spain, this authority operates within the Superior Geographical Council and is composed of a co-ordinated group of bodies representing the cartographic, geographic, linguistic and cultural services.

[6] Decree of 16 August 1968 (B.O.E. No. 212, 3 September 1968).

[7] *Diccionario de la Lengua Española*, pp. 1286 and 1287.

[8] *Gaceta de Madrid*, 28 December 1923, art. 10, p. 1436.

[9] *Diccionario de la Lengua Española*, p. 472.

[10] *Ibid.*, p. 14.

[11] *Nuevas normas...*, p. 31.

[12] *Diccionario de la Lengua Española*, p. 884, meaning 5.

[13] *United Nations Conference on the Standardization of Geographical Names*, vol. 1, *Report of the Conference*, United Nations publication, Sales No. 68.I.9), p. 12 of the Spanish text.

For entry 33, "forma tipográfica" would be more meaningful and concise than "forma para impresión"; it conveys the same idea, and means the final form of some written material.

Under entry 38, "name index" would be rendered more suitably by "indice alfabético" than by "indice de nombres". Many words nowadays include a number of indexes — analytic indexes, indexes of authors, chronological indexes, and so on — and the alphabetical index is what is meant here.

In the last entry, "vocabulary" is rendered by "vocabulario", which properly speaking is the stock of words of a language; the definition given in the list is "the stock of words of an individual or group", and this meaning is rendered in Spanish by "léxico".

Annex II gives the list of technical terms amended in the light of the above comments, with their recognized meanings in Spanish.

To conclude, what could be more appropriate than the words of Madoz: "I am under no illusion that this work is complete; far from it, I expect that I myself shall have to acknowledge some errors and omissions, which I shall try to rectify in due course."[14]

[14] Pascual Madoz, *Diccionario Geográfico de España*, 2nd ed. (Madrid, 1846), vol. 1, p. 10.

Annex I

THE 41 ANNOTATED TERMS

The terms marked with a dash (—) in Nos. 9, 12, 26, 27, 28, 31, 33, 38 and 41, are the new Spanish terms. Asterisks (*) denote definitions which should be revised in the light of the comments made above (Nos. 1, 2, 13, 14, 15 and 30).

1 Nombre geográfico*
2 Topónimo*
3 Nombre de población
4 Nombre de accidente
5 Entidad geográfica
6 Accidente natural (o accidente físico)
7 Accidente hidrográfico
8 Accidente artificial
9 Lugar poblado
— Núcleo poblado —
10 Término genérico
11 Término específico
12 Información cartográfica
— Nomenclatura cartográfica —
13 Transliteración*
14 Transcripción*
15 Idioma oficial*
16 Idioma nacional
17 Idioma principal
18 Idioma de minorías
19 Dialecto
20 Patois
21 Sistema de escritura
22 Sistema silábico de escritura
23 Fonema
24 Signo diacrítico
25 Letra modificada
26 Signo vocálico
— Moción —
27 Uniformidad de los nombres geográficos de cada país
— Normalización nacional de los nombres geográficos —
28 Nombre optativo
— Nombre opcional —
29 Variante
30 Nombre convencional*
31 Autoridad toponímica nacional
— Organismo nacional de los nombres geográficos —
32 Publicación oficial
33 Forma para impresión
— Forma tipográfica —
34 Designación
35 Coordenadas
36 Nomenclátor
37 Diccionario geográfico
38 Indice de nombres
— Indice alfabético —
39 Diccionario
40 Glosario
41 Vocabulario
— Léxico —

Annex II

LIST OF SELECTED TECHNICAL TERMS

1. Nombre geográfico	Nombre propio, que consta de una o más palabras, y que se utiliza para designar una entidad geográfica determinada
2. Topónimo	Nombre de un accidente natural
3. Nombre de población	Denominación de una entidad poblada
4. Nombre de accidente	Nombre de un accidente natural
5. Entidad geográfica	Expresión amplia que se refiere a cualquier sitio o lugar que tenga nombre geográfico
6. Accidente natural (o accidente físico)	Toda entidad natural que pueda tener nombre geográfico
7. Accidente hidrográfico	Toda masa de agua, incluso los cursos de agua
8. Accidente artificial	Toda obra humana o todo accidente geográfico modificado notablemente por el hombre, que pueda tener nombre geográfico
9. Núcleo de población	Todo lugar habitado
10. Término genérico	Término que forma parte de un nombre geográfico para indicar el tipo de la entidad designada y que tiene el mismo significado en el uso local corriente
11. Término específico	Término de un nombre geográfico que identifica la entidad concreta designada por éste, entre las del mismo género

12. Nomenclatura cartográfica	Las palabras que aparecen en un mapa y que no son nombres geográficos sino que indican la presencia de algo o alguna característica de la región
13. Transliteración	(to be decided)
14. Transcripción	(to be decided)
15. Idioma oficial	Todo idioma reconocido como nacional y cuyo uso en los órganos legislativos y judiciales está permitido. En algunos países se reconoce más de un idioma oficial. Los idiomas que tienen cierta sanción oficial en parte del país, pero no en todo él, no se consideran normalmente como "idioma oficial"
16. Idioma nacional	El idioma predominante, que se habla en todo un país o en mayor parte de él
17. Idioma principal	El idioma más difundido en un país
18. Idioma minoritario (o idioma secundario)	Todo idioma no hablado por una gran parte de la población del país
19. Dialecto	Forma regional de un idioma
20. Patois	Variante local de un idioma, menos extendida que el dialecto
21. Sistema de escritura	Todo método sistemático de escritura
22. Sistema silábico de escritura	Sistema de escritura en el que se utilizan caracteres fonéticos que corresponde a las sílabas, p. ej. el Kana japonés
23. Fonema	Sonido elemental mínimo que tiene sentido de acuerdo con la escritura del idioma de que se trate; sonido o serie de sonidos característicos que para quienes hablan el idioma constituyen un sonido único y que tiene un número mayor o menor de variantes
24. Signo diacrítico	Signo que se escribe encima, debajo o dentro de una letra para darle un valor especial, incluso las tildes que indican el tono, si es que se emplean
25. Letra modificada	p. ej. ð islandesa, la ø danesa, la ł polaca y la letra ligada œ
26 Moción	Un signo que se escribe encima, debajo o dentro de una letra, para indicar una vocal; se emplean p. ej. en árabe o en hebreo. Mientras que los signos diacríticos modifican una letra, la moción representa un sonido que no se suele escribir
27. Normalización nacional de los nombres geográficos	La determinación por cada país de la ortografía de los nombres geográficos del país en el idioma oficial (o e los idomas oficiales) de dicho país
28. Nombre opcional	Cada uno de los dos o más nombres con que se designa la misma cosa
29. Variante	Nombre distinto de los que han sido normalizados o aprobados
30. Nombre convencional	Nombre bastante extendido o de larga tradición, que puede conservarse aún cuando no haya sido aprobado de otra forma; p. ej. "Viena" por "Wien"
31. Organismo nacional de nombres geográficos	Organo competente para uniformar los nombres dentro de un país
32. Publicación oficial	Todo mapa, lista, guía, etc., de carácter oficial, aunque no siempre cite los nombres normalizados oficialmente
33. Forma tipográfica	La manera de escribir las letras en lo que se refiere p. ej. a su ortografía, el empleo de las mayúsculas o de los guiones
34. Designación	Nombre común que indica el tipo de entidad que se designa. Los nombres geográficos no tienen a veces la expresión genérica y aún teniéndola ésta puede no indicar la naturaleza de la entidad a que se refiere
35. Coordenadas	Coordenadas geográficas
36. Nomenclátor	Relación de nombres geográficos en donde se indica la naturaleza y la situación de la entidad a que se refieren. La mayoría de las listas de nombres publicadas por los organismos nacionales son nomenclátores
37. Diccionario geográfico	Relación de nombres geográficos que compendia los datos que sobre identificación y situación contienen los nomenclátores, así como otros datos geográficos tales como la población, superficie, producciones,

38. Indice alfabético	Generalmente una lista de nombres contenida en una publicación y en la que se indica el lugar de la misma, en que aparece el nombre en cuestión
39. Diccionario	Catálogo de palabras en donde se dan todas las definiciones conocidas por el autor
40. Glosario	Colección de términos genéricos con sus significados en los nombres geográficos
41. Léxico	Conjunto de palabras de un individuo o grupo

GLOSSARY OF THE TERMINOLOGY USED IN THE STANDARDIZATION OF GEOGRAPHICAL NAMES*

Report presented by France

In September 1967, the French Government submitted to the Geneva Conference a draft amendment to the list of technical terms which was annexed to the report of the Group of Experts on Geographical Names (New York, 20 June to 1 July 1960).

This initial draft has been recast into a glossary of terminology used in the standardization of geographical names. In order to cover the work done by the Group of Experts since the First Conference on the Standardization of Geographical Names as fully as possible, some definitions have been re-included, but the number of terms listed has been considerably increased. This is partly because more account has been taken of developments in modern linguistics and also because greater attention has been given to phonetic notation, which is of paramount importance in matters of transliteration and transcription. It was also thought useful to give English and Spanish equivalents for the French terms contained in the glossary.

* The original text of this paper, submitted in French, was contained in E/CONF.61/L.67. The glossary itself was issued as document E/CONF.61/L.67/Add.1. Copies are available for reference at the Map Collection of the United Nations. It was decided not to reproduce this glossary at this stage, pending its completion and acceptance by the United Nations Group of Experts on the Standardization of Geographical Names.

STANDARDIZATION OF THE TERMINOLOGY OF GEOGRAPHICAL NAMES: TERMS AND DEFINITIONS*

Paper presented by Norway

Place-name investigators, as well as cartographers and geographers, use a number of terms to describe various categories of place names. The meaning which they attach to these terms may at times appear rather vague and ill-defined, and this frequently leads to misunderstandings. Even in the Nordic countries the use of terms varies from one country to another.

Place names are proper names, just as personal names are. The category of "proper name designating a locality" is in Norwegian called *stadnamn* or *stedsnavn* (place name), in Danish *stednavn*, in Swedish *ortnamn*, in Icelandic *örnefni* and in Faroese *staðanavn*. In Nordic the term is briefly defined as "the designation for a place having the quality of a proper name, the name of a geographical locality".

In 1813 the Dane Rasmus Rask suggested the term "stedsnavn" as a translation of *nomina locorum*. Versions with and without -s- (*stedsnavn*, *stednavn*) were both used, without distinction, from 1819 up to the end of the nineteenth century. Since then, the form "stednavn" without -s- has been the only version of the term in Danish. The form of Norwegian known as *bokmål* (or *riksmål*) has the version with an -s-, "stedsnavn", borrowed from the older Danish form. The Swedish word "ortnamn" is first recorded as used in 1884. Corresponding terms in other Germanic languages are also nineteenth-century innovations. The German word "Ortsname", for example, was used for the first time in the writings of Goethe about 1800. English used "names of places" or "local names" until the term "place name" was created on the Nordic patterns.

The Nordic terms "stadnamn", "ortnamn", "örnefni" etc. comprise all names, whether of topographic features or of human settlements and communities. The German "Ortsname" covers the same wide range of meaning as the English "place name", a comprehensive term that embraces a whole number of subcategories, such as those corresponding to the German "Siedlungsname" and "Flurname", the Norwegian "bustadnamn", the English "field name" and the Danish "marknavn".

A number of terms are used to describe the composition of place names: "*first element*", "last element", "compound name" etc. There are also terms such as "secondary name", "primary name" and "related name". There is no uniformity in the use of these terms in the Nordic countries, so that misunderstandings are likely to occur. And in reading literature on the subject written in foreign languages misunderstandings of this kind will inevitably occur because the terminology is not always clearly defined.

For this reason a Nordic symposium will be held in Oslo during the autumn of 1972, at which Nordic terminology will be discussed and clarified. It will hardly

* The original text of this report was contained in document E/CONF.61/L.60.

be possible to arrive at a joint Nordic terminology at this early stage. The most important point will be that in the future it should be possible to avoid misunderstandings. The results of the symposium will be made available to other countries.

The Nordic division considers these questions important, and we therefore recommend that these questions should be dealt with and discussed by place-name researchers, cartographers and geographers in every country, and that the results should be distributed.

SOME GEOGRAPHICAL TERMS AND DEFINITIONS USED IN GUATEMALA*

Report presented by Guatemala

For purposes of information, we present in an addendum to this document a few geographical terms and definitions used in Guatemala, which will be included in the second edition of the Geographical Dictionary of Guatemala. We wish to repeat once again that these do not constitute all that will appear in that work. The writer was obliged, in the circumstances, to make a selection, in order to tell the Second United Nations Conference on the Standardization of Geographical Names something about the work that has been proceeding on the subject.

Many of the geographical terms and definitions used in Guatemala are the same as those used in the other countries of the Central American isthmus. It is therefore suggested that it might be useful for them to be known as "Central Americanisms" in the future.

The writer wishes, at the same time, to explain that, as he was a member of Committee II on Geographical Terms, of which he had the honour to be Chairman, at the First United Nations Conference, held at Geneva in 1967, and also of specific working group set up at the third session of the Group of Experts on Geographical Names in February 1971, he has not included in the data he is submitting[1] any that appear in the draft glossary of technical terminology for employment in the standardization of geographical names, which he has translated from English into Spanish.

* The original text of this paper, prepared by Francis Gall, submitted in Spanish, was contained in document E/CONF.61/L.71.

[1] A list of terms and definitions used in Guatemala was distributed to the participants and issued as document E/CONF.61/L.67/Add.1. Copies are available for reference at the Map Collection of the United Nations. It was decided not to reproduce this list at this stage, pending its completion and acceptance by the United Nations Group of Experts on the Standardization of Geographical Names.

AGENDA ITEM 9[1]

National standardization

(*a*) Field collection of names
(*b*) Office of treatment of names
(*c*) Treatment of names in multilingual areas
(*d*) National gazetteers or other similar publications in which countries make available their standardized names
(*e*) Administrative structure of national names authorities

TRANSCRIPTION OF GEOGRAPHICAL NAMES IN THE REPUBLIC OF VIET-NAM

Report presented by the Republic of Viet-Nam*

Compilation, with the purpose of collecting and cataloguing the geographical names of the Republic of Viet-Nam, is seriously impeded by the long-standing state of war in our country. These difficulties are compounded by another which creates delicate problems for the National Geographical Directorate: the transcription of geographical names into Viet-Namese.

This operation would seem to be very simple, since Viet-Namese is written in Roman characters; but it is complicated, first by the existence of diacritical marks in the written language and by the particular phonemes of the language, and secondly by the presence of numerous ethnic minorities, in various parts of the territory of the Republic of Viet-Nam, who speak other, and until recently unwritten, languages. Consideration must also be given to terms of foreign origin.

In order to explain the method of transcription which has been adopted in cartographic work in the Republic of Viet-Nam, we propose to consider, in the following order, purely Viet-Namese geographical names, geographical names deriving from ethnic minorities, geographical names introduced by the French, and geographical names from other countries.

PURELY VIET-NAMESE GEOGRAPHICAL NAMES

As a rule official names could, to a certain extent, be adequately transcribed by copying them exactly as written in official instruments such as decrees, orders, official gazettes and statistical bulletins. Names which have not been catalogued by the authorities and are therefore frequently misrepresented give rise to difficulties of the following kinds.

Difficulties due to diacritical marks

The existence of diacritical marks, such as á, à, ả, ã, ạ, â, ă, in written Viet-Namese has been a great problem, not only for foreigners, but also for some Viet-Namese. (Each diacritical mark represents a particular sound, the pronunciation ranging from high through neutral to low; an incorrect or missing diacritical causes frequent confusion and distortion.) Thus maps previously published by the former Indo-China Geographical Service feature many geographical names on which the diacritical marks are incorrect or missing. These errors are also found in some official documents published by the Viet-Namese authorities; occasionally the same name is written in different ways by different government organs.

For example, the name of the commune of Tân Kiên (province of Gia Dịnh) is written incorrectly as "Tân Kien" in maps previously published by the National Geographical Directorate of the Republic of Viet-Nam.

Difficulties due to pronunciation

The presence in written Viet-Namese of letters which do not occur in the Roman alphabet creates confusion for foreigners which can be amusing sometimes. For example, the letter Đ, đ (barred D) is pronounced in the same way as one ordinarily pronounces D, while the letter D, d (unbarred D) is pronounced in Viet-Namese like Z. For example, in "Núi Đất" ("hill without rocks"), barred Đ is pronounced like D; in "Hòn Dùa" ("island of coconut palms"), unbarred D is pronounced like Z.

Difficulties due to spelling

Confusion between certain pairs of consonants, such as CH and TR, D and GI, X and S, which are difficult to differentiate in the popular pronunciation, is very often the cause of misspellings. Thus the name of a locality in the province of Phong Dinh was incorrectly written

[1] Papers presented by Austria, Israel and the Union of Soviet Socialist Republics pertaining to this item are reproduced under agenda item 7 above. A paper presented by Yugoslavia pertaining to this item is reproduced under agenda item 11.

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.10.

"Ba Se", instead of "Ba Xe", on Viet-Namese maps published before 1969.

Hyphenation

The use of hyphens is also tricky. Since Viet-Namese is essentially monosyllabic, each word has its own meaning and should be written separately. But a group of several words used together may have a meaning of its own, and for that reason the use of hyphens is necessary. Three categories may be distinguished here.

If a place-name is composed of a noun followed by one or several modifiers, such as a qualifying adjective, a past participle or another noun qualifying the first one, as in ordinary texts, hyphens are not used. For example:

Compound name	*Meaning and part of speech*	*Meaning*
Dât Đỏ	Đât — "earth", common noun Đỏ — "red", qualifying adjective	District of Đât Đỏ
Chợ Gạo	Chợ — "market", common noun Gạo — "rice", common noun	District of Chợ Gạo
Kinh Xáng Mới	Kinh — "canal", common noun Xáng — "dredged", past participle Mới — "new", qualifying adjective	New Dredged Canal

If two or several nouns are combined to form a compound name whose meaning differs from that of the individual words, particularly in the case of nouns of Sino-Viet-Namese origin, hyphens are used. For example:

Compound name	*Meaning of each word*	*Meaning of compound name*
An-Mỹ	An — "peace", common noun Mỹ — "beauty", common noun	Village of An-Mỹ
Hương-Thuy	Hương — "perfume", common noun Thuy — "water", common noun	Village of Hương-Thuy

In the case of proper nouns formed of a surname and one or more first names, hyphens are used in accordance with the composition of these names. For example,

Nguyên-Văn-An
Nguyên-Phươc
Bảo-Tân

There are some names of towns which are very widely known, such as Hà-Nội, Hai-Phòng, Sài-Gòn, which should be written in the correct monosyllabic form. These names are found written on maps previously published by the former Indochina Geographical Service, or published abroad, in the polysyllabic form and without the diacritical marks: "Hanoi", "Haiphong", "Saigon", etc. The polysyllabic transcription, which is obviously a foreign invention, should be avoided.

Geographical names deriving from ethnic minorities

The population of Viet-Nam includes, in addition to the Viet-Namese race, several heterogeneous races, such as the Montagnards of the upper plateaux, and Viet-Namese of Khmer or Cham origin. The ethnic minorities are for the most part grouped in the upper plateau: the Thai, Meo and others in the north, the Rhade, Koho, Bahnar and others in the south, and the Cham in the coastal provinces of central Viet-Nam. Each ethnic group has its own dialect and some of them have only recently adopted the romanized transcription. Correspondingly, one particular feature of the toponomy of the Republic of Viet-Nam is the existence of geographical names of non-Viet-Namese origin. We shall examine the different cases separately.

Geographical names of Cham origin have been transcribed into Viet-Namese for many centuries, by transcribing them phonetically first into Chinese (Chu Hán) or Viet-Namese (Chu Nôm) characters, and later into the Roman alphabet. They have become universally adopted, by the population as well as by official bodies. Examples are:

Cham name	*Viet-Namese name*
Cu Pionе	Cù Mông
Ia Rang *or* Ia Trang	Nha Trang
Pan Idarang, Pan Nrang *or* Pan Ran	Phan Rang

Geographical names deriving from other ethnic groups were first transcribed into the roman alphabet by the French (or other Europeans), in the days of the former Indochina Geographical Service. There is a trend at present to transcribe these names in monosyllabic form. This trend should be discouraged for reasons which will be given in the conclusion below. Examples are:

French transcription	*New transcription (to be rejected)*
Kontum	Công Tum
Pleiku	Bơ Lây Cu *or* Pơ Lây Cu

The polysyllabic form, which is a legacy of the French transcription, is foreign to our monosyllabic system of writing. However, at present, in the absence of a more thorough linguistic study, the polysyllabic form has been provisionally adopted by the National Geographical Directorate of the Republic of Viet-Nam.

Geographical names in the border regions

Generally speaking, in border regions the populations of adjacent countries do not stay within precise boundaries, even though the national frontiers have been clearly demarcated. The fact that a large number of inhabitants of one country live in the territory of the other produces a demographic mixture. This explains the influence of neighbouring peoples on the toponymy of border regions.

Thus, in the territory of the Republic of Viet-Nam, several geographical names of Laotian or Khmer appearance occur along the border. For example, in the provinces of Thừa Thiên and Quảng Trị, along the border between Laos and Viet-Nam, Laotian toponyms are found such as Co Pung (*co* or *ko* = "mountain") and Ban Houei Katang (*ban* = "village"); in the province of Châu Đốc (That Sơn region), on the border between the Khmer Republic and Viet-Nam, Khmer toponyms are found such as Phnom Kachong (*phnom* = "mountain") and Phum Khdenh (*phum* = "village").

Geographical names of Malaysian origin

Maps of the Republic of Viet-Nam feature, particularly along the coast, several toponyms of Malaysian origin which have been transcribed in polysyllabic form, such as Poulo Panjang, Poulo Way, Poulo Obi, Poulo Condore, Poulo Cécir de Mer, Poulo Gambir (*poulo*, in Malay, means "island"). Ancient documents repeatedly assert that these names were introduced by Malay pilots, who were hired by European navigators or merchants to ensure greater safety on the last lap of the Far East route, which was still unknown to many. It should be noted that the majority of these islands also have Viet-Namese names, which date back many centuries and are not, as some believe, of recent creation.

Viet-Namese geographical names of Khmer origin

When they become Viet-Namese citizens, Viet-Namese of Khmer origin form their own separate nuclei, speak their own language, retain their ways and customs and, consequently, have a preponderant influence on the toponymy of their regions.

In these regions there are several geographical names of Khmer origin with a Viet-Namese distortion. Examples are:

Khmer name	*Meaning*	*Viet-Namese distortion*
Tuk Khmau	Black waters	Cà Mau
My Sor *or* Mê Sor	Pretty girl	My Tho
Srock Khléang	Village granary	Sóc Trang

Geographical names introduced by the French

There also exist French geographical names, introduced by French traders or Catholic missionaries. Although they appear on maps published abroad or on those previously published by the former Indochina Geographical Service, since 1970 they have not as a rule been found on the maps of the National Geographical Directorate. These French names were translated literally into our language, whimsically or out of ignorance, by certain Viet-Namese who did not trouble to find out the original names, and they are "barbarisms" which are inadmissible in our national catalogue of toponyms. An example is the French name "Fleuve Rouge", which has been mistranslated as "Hõng Hà", while the correct or original name was " Nhĩ Hà" or "Sông Nhĩ".

Geographical names from other countries

The search for a logical method of transcribing geographical names from other countries has for two years been another special concern of the National Geographical Directorate of the Republic of Viet-Nam. Up to the present, everyone has, depending on his knowledge of foreign languages, been transcribing them in his own way from foreign languages, either directly or from French, English or Chinese.

Transcription from the original language

This method consists in adopting, letter by letter, the foreign geographical names as originally written or transcribed in the roman alphabet, thus, "London", "Beyrouth", "Kjøbenhavn", "Tehran".

With this method, it would be necessary to obtain the original documents; checking proper names would therefore be hard.

Transcription from Chinese documents

This is perhaps the oldest method of transcription: it was very much employed from the end of the nineteenth century onwards, when Viet-Namese scholars began to discover countries outside their familiar range, through the use of Chinese texts. The toponyms were transcribed phonetically by the Chinese into Chinese characters; those characters were then pronounced in the Viet-Namese manner by our scholars and later romanized. This produced such forms as the following:

Foreign name	*Sino-Vietnamese transcription*
London	Luân Dôn
Paris	Ba Lê
Italia	Ý Dai Lợi
Asia	Á tê Á

These toponyms, the transcription of which is a triangular process, are simple for Viet-Namese to pronounce and remember. However, they undergo a twofold distortion — first into Chinese and then into Viet-Namese.

Direct transcription into Viet-Namese

This method was introduced only a few years ago. It consists in transcribing geographical names of other countries phonetically into Viet-Namese. However, the transcription is not systematic. It is done from documents either in English or in French; and there is also the difficulty of certain syllables which cannot be transcribed into another language. It produces such results as these:

Foreign toponym	*Transcription from documents in French*	*Transcription from documents in English*
Rome	Rô Mơ	Rô Ma
Le Caire	Lơ Ke	Kê Rô
La Mecque	La Mêch	Mêch Ca

As may be seen, this method is not uniform.

Conclusion

On the basis of the above analysis, we shall set out below some guidelines for the transcription of toponyms which were adopted two years ago by the National Geographical Directorate of the Republic of Viet-Nam.

Transcription of Viet-Namese geographical names

The spelling, including diacritical marks, after checking (where possible) on the spot, is to be strictly followed.

Initial letters should be capitals except in the case of articles, prepositions and conjunctions: for example, "*từ* Vĩnh Thành *den* Vĩnh An".

Hyphens are not included — although this is contrary to normal usage — since they may clutter the map and conceal other details.

Unidentified and unused toponyms are deleted.

Before the definitive form is decided upon, toponyms are thoroughly checked.

The polysyllabic form of transcription introduced by the French (or other Europeans) has been provisionally adopted. Pending the establishment of a National Commission on Toponymy any other method of transcription might cause further confusion.

In the case of orographic names of Sino-Viet-Namese or non-Viet-Namese origin care should be taken to avoid pleonasms and translation into the corresponding Viet-Namese names.

(a) *Examples of Pleonasms (to be avoided)*

Correct transcription	*Transcription to be avoided*
Nam Hải *or* Biển Nam	*Biển* Nam *Hải*
Hoàng Liên Sơn *or* Núi Hoàng Liên	*Núi* Hoàng Liên *Sơn*

(b) *Examples of Translations (to be avoided)*

Meaning	*Transcription to be avoided*	*Correct transcription*
River Na	*Sông* Na	Nâm Na
River Dam	*Sông* Dam	Dạk Dàm

These orographic names will be translated into Viet-Namese in a marginal glossary.

Toponyms of non-Vietnamese origin are transcribed phonetically into Viet-Namese on the basis of their correct pronunciation.

Toponyms introduced by the French should never be translated unquestioningly into Viet-Namese; their original form should be found. For example:

Toponym introduced by the French	*Original form which should be adopted*
Rivière Claire	Sông Lô

Transcription of geographical names from other countries

This is a very delicate problem. The logical method is to adopt the romanized toponyms which appear on existing maps published by the official cartographic services of the countries concerned.

At present the preparation of a Dictionary of Geographical Names is one of the main projects of the National Geographical Directorate of the Republic of Viet-Nam. Sets of index cards have been made of toponyms and work has been begun on cataloguing them. However, as the preparation of a definitive dictionary for the entire territory of the Republic of Viet-Nam would be too time-consuming, the National Geographical Directorate of the Republic of Viet-Nam has decided first to publish booklets of the geographical names of each province, together with miscellaneous information. These booklets will be used later for preparing the definitive Dictionary, pending the establishment of the National Commission on Toponymy.

This report shows that the problem of toponymy in the Republic of Viet-Nam is extremely complex. Countries which in the future will be drawing up maps featuring the Republic of Viet-Nam are therefore recommended, in order to avoid any error or confusion over Viet-Namese toponyms, to send the proofs of the maps to the National Geographical Directorate of the Republic of Viet-Nam for checking before final printing.

STANDARDIZATION OF GEOGRAPHICAL NAMES IN POLAND

Report presented by Poland*

This report has been compiled in accordance with the problems listed in point 9, paragraph 17, concerning the provisional agenda for the Second United Nations Conference on the Standardization of Geographical Names (document ESA/RT/C/CN/2, 11 March 1971).

The only omission is that of subpoint (*c*), "Treatment of names in multilingual areas", as Poland is a one-language nation and only the Latin alphabet is used. Thus the graphic forms of geographical names occurring on the territory of Poland follow the principles of spelling established in 1936 and supplemented after the Second World War in 1955 by an appropriate commission of the Polish Academy of Sciences.

In Poland, standardization refers to two fields of toponymy: national toponymy, i.e. names occurring within the State boundaries, and world toponymy, i.e. the adaptation of names from throughout the world to the specific features of the Polish language. In each of these fields different methods are employed.

A. *Geographical names on the territory of Poland* are at present established by the Commission for Establishing Names of Localities and Physiographical Objects (Komisja Ustalania Nazw Miejscowości i Obiektów Fizjograficznych) attached to the Office of the Prime Minister. This Commission continues the work of a corresponding body from the period between the two world wars and of the Commission for Establishing Local Names (Komisja Ustalania Nazw Miejscowych) called into existence by the Ministry of Public Ad-

* The original text of this report was contained in document E/CONF.61/L.11.

ministration in 1946. The present commission is composed mainly of linguists working in co-operation with historians and geographers. Within the Commission there are two local sub-commissions (Podkomisje terenowe) from Cracow and Poznań and teams from the Polish Language departments (Katedry Języka Polskiego) of all Polish universities.

The names of localities and physiographical objects are collected on the spot and drawn up into preliminary lists by working teams, before being subjected to linguistic correction at the sessions of the Commission with a view to establishing their proper forms and spelling so as to make them fit for publishing.

The following is a survey of the publications that are still valid.

Official names of localities — i.e. cities and towns, settlements and villages, sections of cities, integral parts of villages etc. — as well as physiographical names — mountains, rivers, artificial water reservoirs, lakes, channels, forests etc. — for western and northern Poland that were established by a commission of the Ministry of Public Administration up to 1950 were published in *Monitor Polski* (*Dziennik Urzędowy Rzeczypospolitej Polskiej*) (the official gazette of the Polish Republic).

All the materials published in *Monitor Polski* were collected and arranged in alphabetical order by Stanislaw Rospond in the two-volume *Słownik nazw geograficznych Polski Zachodniej i Północnej* (*Dictionary of Geographical Names of Western and Northern Poland*) published by the Polish Geographical Society (Polski Towarzystwo Geograficzne) in 1951. The dictionary, which includes more than 30,000 entries, consists of two parts, Polish–German and German–Polish. The Polish names are followed by their genitive forms and by indications of the character of each object.

The geographical names for central and southern Poland which have been established by the present Commission attached to the Prime Minister's office are periodically published by the Council of Ministers Office Bureau for the Presidiums of the People's Councils (Urząd Rady Ministrów Biuro do Spraw Prezydiów Rad Narodowych) in the form of fascicles devoted to the individual poviats of each voivodship. The publication bears the title *Urzędowe nazwy miejscowości i obiektów fizjograficznych* and is destined for use in office work. Thus far complete materials have been published for six voivodships: Kielce, Cracow, Lublin, Poznań, Rzeszów and Warsaw. The preparation and printing of the material for the remaining voivodships of central and southern Poland is well advanced: the publication is expected to be complete by 1972.

To illustrate the arrangement of material in the publication here are examples of data for the gromada (the smallest administrative unit in Poland) Glinojeck in the poviat Ciechanów in the voivodship of Warsaw:

Names of villages/towns, the genitive case, the adjectival form	*Names of parts of villages/towns, the genitive case*	*Names of physiographic objects, character of the object, the genitive case*
Glinojeck, -ka, glinojecki	Baraki, -ków	Góry, Gór – field
	Póświętne, -nego	Przydatki, -ków – field
	Stegna, -ny	Słupie, -pia – meadows
	Zawoda, -dy	Wkra, Wkry – river
Juliszewo, -wa, juliszewski		Duży Bór, -żego Boru – forest
		Nowiny, -win – field
		Włoki, Włók – field
		Zędowy, -wego – forest
Luszewo, -wa, luszewski		Dąbrówki, -wek – field
		Działkowizna, -ny – field
		Kowalowa, -wej – mountain
Wkra, Wkry, wkrowski	Kolonia, -nii	Koło, -ła – meadow
		Nadziały, -łów – field
		Narty, Nart – pasture
		Półka, -lek – field
		Tobołki, -ków – pasture

Within poviats the names are given in alphabetical order of the gromadas.

B. *The standardization of non-Polish geographical names* is in Poland a responsibility of the Commission for Geographical Names (Komisja Nazw Geograficznych), which was called into being by the Polish Geographical Society (Polskie Towarzystwo Geograficzne) in 1951, and which since 1953 has been working within the Institute of Geography of the Polish Academy of Sciences (Instytut Geografii Polskiej Akademii Nauk) under the name of the Commission for Establishing Geographical Names of the Institute of Geography of the Polish Academy of Sciences (Komisja Ustalania Nazw Geofraficznych IG PAN). Headed by L. Ratajski, the Commission has predominantly geographers as its members, with P. Zwoliński as a permanent member representing linguists. The geographical names established by this Commission are submitted for evaluation to specialists in different languages of the world, primarily to university professors, and only afterwards are they approved for publication at the sessions of the Commission.

The material for world toponymy is collected exclusively from cartographic sources and current publica-

tions with relevant contents. It is on the basis of these sources that individual names are identified as having become polonized: the earliest sources come from the sixteenth century, exceptionally even from the Middle Ages. Names that have no tradition in the Polish language retain their pronunciation and their original spelling if they come from countries using the Latin alphabet. Names from countries using other alphabets are given in transliteration or transcription, of which, unfortunately, there are several competing systems.

The first attempt at the provision of standardized geographical names outside Poland was the publication *Polskie nazewnictwo geograficzne świata* (*Polish Forms of World Geographical Names*) prepared by L. Ratajski, J. Szewczyk and P. Zwoliński, members of the Commission for Establishing Geographical Names of the Institute of Geography of the Polish Academy of Sciences, and published by the Institute of Geography in 1959. It includes about 20,000 names of localities, administrative units and physiographical objects, and of the nations and tribal groups of the world. The fundamental unit of division in the book is the continent. Within continents, the countries are listed in aphabetical order. Within each country all names are given alphabetically in 22 groups corresponding to the fundamental concepts of geographical terminology.

The book *Polskie nazewnictwo geograficzne świata* was taken as the foundation for preparing the geographical names in the entries of the *Wielka Encyklopedia Powszechna* (*Great Universal Encyclopedia*) (published in 13 volumes from 1962 to 1970). Currently the second, amended and much extended, edition is being prepared for publication: it is planned to appear in 1974.

A national gazetteer has not thus far been prepared. The function of a gazetteer is partly fulfilled by the *Spis miejscowości Polskiej Rzeczypospolitej Ludowej* (*List of Localities of the Polish People's Republic*) published by the Publishing House for Transport and Communications (Wydawnictwa Komunikacji i Łączności) in April 1967 and destined for a wide public. This 1383-page folio index of all localities in Poland lists 105,000 items. It also provides information concerning the character of the named locality, its administrative appurtenances, post-office and registrar's office, as well as indications of the nearest railway station or railway stop. Irrespective of the kind of locality named, the index is arranged in alphabetical order. It is only by the type-face that towns and urban settlements can be distinguished from localities situated in rural areas such as villages, hamlets and colonies. This publication has been prepared by working teams of the Commission for Establishing Names of Localities and Physiographical Objects, the Ministry of Communications, the Ministry of Transport and the registrar's offices.

The administrative structure of national names authorities in Poland has not been finally determined, as no definite legal act has been passed for the purpose. Since the results of the work of the Commission for Establishing Names of Localities and Physiographic Objects are published by the Prime Minister's Office, at the moment of publication they acquire the status of official authority. The official character of the standardization of names from beyond Polish territory is at present a subject of discussion between the institutions interested in the problem. It is to be expected that the Second United Nations Conference on the Standardization of Geographical Names will accelerate the final decisions here.

NATIONAL STANDARDIZATION

Report presented by Guatemala*

Although 2,000 years have passed since Horace wrote his epistle to Julius Florus, the concepts in it may still be applied to geographical names. Moreover, all the countries of Latin America, in particular, feel a great need to study, express their opinions on, determine and record their geographical names in the most uniform manner possible along certain basic lines dictated by experience and local usage.

Since earliest antiquity, man has always tried to provide distinct geographical names for all his surroundings, since this has always been the only way of accurately determining where the different features are situated. In addition, it should not be forgotten that standardization at the national level is the basis for international standardization, because only this makes it possible to avoid anarchy in this field and at the same time to exercise the necessary control over geographical names.

The writer has always held the view that countries which are not yet privileged to have their own national geographical names authority should proceed to establish one, as an official specialized body, as soon as possible, in order to benefit from its advisory services in determining, redetermining or possibly changing geographical names, applying the procedures established for the purpose. Thus, when the national authority decides on a particular name, it will be the only official name and must therefore be disseminated as widely as possible within the national territory.

The two regional meetings on the standardization of geographical names, held in Central America at this writer's request (Guatemala, 7-11 October 1968, and Panama, 19-23 October 1970), dealt thoroughly with national standardization. This subject will also be specifically covered at the proposed first South American regional meeting on the standardization of geographical names, which the Government of the Federative Republic of Brazil has agreed to sponsor in 1972, also at the request of this writer, through its Ministry of Foreign Affairs, at the Palácio Itamaraty, Brasilia.

* The original text of this report, submitted in Spanish, was contained in document E/CONF.61/L.17.

I feel that I must, in all fairness, express my deepest gratitude to Alfredo Obiols Gómez, the engineer who pioneered the study of geographical names in my country, and who, in his capacity as Director General of the National Geographical Institute of Guatemala, laid down the basic procedures for standardization on 22 July 1960. These procedures were later supplemented on the basis of the conclusions of the First United Nations Conference, held in September 1967 at Geneva, and by additional procedures found necessary in practice.

The process of allocating geographical names can never be static; it must be essentially dynamic, since it constitutes an encyclopaedic register which faithfully reflects the environment in which we live and is thus subject to a continuous process of adjustment and change — to innovations and corrections brought about by the progress of research, by the action of the forces of nature and the hand of man in transforming the face of the earth, and by constantly changing events.

In order that the action taken in Guatemala towards standardization at the national level may be of use to the experts attending the Second Conference on the Standardization of Geographical Names, we offer now a description of the procedure followed in Guatemala, which has been adopted by a number of countries in the region.

As already indicated, the basic standardization procedures to be followed in Guatemala were introduced on 22 July 1960, and the Joint Commission on Geographical Names was established on the same date. In accordance with the conclusions of the First United Nations Conference, held at Geneva, its name was changed to the National Geographical Names Authority of Guatemala as from 2 March 1968.

Under the Constitution, Guatemala is divided politically and administratively into departments, which, in turn, are made up of *municipios* (municipalities). Since, for the sake of convenience, it was decided to use the Dewey decimal system, each department, in alphabetical order, was assigned a number, followed by sub-number for each of its *municipios*. Each department and *municipio* has its own cardboard folder with its decimal number and standardized name indicated on the tab.

Each folder contains a rough sketch which was requested from the municipal authorities, all the administrative correspondence with those authorities relating to geographical names, copies of government decisions, information on boundary disputes, if any, and, at the beginning, a list of all geographical features, including all types of rural properties, prepared by the National Geographical Names Authority.

This information is kept up to date and supplemented with data from the duly signed certificates issued by the municipal authorities to the classification and review teams when the latter find and pinpoint on aerial photographs features previously omitted from maps and therefore representing new toponyms. After being studied and adopted, the new names are entered in the catalogue of informaton on the *municipio* by the National Geographical Names Authority. In cases where there is a change of toponym, the municipal authorities are advised accordingly.

Before leaving for the field, each classification and review team applies for a copy of the file, which is provided automatically for each municipal area in which it will work. When it returns with the classified vertical aerial photograph, the certificates relating to the new toponyms are received. Next, geographical names which have already been standardized are checked to see whether they are accurate designations. Where new toponyms are concerned, the first step is to determine whether they appear correctly on the classified photograph in accordance with the pertinent certificates. Each name is then studied individually, and the possibility of duplication and all other factors affecting its acceptance are reviewed. Any doubts which arise are first discussed with the cataloguer concerned. If they cannot be resolved in the office, the appropriate municipal authorities are consulted. This procedure is followed for aboriginal names, especially where their etymologies are concerned.

The aerial photograph, when all the names on it have been checked and the new names accepted by the National Geographical Names Authority, is sent for photogrammetric compilation.

Once the map is compiled, a copy of the basic manuscript of geographical names is received and is subjected to further review. Any doubts which might arise are noted on the copy of the manuscript — for instance, the absence of names for population centres, elevations or watercourses, depending on the scale of the map. All this is sent to the review department for consideration in conjunction with any uncertainties there may be relating to the photogrammetric compilation. The uncertainties are investigated in the field by the field review team.

As soon as the necessary information is received, the National Geographical Names Authority takes appropriate action and, when all the discrepancies have been cleared up, publishes the new names as official. Appropriate annotations are made on the copy of the names manuscript, which is returned to the review department, where the changes are noted as appropriate; the duly corrected material is then sent to the Printing Department for colour separation.

When the colour proof is ready, a final check of the geographical names is made in the office before the map is printed.

Copies of the two forms used in proposing new geographial names are annexed to this report: the domestic geographical name report form (annex I) and the form for the proposed name of a prominent unnamed geographical feature (annex II).

In its sincere desire to co-operate fully, the National Geographical Names Authority of Guatemala will make available to representatives the experience it has acquired in 10 years of operation, as well as all information relating to the standardization of geographical names at the national level.

It is well known that the standardizaton of geographical names is exceedingly difficult and that it is impossible, in many cases, to achieve any practical results.

As an example, it should be sufficient to recall that the writer, at the closing meeting of the First United Nations Conference at Geneva, remarked that, owing to an irony of fate, it had not been possible to decide on one of the many official names of the beautiful Swiss city in whose Palais des Nations we had met, and that the city continued to be known as Genf, Ginevra, Genève, Geneva and Ginebra. We should, however, find some consolation in the fact that this aspect of geographical nomenclature is neither peculiar to nor characteristic of the great, highly developed European countries: it is not true that they alone can take pride in the awesome confusion which prevails among the official variants of their geographical names, a random example of which is provided by Aix-la-Chapelle, Aachen, Aquisgrana, Åken and Aquisgrán, all of which refer to the same city.

Similarly, we in Latin America, who live in developing countries, or what has lately come to be called the Third World, have the privilege of being in a position to contribute to the world-wide confusion in the field of geography concerned with standardization at the national level, for we, too, have a great number of variant forms of geographical names, optional or otherwise, but all official. Although there are numerous examples in every country, a reference to only two of the many cases which have arisen in Guatemala should be sufficient to illustrate the point. I shall first take the name of the second largest city in my country, which offers a typical example of different geographical names, all of which have appeared in official documents at one time or another: 1. Culahá; 2. Culajá; 3. Xelajuj; 4. Xe-lajuj; 5. Xelajú; 6. Xela; 7. Vucxiquín; 8. Vucubxiquín; 9. Lahum Quiej; 10. Xelahun Queh; 11. Lahunquej; 12. Culahá Ah Xelahú; 13. Quetzaltenango; 14. Quetzaltenanco; 15. Quesaltenango; 16. Quesaltenanco; 17. Quezaltenango del Espíritu Santo; 18. Quezaltenango. It was this last name, Quezaltenango, which became the standardized name after archives, philological studies, historical literature, various maps etc., dating back over four centuries, had been consulted. By way of information, in the Mam language, "Culajá" means "gorge of water", referring to the town's situation in a valley of the high plateau 2,300 metres above sea level and to the rivers in its environs. "Xelajuj" comes from the Quiché words *xe*, "underneath", and *lajuj*, "ten", meaning "beneath, or at the foot of, the ten peaks", since Quezaltenango is indeed situated in a valley at the foot of 10 peaks which rise around it. At this point it should be mentioned that the Quichés are supposed to have captured this region from the Mam race in the sixteenth century; even today the linguistic frontier lies at the nearby town of Concepción Chiquirichapa, where the Mam race and language still prevail. "Quezaltenango", so spelt, appears in the first known report of Pedro de Alvarado to Hernán Cortés, dated 28 July 1524. It comes from the Nahuatl words *quetzalli*, "quetzal" (*Pharomacrus mocino*), and *tenango*. from *tenanco*, meaning "town", perhaps owing to the great number of quetzal birds which formerly abounded in the region.

The other example is provided by the lake, 99 square kilometres in area, on an island in which Flores, chief town of the department of El Petén, in the northern part of the country, is situated: 1. Yaxhá; 2. Yaxjá; 3. Yzá; 4. Ytzá; 5. Itzá; 6. Petén Itzá; 7. Petén Ytzá; 8. Petén Yzá; 9. Remedios del Petén; 10. Nuestra Señora de los Remedios; 11. Nuestra Señora de los Remedios y San Pablo del Itzá; 12. Nuestra Señora de los Remedios del Petén; 13. Petén; 14. del Petén; 15. de Itzá del Petén; 16. de Itzá de Petén; 17. San Andrés; 18. de San Andrés; 19. Chaltuná; 20. de Chaltuná; 21. Chaltuná o del Petén Izá; 22. Chaltuná o del Petén Itzá; 23. Taizá; 24. Tayasal; 25. Haltunná; 26. Jaltunná; 27. Flores; 28. de Flores; thus, there are 28 different names which, at one time or another since the fifteenth century, have designated the same body of water, each of them an official name. With understandably universal approval, the name of the lake was standardized as "Petén Itzá", which is the most common form and means "island of the *itzás*". In Maya, "Petén" has the etymological meaning of "island", which was later extended to the whole of the territory corresponding to the existing department established by the Government Decision of 8 May 1866. Penelo, following Maler, writes that "Itzá" is a Nahuatl word (*its-atl*) meaning "place of the water in which blood (from religious sacrifice) is washed off". According to Becerra, it is a Maya word (*its-haa*) meaning "sweet, or drinkable, water". In Maya, "Chaltuná" means "lake with houses", while "Tayasal" (*tayax-hal*, with the letter h sounded, like the modern Spanish j) means "amid the green waters".

Cases like these are not exceptions which occur only in Guatemala, but are found in most countries. Consequently, steps must be taken to find a solution. To this end, it is not only necessary to utilize the procedures outlined at the First United Nations Conference, held at Geneva in 1967; each country must also proceed to lay the groundwork for its own national standardization. Ideally, a national geographical names authority should operate in each country, and it is considered essential that the following guidelines should be followed from the outset:

(*a*) To make any unnecessary or ill-considered change in a geographical name is tantamount to destroying living monuments of history and language; for geographical names are hallowed by usage, and to destroy them is to wipe out the traces of history, thus sacrificing national identity in order to satisfy, in most cases, the whims of the moment;

(*b*) The syntactic patterns of geographical names tend to be idiosyncratic, since phonological changes in them or in the language to which they belong produce reflexes which are irregular in relation to their etymological meaning;

(*c*) Geographical names reflect the most salient characteristics of the regions which they designate, for it is well known that those who coined the names which have been retained always sought out the most colourful feature and, in expressing it, formed rich and euphonic terms to designate the places through which they passed or in which they lived. However, it must be borne in mind that orthographic analysis of the "geonyms" with which we designate all geographical features informs us also about the genealogy, variations

and history of these names, for words, like all living things, are subject to evolution, which must be investigated in the case of geographical names;

(*d*) Unless there are sufficiently important and duly justified reasons for doing so, an established geographical name which has been declared official should be neither changed nor replaced;

(*e*) It is inadvisable to introduce proper names honouring any person into national geographical nomenclature unless at least 15 years have elapsed since his death;

(*f*) The ideal to be aimed at is for all geographical names to be concise and euphonic and, so far as possible, descriptive of the place to which they refer;

(*g*) In cases where geographical names may give rise to confusion owing to duplication within the same municipal jurisdiction or the equivalent, a solution to the problem should be sought in the most impartial manner;

(*h*) From any point of view, geographical names containing the following should be considered unacceptable: (*i*) contrived or discordant combinations formed of words from different languages, except where hallowed by usage; (*ii*) corrupt or altered terms; (*iii*) obscene or blasphemous connotations; (*iv*) names which may in certain cases be interpreted as publicity for any commercial or industrial enterprise;

(*i*) Optional portions of geographical names should be avoided so far as possible;

(*j*) Only those geographical names concerning which the necessary information is provided in writing should be accepted for consideration;

(*k*) No govermental, autonomous, semi-autonomous or private body may use any geographical name or designation of an inhabited place unless the name or designation is declared official.

It should be noted that, in the matter of national standardization, the basic Guatemalan standardizaton procedures have been adapted to the needs of other countries of the region.

General definitions

Geographical name: a proper name composed of one or more words designating and delimiting an area as an individual entity or geographical characteristic.

Geographical entity or *geographical characteristic*: any geographical feature, object or locality which is precisely defined.

Toponym: the name of any geographical entity or characteristic.

Topographic feature: any geographical feature of elevation, also known as *oronym.*

Hydrographic feature: a geographical feature consisting of a body of water.

Cultural feature: a geographical feature made or significantly changed by man.

Generic term: a term forming part of a geographical name which indicates the type of the designated entity and which has the same meaning in current local usage.

Specific term: that portion of a geographical name which particularizes it.

Map information: words appearing on maps which are not the names of geographical characteristics but serve only to indicate them.

Transliteration: the letter-for-letter transfer of a word from one alphabet to another alphabet.

Transcription: the phonological representation of a word of one language in another.

Standardization of geographical names: the process by which the competent authority establishes names, although their use may not be mandatory.

General considerations

Toponymy, or the science of toponyms, requires personnel trained in geography, linguistics and history.

A map is a scientific record, a research document and a work of art.

Similarly, a geographical name is a historical record which should give life and personality to a map. It should facilitate correct identification and understanding and is, in general, subject to changes and developments which should be controlled.

Consequently, apart from the problems of standardization, the establishment of a geographical name demands careful study based on research, analysis, comparison, interpretation etc., until the proper choice is arrived at, while the need for simplicity and ease of acceptance by the user must not be ignored.

No decision should ever be made to incorporate a doubtful name in an official document of great value like a map, geographical dictionary or glossary.

All doubtful geographical names should be studied from the point of view of linguistics, semantics, etymology, orthography, geography, history, tradition etc., according to the region and language to which they belong.

The National Geographical Names Authority

The President of the Republic, acting through the Ministry of Internal Affairs, is empowered to name, rename, or change the names of, geographical entities, characteristics or features. In accordance with statutory provisions, the Executive, before taking decisions in this regard, consults the National Geographical Institute and the General Directorate of Statistics.

By virtue of an administrative provision, the National Geographical Institute, owing to the nature of the studies and work it carries out, is the body responsible for studying, recommending and recording the country's geographical names. No name is deemed official unless it is recorded by the National Geographical Names Authority.

All responsibilities relating to geographical names have been delegated by the National Geographical Institute to the National Geographical Names Authority, which is composed of two bodies: the Working Group and the Advisory Group.

The former is made up of three staff members of the National Geographical Institute: the head of the Human

Geography Department, the head of the Review Department and the head of the Geographical Division. Their duties in this sphere are: to carry out research, compilation, analysis, comparison, interpretation and evaluation in connexion with each geographical name; to submit to the National Authority drafts concerning decisions, methods and procedures in the field of standardization; and to record, transcribe and publish the decisions taken, and to communicate or exchange information with foreign bodies responsible for the standardization of geographical names.

The second body, which constitutes the National Authority, has as its chairman the Director-General of the National Geographical Institute; as members, representatives of the National Geographical Institute, the Faculty of Humanities at the University of San Carlos de Guatemala, the General Directorate of Statistics, the National Indian Institute, the Guatemalan Academy (correspondent with the Spanish Academy of the Language), the Geographical and Historical Society of Guatemala, and the Guatemalan National Section of the Pan American Institute of Geography and History; while the head of the Department of Human Geography serves as member and executive secretary.

The basic duties of the National Geographical Names Authority are: to establish general, clearly defined and well-publicized principles in order to facilitate the acceptance of standardized names; to provide the necessary advice concerning geographical names in the Republic; to approve methods and procedures for the standardization of geographical names; and to provide advisory services in its field of specialization.

Rules of the National Geographical Names Authority

1. The National Geographical Names Authority shall propose to the National Geographical Institute the methods to be used in determining current names and their proper spelling. The method may be varied as necessary in different linguistic regions and must comprise:

(*a*) The most thorough inquiry possible, to provide information on the way the name is written on old maps, on modern maps, in administrative, land-registration and registry instruments etc, in archives and historical literature, and the written, phonemic, phonetic and other forms of the name, and its etymology;

(*b*) The most accurate determination possible of the size and nature of the named feature;

(*c*) In the initial phase, the employment, so far as possible, of personnel with sufficient training to deal with and recognize linguistic phenomena;

(*d*) In the determination of spellings, compliance with the rules of the Royal Spanish Academy of the Language, where Spanish or Castilian names are concerned; with the rules of the Guatemalan Academy, correspondent with the Spanish Academy of the Language, where Guatemalanisms are concerned; and with the rules of the National Indian Institute, where aboriginal names are concerned.

2. It must lay down general, clearly defined and well-publicized principles to facilitate the acceptance of standardized names. With reference to these principles, the following considerations must be borne in mind.

Names should be effective in identifying and facilitating reference to individual geographical entities.

A basis should be established for deciding whether to retain or change names.

A method should be established of reviewing and up-dating these procedures.

The habits and observed or inferred attitudes of people towards geographical names must not be overlooked.

Systematic treatment should incline towards retaining names, rather than changing them: exceptions should be fully justified.

So far as possible, meaningful components of names under consideration should not be eliminated.

Translations should not be used unless they are accepted.

Duplication should be eliminated so far as possible. To this end, a change in the less important of the duplicated names should be proposed; and if the change is not desirable or not accepted, a meaningful component should be added. In all cases, it is desirable to determine the degree of duplication.

No decision to change a geographical name or to choose among several of equal authority should be made without first consulting the users and determining their probable reaction.

For the spelling of aboriginal names, the symbols studied and approved by the National Indian Institute must be used.

The names of physical features must be clear and precise. In other words, it is necessary to determine what the name designates, and its extent.

Names should generally be assigned to physical characteristics which are only partially named.

So far as possible, the standardized form of a name should not include an optional component. Where this cannot be avoided, the cases in which the optional component is to be used must be clearly specified.

Generic components should not be deleted where they are considered necessary to avoid confusion.

Where Guatemalanisms are used, their correct meaning must be indicated.

A choice must be made between parallel forms or grammatical variants.

It must be clearly indicated whether or not articles or prepositions are to be included.

Similarly, the use of sigla and abbreviations must be regulated.

Localities must be pinpointed as accurately as possible, using either geographical co-ordinates or distances from a known fixed point.

Gender, number etc. must be specified where necessary.

3. It should be understood that these standardization procedures should not be considered exhaustive. The National Geographical Names Authority will propose to the National Geographical Institute further principles of standardization as practice and usage dictate.

In short, in order to standardize geographical names at the national level it is necessary to follow guidelines

clearly laid down by a national names authority. This is the only way of ending the present chaos and at the same time of exercising the necessary control over geographical names.

Annex I

DOMESTIC GEOGRAPHICAL NAME REPORT FORM

INSTITUTO GEOGRAFICO NACIONAL

Guatemala, América Central

INFORME DE NOMBRE GEOGRÀFICO DOMÉSTICO

Nombre controversial	Nombre recomendado:	Categoría:
Cambio de nombre		
Otro	Nombre actual:	Municipio:
		Departamento:

Latitud ——— ° ——— ′ ——— ″ norte, Longitud ——— ° ——— ′ ——— ″ oeste.

Descripción del accidente: En lo pertinente, proporciónese configuración, longitud, ancho, dirección o rumbo, dirección y distancia de las extremidades desde puntos con nombres establecidos, elevación (si es conocida) y otros detalles adicionales:

Mapas en que figura el nombre actual (incluyendo fechas y escalas), u otras fuentes	Nombre variante	Mapa o fuente usando el nombre variante

Información disponible en cuanto al origen, grafía y significado etimológico del nombre recomendado, y/o declaración relacionada con la naturaleza de la diferencia en su uso, o aplicación:

Nombre propuesto por:

(Nombre)	(Firma)	(Dirección)
(Cargo u oficio)	(Años de residencia)	(Fecha)

Dato obtenido por:

(Nombre y firma)	(Cargo)	(Fecha)

AUTORIDAD NACIONAL DE NOMBRES GEOGRÁFICOS

Resolución:

Ciudad de Guatemala, ——— de ——— de 19———

Nombre geográfico aprobado y registrado: ——— Accidente: ———

Visto Bueno:

Secretario Ejecutivo

Presidente

Annex II

FORM FOR THE PROPOSED NAME OF A PROMINENT UNNAMED GEOGRAPHCAL FEATURE

INSTITÙTO GEOGRAFICO NACIONAL

Guatemala, América Central

FORMULARIO PARA NOMINACIÓN DE UN ACCIDENTE GEOGRÁFICO PROMINENTE SIN NOMBRE

Nombre propuesto: _____ Pronunciación fonética: _____
Municipio: _____ Departamento: _____

Ubicación del accidente — Latitud _____° _____′ _____″ norte Longitud _____° _____′ _____″ oeste.

Descripción y extensión del accidente:

Distancia y dirección de accidentes conspicuos o poblados:

Base de conocimiento que el accidente no está nominado:

Motivo de seleccion del nombre

descriptivo

por un accidente cercano

otro (indíquese el motivo): _____

Si es descriptivo, especifíquese el motivo por el cal es apropiado: _____

Si es nominado por otro accidente, estecifíquese por cual: _____

1. Nombre _____ Lat. _____° _____′ _____″ norte; Long. _____° _____′ _____″ oeste.
2. Variantes conocidas en la grafía u otros nombres: _____
3. Número de años conocido por su nombre actual: _____ Optativo: _____
4. Relación entre los dos accidentes: _____

Menciónense los anexos que se incluyen como ayuda en la identificación

Mapa en que se ha señalado: _____
Fotografía aérea marcada: _____
Otros: _____

Presentado por: _____ _____
(Nombre y firma) (Cargo u oficio)

(Institución) (Fecha)

AUTORIDAD NACIONAL DE NOMBRES GEOGRÁFICOS

Resolución:

Ciudad de Guatemala, _____ de _____ de 19____
Nombre geográfico aprobado y registrado: _____ Accidente: _____

Secretario Ejecutivo

Visto Bueno:

Presidente

NATIONAL GAZETTEERS OR OTHER SIMILAR PUBLICATIONS IN WHICH COUNTRIES MAKE AVAILABLE THEIR STANDARDIZED NAMES

Report presented by Austria*

1. Recommendation 4. E[1] of the First United Nations Conference on the Standardization of Geographical Names (Geneva, 4-22 September 1967), concerning national gazetteers, is suitable for the purposes of the international standardization of geographical names; it needs, however, to be supplemented with the following suggestions.

(*a*) As far as multilingual areas are concerned, gazetteers following recommendation 4. D,[2] paragraphs (*b*) and (*c*), of the above-mentioned conference should give all the officially recognized names and state whether such names have the same standing or whether any of them rank higher than others. In cases where it seems to be appropriate or necessary it is recommended that the official status of the various languages should be explained in a preface;

(*b*) The glossary to be prepared for each of the gazetteers according to recommendation 19. B[3] of the same conference should give the explanations of generic nouns and other generic terms such as adjectives not only in the official language(s) of the given country but also in English, French or both;

(*c*) For names written in a non-Roman alphabet or in a non-alphabetic script, a romanized form should be given alongside the original written form. Such romanization should follow a system of conversion officially recognized by the country concerned, or, if no such system exists, an internationally and linguistically acceptable system of conversion.

2. For the purposes of international co-ordination of work, it is recommended that a scheme of publication should be provided that would achieve the greatest possible extent of uniformity for all gazetteers prepared under United Nations recommendations. Such a scheme should include provisions for the numbering of the volumes, uniformity of the covers and preliminary pages (see below), a preface and introduction in the official language(s) of the country concerned as well as in English, French or both, and uniformity of the glossary (see 1(*b*) above). The following are suggestions for possible layouts of the covers and preliminary pages of the books (keys below each layout show what information should fill the books).

Book cover:

NOMINA GEOGRAPHICA

(1)

vol. .....

(2)

.....

(3) (4)

....

(5) (6)

....

(1) Number of the volume
(2) Name of the country in the national language
(3) Name of the country in English
(4) Name of the country in French
(5) Place of publication in the national language
(6) Year of publication

Title-page opening

Left-hand page:

NOMINA GEOGRAPHICA

(1)

vol. .....

Geographical Gazetteer Répertoire des noms géographiques de

(2) (3)

of ....

drawn up according to the recommendations of the United Nations

rédigé selon les recommandations des Nations Unies

(1) Number of the volume
(2) Name of the country in English
(3) Name of the country in French

Right-hand page:

NOMINA GEOGRAPHICA

(1) (2)

....

(3)

.....

(4)

.....

(5)

.....

(6) (7)

....

(1) Equivalent to "volume" in the national language
(2) Number of the volume
(3) Equivalent to "Geographical Gazetteer of" in the national language
(4) Name of the country in the national language
(5) Detailed information about editorship in the national language
(6) Place of publication in the national language
(7) Year of publication

* The original text of this report was contained in document E/CONF.61/L.27.

[1] *United Nations Conference on the Standardization of Geographical Names*, vol. 1, *Report of the Conference* (United Nations publication, Sales No. E.68.I.9), p. 11.

[2] *Ibid.*, p. 11.

[3] *Ibid.*, p. 14.

Example

Book cover:

NOMINA GEOGRAPHICA

vol. 6

ÖSTERREICH

AUSTRIA AUTRICHE

Wien 1972

Title-page opening
Left-hand page:

NOMINA GEOGRAPHICA

vol. 6

Geographical Gazetteer of AUSTRIA drawn according to the recommendations of the United Nations

Répertoire des noms géographiques d'AUTRICHE rédigé selon les recommandations des Nations Unies

Right-hand page:

NOMINA GEOGRAPHICA

Band 6

Geographisches Namenbuch

Österreichs

Herausgegeben nach den Richtlinien der Vereinten Nationen von der Abteilung für Kartographische Ortsnamenkunde der Österreichischen Kartographischen Kommission in der Österreichischen Geographischen Gesellschaft

Wien 1972

FIELD COLLECTION OF NAMES

Report presented by Canada*

The collection and recording of geographical names by inquiry on the ground is in a much earlier stage of development in Canada than in the countries of the Old World. It is also governed by conditions which differ greatly from those in smaller and more densely populated countries, where names have become stabilized over centuries, and municipal authorities know all the geographical names within their boundaries, and are, in effect, their own field survey agencies, reporting changes to central administrations. In Canada, even in more settled areas, long distances extend between communities, and vast hinterlands lie beyond main transport routes. Municipal authorities have little knowledge of the toponyms of the extensive, sparsely settled reaches beyond their communities.

Maps reflect similar differences. In Canada, a map on the scale 1:50,000 is considered to be a large-scale map; in Europe, a large-scale map is more likely to be considered one at 1:10,000 or 1:5,000. There is a significant difference between the degree of ground examination lavished on a map at 1:5,000 and that lavished on one at 1:50,000, and the examination of toponyms in each case is likely to be proportionate.

The collection of geographical names is closely related to the development of map coverage. Basic mapping in Canada is still far from complete even at a scale such as 1:50,000, which would be a medium scale in Europe. Revision of such maps in Canada has taken second place to the effort to extend the initial coverage to areas still unmapped at this scale. Consequently, the original collection of map-names exhibited on a map produced 30 years previously may not have been rechecked since.

A review of the way in which geographical names have been accumulated in association with field survey work for geological and topographic map-making is necessary to understand the reasons why Canadian toponymists feel that, under the conditions obtaining in Canada, the field collection of geographic names should now be conducted as intensive studies by specially qualified workers.

The collection of geographical names in Canada as a function of map-making

Maps were centralizers and exhibitors of geographical names before gazetteers were conceived. The systematic mapping of any country has invariably been accompanied by an accumulation of toponyms.

In Canada, officially sponsored geological survey work began in 1842, and the Geological Survey of Canada produced its first report and an accompanying map in 1863. Until the formation of the Topographical Survey Branch in 1906, the field geologists were important collectors of geographical names in the course of their work. Hydrographic surveys of earlier date also contributed to the store of names. Subsequently, government topographers expanded mapping programmes, until today the entire country from the Atlantic to the Pacific and from the United States border to the north pole is mapped on the scale 1:250,000. Each of the 917 maps making up this coverage carries its quota of geographical names collected by explorers, hydrographers, geologists and topographers.

* The original text of this report, prepared by G.F. Delaney, Chief of the Toponymy Division, Department of Energy, Mines and Resources, and Executive Secretary of the Canadian Permanent Committee on Geographical Names, appeared as document E/CONF. 61/L.29.

Most of the names so accumulated were obtained by simple, uncritical inquiry. Field officers were preoccupied by the tasks relating to their specific disciplines. Some demonstrated a real interest in geographical names, and annotated this aspect of their reports with background material. Generally, and this is true up to the present day, field engineers doing field surveys have little time or inclination to do more than a minimum of checking on toponyms. This becomes evident when the results of reports on the geographical names of a given area by survey officers, primarily concerned with topography, geology or hydrography, are compared with those by trained toponymists. Amplification of this conclusion will be found later on in this paper.

It should be noted that this statement is not intended to disparage or minimize the contribution which the field-survey officers have made to the collection of Canadian names. Our maps exhibit several hundred thousand which, under the circumstances of Canada's development, could have been assembled in no other way. It has become evident to students of toponymy, however, that the collection and evaluation of geographical names need more intensive investigation, more refined techniques and more informed knowledge than can be expected from field officers primarily responsible for other duties. This is true even when the investigator is concerned with names in a language in which he is thoroughly at home, and much more true when the names to be recorded are derived from languages with which he has little or no familiarity.

The collecton of geographic names in Canada as a function of toponymy

Work sponsored by the Government

The interest of the Government of Canada in collecting geographical names, manifested by the work of its field surveyors in various disciplines, has already been mentioned. The survey officers of provincial governments have also contributed in the same way.

Canada established a Geographic Board in 1897, charged with responsibility for all matters relating to geographic names. While this Board, now called the Canadian Permanent Committee on Geographical Names, has been active during the past 75 years in the investigating, recording and publishing of names, it has only recently become directly involved in true field-collection operations.

It has published many extensive reports on various aspects of toponymy, and is responsible for the *Gazetteer of Canada* Series, but while many of the names in these publications originated from reports by a wide variety of persons, official and private, representing data gathered *in situ*, no publication was fully supported by anything representing a systematic field survey until 1964. In this year a study entitled *The Geographical Names of Renfrew County* was issued which fulfilled the requisites of a complete field examination, complemented by adequate documentary research. This study was carried out by a geographer, Alan Rayburn, who has specialized in toponymic work for the past decade. Mr. Rayburn did this work as a member of the secretariat of the Canadian Committee.[1]

The Renfrew study covered an area of approximately 3,000 square miles, located in the eastern part of the province of Ontario. To cover the 2,800 names dealt with, 150 interviews were necessary. The Information obtained from the people interviewed was recorded for further reference. The *Geographical Names of Renfrew County* was published as Geographical Paper No. 40.

The results of the Renfrew study are summarized as follows in the conclusion of the report:

"Previously unrecorded local names: 770

"Unrecorded local names differing from formerly approved names: 89

"Names still used and reinstated for which substitutes had been formerly approved: 37

"Spelling errors: 28

"Names misapplied on maps: 19

"Features with approved names unknown locally, and without alternatives: 12."

This study was followed by one of much greater magnitude, the field examination of the geographical names of an entire province.

The New Brunswick study, the second toponymic study, which examined all the geographical names in an area of 28,000 square miles, began in 1966 and was completed in 1969. It was conducted by the same field officer who carried out the Renfrew study. The techniques employed were similar, but refinements were introduced as a result of lessons learned. The objectives were: (*a*) to confirm the correctness of the names shown on existing maps and marine charts of the province (a complete topographic coverage on the scale 1:50,000 was available); (*b*) to discover names not known to the Committee which might be in local use; and (*c*) to accumulate such data on origins and history and language aspects as might be disclosed in the course of completing (*a*) and (*b*).

This comprehensive study proved to be a major contribution to the standardization of the geographical names of New Brunswick. The map coverage at the initiation of the study displayed about 7,000 names: the field examination produced 14,000. Of the names shown on the maps, 20 per cent proved inaccurate in respect of spelling, application or conformity to local usage. Substantial name-revisions have resulted in maps produced since the completion of the survey and more remain to be incorporated on later maps. Background information suitable for an annotated gazetteer was collected for 4,000 names: this will shortly be published. The Gazetteer of New Brunswick will be issued in a revised edition, with a 100 per cent increase in name volume provided by the survey.

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[1] The Canadian Permanent Committee on Geographical Names, composed of Federal and provincial members, has derived staff support from various departments during its history. At the present time, this supporting agency is the Surveys and Mapping Branch, Department of Energy, Mines and Resources. As relationships are rather involved, this paper, for convenience, refers to the Permanent Committee only as the responsible toponymic authority. The executive secretary of the Committee functions also as the chief of the Division of Toponymy of the Surveys and Mapping Branch.

Prince Edward Island. A third field study was initiated in the summer of 1970 and completed in the summer of 1971. This encompassed the province of Prince Edward Island, an area of 2,184 suqare miles. The office analysis of this work is still in progress, but there is reason to believe that the results will be proportionately comparable to those of the New Brunswick study in respect of new names found, amendments found necessary to existing map names, spellings corrected and feature identifications.

Projected studies. A field examination of the geographical names of the province of Nova Scotia is planned to begin in the latter part of 1972.

Studies conducted by non-Federal organizations

Besides studies conducted at the Federal Government level, other organizations have shown great interest in similar projects.

Field investigations by the Quebec Geographical Commission. The province of Quebec, through its official body which deals with all questions concerning geographical names within the province, has undertaken field studies in different areas of Quebec.

In 1968, the results of a toponymic study of Metropolitan Montreal were published in a 225-page report entitled *Toponymie de la région métropolitaine de Montréal*, in which the spelling, the historical background, the correct application and the local usage of the names were given. The introduction of this report states that aims of the field study are twofold: first it makes it possible to check the names used on topographic maps and to gather information about them; secondly, it is the only means of collecting new names and spotting those that have been forgotten by the mapmakers.

Other regional studies were conducted by the Quebec Geographical Commission: one in the Sherbrooke area and another in northern Quebec. These two regional studies resulted in the correction of the names of the maps of the Sherbrooke area and added 500 Eskimo names to the nomenclature of Quebec.

Non-governmental investigatons conducted at Laval University, Quebec City

Toponymic research is well organized at Laval University. A Groupe d'étude de choronymie et de terminologie géographique has been established and there exists a marked interest in toponymic research. A master thesis based on field investigation of names was accepted by Laval University in 1961.

In 1965, *Les Noms de lieux de la Beauce* was published by the Institut de Géographie de l'Université Laval. This 100-page publication contains approximately 800 names which were confirmed on survey plans, on old maps and by local interviews.

In 1967, the Presses de l'Université Laval published *Les Noms de lieux montagnais des environs de Mingan.* In this pubication, 137 Amerindian names of the Mingan area are listed with their pronunciation and meaning. This information was obtained in the field. Similar studies are projected by linguists and geographers of the Université Laval, and eventually all the geographic names of the province of Quebec will be investigated.

Field-study planning and techniques

Canadian experience indicates that the conduct of effective field collections of geographic names requires the following:

(*a*) The employment of personnel qualified in the science of toponymy;

(*b*) The existence of a suitable cartographic coverage of the area to be examined;

(*c*) A preliminary study of the names on the existing maps, and of available documentation respecting them;

(*d*) An examination of contemporary material, such as newspapers, magazines, travel guides and tourist literature;

(*e*) The actual inspection of all physical features;

(*f*) The extensive use of local interviews;

(*g*) Record accumulation using map notation and tape-recorders;

(*h*) Adequate transport;

(*i*) The establishment of a base of operations convenient to the chief local government administration where co-operation in access to records of all kinds affecting the geographical names to be examined may be obtained;

(*j*) Interviews directed towards verifying local use; checking local agreement with map names; verifying feature identification; checking the accuracy of spellings; checking pronunciations; ascertaining previously unrecorded names; and determining the existence of conflicting usages — with enough interviews conducted in any area to preclude bias;

(*k*) The checking of field-survey results against local administrative and archival records.

Conclusions

From the work done in the field collection of geographical names in Canada, it may be concluded: that no substitute exists for a comprehensive field examination of toponyms; that such work requires personnel trained in the science of toponymy and geography and capable of planning and executing the surveys; that geographical names on maps, when derived as a by-product of the work of the land surveyor, the geologist or others, are likely to be incomplete and inaccurate in many respects; and that the examination of large geographical areas may be accomplished within a practical economic framework in a relatively brief time, if well planned and conducted by qualified personnel.

OFFICE TREATMENT OF GEOGRAPHICAL NAMES IN CANADA

Report presented by Canada*

Introduction

The accumulation and recording of geographic names must be regarded as an important and essential task in any country. Depending upon the degree of social sophistication, the nature of the process ranges from simple unplanned listing on a private level to a nationally controlled endeavour presenting a complex and comprehensive pattern.

Canada's development in this field has progressed well beyond elementary levels. It involves the elements of national control, research, nation-wide inventory, the application of standards, regional co-ordination, decision-making and publication. Our experience extends over the past 75 years. The Canadian Permanent Committee on Geographical Names has not yet ventured into the computerization of its geographic names, although a feasibility study on the subject has been made. An actual start in this direction has been made at Laval University in Quebec City, where a project to transfer the geographic names of the province of Quebec on to magnetic tape has been initiated under the direction of H. Dorion.

This paper will attempt to outline the office methods used by the national control organization, the Canadian Permanent Committee on Geographical Names. The methods used by regional authorities — in Canada's case, the provinces and territories of the Canadian federation — are basically similar, as each nominates a member on the national Committee.

The task of the Canadian Permanent Committee is to co-ordinate work on geographical names throughout the country; to maintain established principles; to record and publish decisions; to ensure that Federal Government departments apply such decisions; to provide advice and guidance to the provincial toponymic authorities; and to aid in the solution of inter-provincial and broadly national toponymic problems.

Individual provinces have decision-making autonomy. Each may, if it wishes, publish its decisions unilaterally; to date only one province, Quebec, has done so.

To carry out its work, the Committee is supported by an office staff supplied by the Surveys and Mapping Branch of the Federal Government. This staff is directed by the Committee's executive secretary, and is responsible for the office processing of names ruled on by the Committee.

Standards

Principles to be observed in the acceptance of geographical names for official purposes were established in 1897 when the Geographic Board of Canada (now known as the Canadian Permanent Committee on Geographical Names) was established by the Government of Canada.

These principles were carefully designed to be simple, broad and flexible. While some modifications have been introduced over the years, the basic structure has survived. These principles govern office treatment of geographical names. They are summarized below.

Principles of nomenclature

(*a*) Names established by statutory authority are accepted unchanged;

(*b*) Names in public use shall have primary consideration;

(*c*) Names proposed for railway, postal or resource-development use should be evaluated by the Committee;

(*d*) Duplication of names should be avoided;

(*e*) Names of living individuals should only be used in exceptional circumstances;

(*f*) Different names in the English and French languages for the same feature should be recognized only if unalterably established in public use;

(*g*) Native names (Indian and Eskimo) must be recorded in a recognized orthography;

(*h*) Names characterized as follows are to be avoided: incongruous multilingual combinations; combinations of Christian name and surname; qualified names; double names; corrupted, unduly cumbersome, obscene, derogatory or commercialized names;

(*i*) Generic terms must be appropriate to features described. The language of generic terms may correspond with that of the text of publication;

(*j*) Names for features outside Canadian sovereignty must accord with forms established by the national authority of the country concerned, subject to North Atlantic Treaty Organization, Internatonal Hydrographic Bureau or United Nations requirements;

(*k*) Names proposed must be accompanied by exact information on location, feature identification and origin, or, if alteration is proposed, by a rationale.

Copies of the booklet *Principles and Procedures of the Canadian Permanent Committee on Geographical Names* are available from the Canadian delegation.

Classes of names considered

Geographical names referred to the Canadian Permanent Committee may be categorized as follows:

Topographic — relating to natural features of the landscape;

Hydronomic — relating to natural surface-water features;

Bathymetric — relating to undersea features, inland, coastal or open sea;

Physiographic — relating to the special regional or classification requirements of geology, minerology, forestry or soil-evaluation disciplines;

* The original text of this report, prepared by G. F. Delaney, Chief of the Toponymy Division, Department of Energy, Mines and Resources, and Executive Secretary of the Canadian Permanent Committee on Geographical Names, appeared as document E/CONF. 61/L.30.

Cultural — relating to populated places and man-made landscape occurrences;

Extraterritorial names, relating to any of the above classes, for use on hemispheric or world maps published in Canada.

Sources of names

The Committee secretariat examined 27,682 geographical names during the 12-month period from October 1970 to September 1971. Of these, approximately 5,000 were newly applied names, about 3,000 were names in which some change from the previously approved forms was required, and the remainder were names in good standing which had already been approved by the Committee at earlier dates. The reason for the recurrence of the latter names is explained below in the section on mapping organizations. Names referred to the Committee originate with mapping organizations, field returns or other sources.

Mapping organizations

In Canada it is the practice for federal and provincial mapping organizations to submit to the Permanent Committee new and revised maps, accompanied by a complete list of all names to be shown, before publication. The submission of complete name lists, including many names previously approved by the Committee, provides a guarantee for the mapping organization, in the form of a clearance from the Committee, that all names to be used are properly spelled and properly applied. It enables a check to be made for any changes which have come to the Committee's attention since the original decisions were made but about which the mapping agency may be ignorant. It also ensures that names not previously recorded and officially approved may be noted and dealt with. Names which are controversial in spelling or topographic application are exposed to scrutiny, and decisions are rendered which the mapping agency may accept with confidence. The system also enables the mapping agency to secure, through the Committee's records and its contacts with provincial members, any new names which the agency's own documentary sources may lack.

The submission before publication of complete name lists for maps produced by federal government agencies is a standard procedure.

As the Surveys and Mapping Branch of the Department of Energy, Mines and Resources produces virtually all of the basic maps of Canada, this Branch originates the greatest volume of names received by the Permanent Committee. It is not mandatory for provincial mapping agencies to submit their maps and name lists, but many do. When they do not, it is usually because their geographical names have been taken directly from the basic federal maps on which they know the names have already been approved. Commercial mapping agencies follow the same pattern, securing most of the names they use from approved federal maps. They are free to submit names they propose using to the Committee, and often do. More frequently, they request information regarding specific names which for some reason they consider doubtful.

Field returns

A second major input of names originates in the field activities of government organizations, both federal and provincial. These may relate to topographic, geological, hydrographic, mineral-exploration, forestry or soil-evaluation work. The officers concerned report new names encountered and discrepancies between names on maps they are using and local designations. These are channelled to the Permanent Committee for examination and decision. In addition, the Committee receives the results of its own field studies, which provide much more thorough and detailed coverage of the areas examined.

Other sources

A not inconsiderable number of names are submitted to the Committee by commercial interests involved in resource development, by railways establishing or altering rail-point names, by postal authorities opening or closing post-offices, by mountaineering groups or others engaged in geographical exploration, and by the general public. Most are suggestions for the naming of unnamed features. Some relate to native names in undeveloped areas. Others concern conflicts between names locally used and the usage shown on the map in identifying identical features.

Processing objectives

In dealing with each name submitted to it, the Permanent Committee has the following objectives:

(*a*) To create a permanent record of the name; to establish the geographical location of the feature it identifies; to determine its compatibility with Committee principles; to record alternative forms, if any; to resolve any controversy relating to spelling, language or application; and to accumulate data concerning origin, history of use or other supplementary facts which may be available;

(*b*) The clearance of the name with the provincial member of the Committee;

(*c*) The rendering of a decision, if this has not already taken place; and

(*d*) The dissemination of decisions (this is done by direct advice to mapping organizations and others making name submissions and by publication in gazetteers to the general public).

The processing procedures are established to achieve these ends.

Processing support elements

The processing staff

The operational work force is clerical and stenographic. Two out of three of the supervisory and research staff, however, are university-trained. All staff are

expected to be thoroughly familiar with the Canadian mapping system, and able to read maps and use locational devices.

Working criteria

In the interpretation of the Committee's principles, the working staff are trained to keep in mind the following instructions:

(*a*) Promote name stability by avoiding changes in the absence of compelling reasons;

(*b*) Give major weight to local usage in preparing recommendations;

(*c*) Respect the claims of native names to due recognition;

(*d*) Restore original forms when practical;

(*e*) Avoid compound names;

(*f*) Standardize abbreviations of generic terms;

(*g*) Consider the appropriateness of generic terms to the features designated;

(*h*) Minimize duplications;

(*i*) Ensure proper identification;

(*j*) Include proper diacriticals and hyphenation for the language of the name.

Use of maps and charts

Maps and charts are basic tools in working with geographical names. They enable geographical positions to be determined, the extent of features to be decided, and the suitability of generic terms to be assessed.

Canada employs a topographic grid, termed the National Topographic System, on which all map areas, for all scales from 1:25,000 to 1:1,000,000, are based. In the system each area for the 1:1,000,000 maps is numbered with a main number, from 1 to 117, which denotes an area 8 degrees of longitude by 4 degrees of latitude. By quartering one of these areas, limits are established for the 1:500,000 map areas, and by further division the areas for the 1:250,000; 1:125,000; 1:50,000 and 1:25,000 maps are delimited. These are the scales for series map production. Thus, number 16 indicates a particular map on the scale 1:1,000,000, 16NW denotes a 1:500,000, 16A 10 denotes a 1:250,000, 16 A/NW a 1:125,000, 16 A/10 a 1:50,000 and 16 A/10e a 1:25,000 sheet. Marine charts are less uniform in area representation, but bear identifying numbers. Comprehensive indexes of both maps and charts for each scale, covering the entire country, are available and constantly updated.

The reception of the majority of names processed by the Committee in blocks corresponding to these maps and charts permits the construction of a corresponding file for each map sheet or chart. Names received in smaller groups, or individually, are related to the largest-scale map available and to its corresponding file. Normally this is the 1:50,000 map, but in areas where mapping on this scale is incomplete the 1:250,000 map is used, as this series is complete for all parts of Canada. The series on the largest scale, 1:25,000, is not commonly employed because its coverage is confined to larger cities and their immediate environs.

Amendment copies

Maps and charts constitute unrivalled graphic storages for geographic names. The Permanent Committee secretariat takes advantage of this by maintaining in a pocket in the cover of each map or chart file a copy of the relevant map which is stamped "amendment copy".

The amendment copy is first created from a reproduction of the map manuscript which accompanies the name list initially submitted to the Committee. The manuscript copy is replaced by the printed map as soon as this becomes available. The Committee and the production agencies co-operate very closely on these matters. The status of each name on the amendment copy is verified and indicated by code number relating to the date of approval of the name, or to any qualification which the file record may contain.

Changes which may affect any name on the amendment copy, regardless of source, are noted by further coding. Such changes may concern spelling or feature-designation, or result from rescission, topographic alterations affecting the application of the name (such as flooding), geodetic data, or any type of information affecting the status of the name. New names are hand-lettered on the amendment copy, and a code number indicates source and status.

Thus, at any time during the life of a particular map or chart, the current status of the names displayed is instantly available. Questions about particular names or groups of names in the particular map area may thus be answered more quickly than by a computer printout. These answers can, of course, only relate to the facts which can be shown by this method — data on name history, or manipulated statistics, are not storable in this way.

The code system is very simple. It consists merely of information keys written on the margin of the map, each item being assigned an arbitrry number. This number is then written against the name or names concerned. A typical key list would appear as:

(*a*) Names approved 7/10/69 File 23 K/1

(*b*) Names approved 16/4/71 File 23 K

(*c*) Names proposed by John Doe 15/1/70 File 23 K

(*d*) Names deleted, features flooded, 22/8/71 File 23NW

When a revised edition of a particular map sheet is issued, it replaces the previous amendment copy, which is stored for record purposes. Subsequent changes in names on the new map are then built up as they occur in the same manner as before.

Card records

The card record system is the backbone of the information-storage system maintained by the secretariat. As in many organizations, the card records accumulated over a long period of time suffer from lack of foresight in the selection of card size and data recorded, and in the choice of cabinets and in organizational grouping.

The Permanent Committee's card records reflect these shortcomings, but a standardized system is now employed, and the conversion of older cards is gradually being accomplished.

For reasons connected with he utilization of carded information for gazetteer compilation, a standard card of the Hollerith type is now employed. Information on this card is typewritten. The top line contains the data used in the gazetteer entry — the name itself, the generic term, locational information such as country, township, parish (or, in some parts of the country, range and concession), and the geographical co-ordinates to the nearest minute. Beneath this in a standard order are entered the date of approval of the name, the map and file reference, and, when available, information concerning the origin, history and alternative forms of the names or other pertinent data. Obsolete and rejected names are also carded and cross-referenced as necessary. Alphabetization is governed by the same rules employed in Committee gazetteers. A master card is established for every name.

Cards are filed in steel filing-cases, in groups corresponding to provinces and territories. The secretariat has approximately 260,000 cards on file.

Supplementary card indexes are kept for certain classes of information. For example, all names assigned in commemoration of war dead, which total over 8,000 applications throughout the country, are also recorded, in addition to their place in the main index, in a separate index, so that statistics on them may be compiled and additional assignments controlled.

Other special indexes cover such classifications as glacial features, features named for surveyors, and names in areas where toponymic research is in progress. These are specialized accumulations of names and selected data designed to facilitate research, writing and response to inquiries.

File records

Files built up since the Geographic Board of Canada was first established in 1897 are in the possession of the Permanent Committee, and constitute an invaluable and irreplaceable source of reference data and historical records. Though much of it is unpublished, it is continually used in the processing of and research into geographical names.

The original system of consecutive numbering has long since been replaced by the creation of individual files for every map sheet (totalling almost 30,000 files of this class alone) plus a large number of general files dealing with a wide variety of toponymic subjects. A feasibility study has been made for the placement of all this data on microfilm.

Reference aids

The secretariat staff has available for instant access on the premises a collection of several thousand volumes of reference publications. A library specializing in cartographic and geographical material maintained by the Surveys and Mapping Branch is also readily accessible, as are the map collections of the Department of Energy, Mines and Resources and those of the National Archives.

Consultative facilities

As an agency of the federal Government, the Permanent Committee secretariat is located in the national capital, Ottawa, and has the specialized resources of many government agencies to draw upon when advice is required on topographic, hydrographic, archival or linguistic matters. It makes considerable use of these facilities.

Sub-committees

The Canadian Permanent Committee appoints sub-committees to advise on various problems connected with geographical names, and the reports produced are available to the operational staff of the secretariat. A standing sub-committee on the terminology of undersea features, and others appointed to study the basis for a "national policy on geographical names for Canadian maps" and the "concept of a geographical name", will provide useful conclusions for operational purposes.

NAME-PROCESSING OPERATIONS

Organization

The office treatment of the input of geographical names is organized to deal with the work on a regional rather than on a name-class basis.

Names relating to areas where the language is predominantly French, as in the province of Quebec, are assigned to a supervisor qualified in this language. Names relating to he predominantly English-speaking provinces go to a second unit, and those relating to northern Canada, the area of the Yukon Territory and the Northwest Territories, are assigned to a third unit. The supporting staff for each unit varies in size according to the over-all workload of each.

The operational staffs of each section therefore are trained to cope with the full range of problems that the processing of geographical names involves. They do not specialize in topographic names, or in hydronyms, and consequently may be shifted from one unit to another in response to workload pressures without loss of efficiency.

Operational sequences

The office treatment of names is uniform in each of the three units, allowance being made for the differences arising from language and population-density variations in the different geographic regions.

The first step in the sequence of operations for any name or group of names is normally the classification of the names as established, contentious or new. This process is not a matter of regrouping or association. It is concerned with the evaluation of the status of the name and influences the treatment of it.

Established names are those which have been previously approved by the Committee, or which have had a history of public use, as evidenced from one or more usage indicators, without evidence of conflict in orthography or alternative usage. One form of usage indicator is local verification; another is provided by maps or charts, or publication in books, newspapers or other documents. Contentious names are those for which similar evidence indicates alternative spellings, generics or feature applications, or opposing names for the same features. Previously approved names may become contentious because of subsequent developments, or because of oversights in the evaluation when first approved. New names are those proposed for previously unnamed features, or names for which no record of past usage has been made.

Step two is the assignment of the incoming documentation for a name or names to a correspondence file, or the creation of a file if none exists. This is determined by the map-sheet area or areas to which the names relate.

Step three is the record search regarding the names in question. Card records, maps, publications, field reports, and the services of language or other specialized consultants are employed to determine proper feature identification, orthography, previous usage, feature extents, compliance with Committee principles, the suitability of generic terms, corruptions, problems with boundary crossings, origins and histories, and other aspects.

The geographical co-ordinates of the features named are determined to the nearest minute from the largest scale map available.

In recording the extent of features, it may be necessary to determine the headwaters of streams, the mouths of bays, the positions of peaks on mountains, the extent of particular massifs, the lengths of channels and straits, the separation between interconnected lake features with different names, the boundary limits to which names of communities apply; and the elements involved in pluralized names. In delineating these aspects on maps, coloured lines are used to trace limits and area shading to provide distinctions.

The processor must be knowledgeable about drainage patterns, map and chart symbolization, and contour reading. He must be able to calculate distances on maps, and use proportional dividers in making comparison between maps on different scales.

Observations are recorded by the preparation of a master card for each name, by the creation or updating of an appropriate amendment map, and by notations on the document on which the name was received.

The name or names are then dispatched to the provincial or territorial member of the Committee to whose jurisdiction they relate, accompanied by copies of the appropriate map sheet and a summary of the observations assembled by the processing staff.

If features for which no names exist require identification, and the provincial may be asked to select names from the casualty lists maintained in both the Committee and the provincial offices.

The Committee processors may make suggestions for any phase of treatment of the name.

Upon the return of the names by the provincial or territorial member, the observations and decisions transmitted are examined, necessary amendments are made to Committee records, and decision lists for the names are prepared. These decision lists state the proper spelling of each name, the applicable generic term, the geographical co-ordinates, and the date of approval, rejection or suspension for further investigation. They also indicate any alternative names considered for the same feature.

The final step is the issuance of the approved names to the mapping agency or other source from which they were originally received. At the same time, the gazetteer section of the secretariat is provided with the listed decisions.

Office name research projects

A number of research projects utilizing the wealth of data accumulated in processing operations are normally in progress at any given time. These may relate to the isolation of classes of commemorative names; to the study of abbreviations of generic terms; or to the history of particular names or groups of names with respect to language or exploratory influences or as responses to general inquiries.

Treatment of inquiries

The Committee secretariat receives a steady flow of inquiries on toponymic matters. These come from governmental, business and private sources. They may concern the locations, extent or other aspects of named features, the origin of names or the history of them. Linguistic elements are often questioned, or requests are made for pronunciations or for explanations of decisions.

Inquiries come by mail, by telephone and by personal visits. Every effort is made to respond promptly and fully to such requests for information. Office procedure requires an answer to written requests within 48 hours. A tickler card index is maintained to ensure the periodic follow-up of items under investigation. The facilities and records of the Committee are made available to researchers who wish to use them in person.

Reports and statistics

Monthly progress reports of work accomplished are made by each unit of the secretariat to the executive secretary. Annual reports are made by the executive secretary to the annual meetings of the Permanent Committee. Between annual meetings, problems in name treatment or in policy interpretation are resolved by consultation between the executive secretary and the Committee chairman.

Summary

The centralized character of the examination of geographical names in Canada contributes materially to uniform toponymic usage throughout the country.

Office practices ensure that the majority of names in common use are recorded, standardized and made available for maps and other uses.

Regional co-operation is continous and the dissemination of local information achieved is the widest possible under Canadian conditions.

NATIONAL GAZETTEERS OR OTHER SIMILAR PUBLICATIONS IN WHICH COUNTRIES MAKE AVAILABLE THEIR STANDARDIZED NAMES

Report presented by Canada*

Introduction

Canada presented a paper on its gazetteer programme to the First United Nations Conference on the Standardization of Geographical Names at Geneva in 1967.[1]

A number of changes in outlook and direction have affected the Canadian gazetteer programme since the First Conference. Chief among these has been the need for our gazetteers to reflect the recent establishment of English and French as the official languages of Canada. A second important element has been the impact which toponymic field surveying has had on the nature and volume of the information presented. A third has been some changes in territorial administration.

This paper, therefore, will not only review progress in gazetteer work in Canada since our previous report, but try to indicate how these social changes have modified compilation procedures and presentation.

The Gazetteer of Canada series

The Gazetteer of Canada consists of a series of volumes, each containing names concerned with a particular province or territory. Canada is composed of 10 provinces and two territorial divisions. Their areas and populations vary widely, and the number of names in the gazetteers for the different provinces reflects this. The province of Quebec has an area of 594,860 square miles, and a population of approximately 6 million. The gazetteer for that province contains over 45,000 names. The gazetteer for Canada's smallest province, Prince Edward Island, with an area of 2,184 square miles and a population of 111,000 people, contains, in the current edition, only 1,150 names. This ratio of gazetteer size to area and population holds for other provinces, with those for Ontario and British Columbia approaching 50,000 names each, and gazetteers for the smaller provinces having correspondingly fewer. The proportion is not true for the two territorial areas, the Yukon Territory and the Northwest Territories, which lie north of the sixtieth parallel. Despite areas of 207,076 and 1,304,903 square miles respectively, the populations are small and the numbers of geographical names proportionately lower.

Canada has approximately 250,000 geographical names recorded in its gazetteers. There are firm indications from field survey work that the actual number locally used may be almost twice that quantity.

The Gazetteer of Canada series is compiled by a staff directed by the secretary of the Canadian Permanent Committee on Geographical Names, and published in uniform formats under the Committee's imprint, except in the case of the province of Quebec. Quebec's gazetteer is published under the provincial imprint. In gazetteer work, the Committee co-operates very closely with each province.

The gazetteers in this series do not include information on the origin or history of individual names, or contemporary statistical data.

Gazetteer compilation

Name verification

The basic tool for gazetteer compilation is the record card which exists for each known name. The preparation of a new or revised gazetteer starts with an examination of the card records for the province concerned to determine the status of each name. Names which may have become obsolete, may have changed in spelling, have been altered in application, or have had no previous official approval, are all referred to the Committee member for the particular province for his recommendation. The usage on federal and provincial maps is carefully checked with respect to spelling and feature identification. Any doubtful cases are investigated. If a field survey of the geographical names of the province concerned has been done, the results are incorporated. Field surveys have proven to be extremely informative. In the province of New Brunswick, a two-year survey verified all known named features, resulting in many changes: of the total of 14,000 names which will appear in the revised gazetteer, approximately 7,000 are additional names revealed in the survey and not previously recorded. Where field results are not available, the compilation must rely on documentary research. It is clear that such research will never provide results commensurate with those of a detailed field examination.

Various municipal, provincial and federal publications and reports are consulted for additional and revised information. A complete examination of the names on all relevant maps is made.

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* The original text of this report, prepared by G. F. Delaney, Chief of the Toponymy Division, Department of Energy, Mines and Resources, and Executive Secretary of the Canadian Permanent Committee on Geographical Names, was conained in document E/CONF.61/L.31.

[1] *United Nations Conference on the Standardization of Geographical Names*, vol. 2, *Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. E.69.I.8), p. 99.

Content

All geographical names approved and accepted by the Permanent Committee are published in the Gazetteer of Canada series. These consist of the names of populated places and of topographic and surface hydronymic features. Previously published names of formerly populated places, which have been rescinded, are retained in one succeeding edition of the gazetteer; such names are shown with a symbol denoting that they are no longer in local use. Names which appeared in previous editions, but were subsequently changed, are retained as cross-references.

The information about each name is normally contained in a single-line entry. The name is given in its proper spelling, with its generic term (and an explanation of it if considered necessary), and the geographical coordinates.

Consideration is being given to the inclusion of a map reference for each name, but the problems involved in doing this have not been fully resolved. A step in this direction has been the addition of a map in the forthcoming gazetteer of New Brunswick, showing an index to the 1:50,000 maps of the National Topographic System pertaining to the province. By locating the geographical position for any name on this map, it is possible to identify the map sheet displaying the feature.

To date, names of airports, landing-fields, dam sites, fire towers, roads and certain other man-made features are not included in the gazetteers. This leads to the questions, "What contitutes a geographical name?" and "Should names of features such as these be included in the Committee's gazetteers?:' These questions were studied by a sub-committee which presented a report on the concept of a geographical name. This subject is currently being considered by the Permanent Committee.

Language presentation

Emphasis on the bilingual character of Canada has been intensified sharply in the past decade. In addition, language shifts in the populations of some areas have become evident. Both factors are influencing the presentation of geographic names in gazetteers. For example, in recent years French has become the predominant language in the northern part of the province of New Brunswick. The Permanent Committee's field study revealed that both French and English forms of many names have become firmly established. In such cases, both forms are approved, as in the following:

Rivière Verte — Green River
Baie des Chaleurs — Chaleur Bay.

Each is listed in the gazetteer and cross-referenced with an indication that both language forms are officially accepted.

Since English and French are the two official languages of Canada, it was decided to attempt, beginning with the second edition of the New Brunswick Gazetteer, a listing designed to satisfy the requirement of both the English- and French-speaking users in a single publication. The features of this design are as follows:

(*a*) Each name is listed in the name column of the gazetteer exactly as approved;

(*b*) Ambiguous or understood generic terms are explained in both languages by a bracketed interpolation;

(*c*) A glossary of generic terms, in each language, is included;

(*d*) The arrangement by columns facilitates the use of headings in both languages;

(*e*) Names of populated places are shown in upper-case letters to make them distinguishable from natural features with similar names;

(*f*) The preface and foreword, and introductory material such as explanatory notes on alphabetic arrangement, the classification of populated places, and abbreviations, are given in both languages.

A sample page is shown in the annex to this report.

Alphabetization

Some changes have been made to the rules presented at the First Conference. Rule II (*a*), which states, "the specific term or proper name is the basis for alphabetization, with the generic term being taken into account in the listing of two or more identical names", is superseded by, "when a name consists of only a specific term and a generic term, in that order, the name is alphabetized letter-by-letter throughout". And rule II (*i*), on names beginning with "Saint", "St.", or "Ste.", was revised to read, "where an abbreviation is used in the normal spelling (such as St. or Ste.), the alphabetization proceeds as though the abbreviation were spelled out in full including the final 'e' in the French feminine form".

Key map

A small-scale map (approximately 31 miles to the inch) is inserted at the back of the gazetteer. By referring to it, the user can readily determine in what general area of the province a feature is located. The names of the more significant features are shown on the key map, and these names are sometimes used as a locational reference in the listings. Future gazetteers will contain an additional outline map of the area dealt with; and an overlay index to the maps on the 1:50,000 or 1:250,000 scale under the National Topographic System, depending on the scale at which map coverage has been completed for the province or territory concerned.

GAZETTEER OF CANADA SUPPLEMENTS

Since new and changed names are constantly being adopted, the information in the Gazetteer of Canada series is updated by semi-annual supplements. These lists, by province, decisions of the Permanent Committee on new names, name changes, altered applications and rescissions. The current supplements were first issued in 1963, partly because the expected 10-year revisions

cycle of the Gazetteer of Canada series could not be maintained. The supplement system is of limited value; a five-year revision cycle without supplements would be greatly preferable.

Automation

A study has been made of the various kinds of data on geographical names that should be stored for the requirements of automated cartography and the computerization of geographical names.

Automated cartography. Current Canadian gazetteers give geographical co-ordinates to the nearest minute. Since automated cartography requires more precise positions, our present task is to record, on more than 260,000 card files, geographical co-ordinates to the nearest five-second interval.

Computerization of geographical names. Computer storage of the data on geographical names now in the Permanent Committe's card records has been studied. It is considered inevitable that the creation of a memory bank for this purpose will be necessary in the next few years.

New publications since 1967

The volumes of the Gazetteer of Canada series issued since those mentioned at the First Conference are listed below.

Newfoundland and Labrador, 1969 (first edition). This volume also contains, in a separate section, geographical names of the French possessions of the islands of Saint-Pierre and Miquelon. The latter names were compiled from six 1:20,000 maps published in 1955 by the Institut Géographique National de France.

Quebec, 1969 (first edition). This volume was published by the government of the province of Quebec. Although it is not considered to be within the regular Gazetteer of Canada series, the Permanent Committee collaborated in its compilation.

Manitoba, 1968 (revision of the 1955 edition). The volume of entries increased from 4,000 to 7,000.

Saskatchewan, 1969 (revision of the 1957 edition). This new edition also expanded. The listings here increased from 6,500 to 12,500.

Nothwest Territories and Yukon Territory Gazetteers, 1971 (revision of the 1958 edition). The first edition of the Gazetteer of the Northwest Territories and the Yukon Territory covered both areas in one volume, listing about 7,500 names. The rapid development of Canada's northland caused a brisk demand for this gazetteer, and it ran out of print. Reprinting was resisted by the Permanent Committee in the knowledge that thousands of new names had evolved, and a revision was undertaken. In the interval, however, to meet the pressing need for reference works, provisional publications were produced by electric typewriter and Xerox reproduction based on the Committee's card-indexed material. These provisional gazetteers are sold more cheaply than the standard editions. (Because of the gradual shift in the administration of the northern territories from centralized government from Ottawa to regional local autonomy in the individual territories, it became necessary to issue gazetteers for the Yukon Territory and the Northwest Territories in separate volumes.) Work on the standard gazetteers for these two territorial regions is proceeding, and publication is expected in 1973.

Distribution

The publication costs of the Canadian Permanent Committee's gazetteers are borne by the Surveys and Mapping Branch of the Federal Department of Energy, Mines and Resources. This Branch has a map distribution office through which gazetteers are also sold. However, the main outlet is the department known as Information Canada, through which the majority of federal government publications are channelled. Gazetteer prices are adjusted to the size of each volume, and are designed to recover printing costs. Printing runs are culculated to match anticipated demand, which is naturally greater in the more populous provinces. In some instances, several reprintings between revisions have been necessary.

Annotated gazetteers

The Gazetteer of Canada series is designed to present an alphabetical listing, in a concise form, of all names considered by the Permanent Committee on Geographical Names, so that the public may easily ascertain the proper spelling and location of each.

The accumulation of data on the origins and meanings of names, and of facts about area, heights etc., is an arduous process. Only some geographical names have a history worthy of record. The early reports of the Committee's predecessor, the Geographic Board of Canada, published selected decisions only, with informative supporting information. This policy was abandoned by the Committee in favour of total listing.

With the completion of the initial gazetteers for each province, work has been resumed on toponymic studies. In 1967, a study of Geographical Names in Renfrew County, Province of Ontario, was published. This publication gives origins and historical information. A study of the names of the Province of New Brunswick has been completed, and it is expected to be published this summer. It will contain information on the origins and history of about 4,000 names, which form almost one third of the names which will be listed in the second edition of the New Brunswick Gazetteer. A revision of *Place Names of Prince Edward Island*, first issued in 1925, is in preparation.

Annex

SAMPLE PAGE OF THE NEW BRUNSWICK GAZETTEER

Name *Nom*	*Parish* *Paroisse*	*County* *Comté*	*Position* o ' o
Albee Rips	Saint James	Charlotte	45 29 — 67 30
Allain, Ruisseau à	Saumarez	Gloucester	47 27 — 65 04
ALLAINVILLE (Disp. Comm — Agglom. Dissém.)	Alnwick	Northumberland	47 18 — 65 15
Anglin Plain	Saumarez	Gloucester	47 24 — 65 08
Babbitts Meadows	Burton	Sunbury	45 52 — 66 19
Bald Head (Hill — Colline)	Campobello	Charlotte	45 28 — 66 32
Barber Dam Deadwater	Saint James	Charlotte	45 29 — 67 13
Barnabys Nose Brook	Saumarez	Gloucester	47 27 — 65 01
Barnabys Nose (Point — Pointe)	Saumarez	Gloucester	47 27 — 65 01
Beans Brook	Saumarez	Gloucester	47 57 — 65 03
Bear Landing	Allardville	Gloucester	47 21 — 65 19
Big Eskedelloc River	Alnwick	Northumberland	47 19 — 65 20
Big Marsh	Alnwick	Northumberland	47 21 — 65 06
Black Duck Cove	Alnwick	Northumberland	47 21 — 65 05
Blakes Gulch	Saumarez	Gloucester	47 22 — 65 16
Blanc, Cap	Saumarez	Gloucester	47 27 — 65 01
Blanc, Rapide	Saumarez	Gloucester	47 26 — 65 07
Blobs, The (Channel — Chenal)	Sheffield	Sunbury	45 55 — 66 19
Canoose Flowage	Saint James	Charlotte	45 25 — 67 20
Cowassaget Stream	Alnwick	Northumberland	47 22 — 65 05
Devils Elbow (River Bend — Tournant)	Saumarez	Gloucester	47 23 — 65 16
Dugway, The (Cove — Anse)	Cambridge	Queens	45 46 — 66 07
Escuminac, Mocauque d'	Hardwicke and Carleton	Northumberland and Kent	47 03 — 64 51
Gin Creek	Saint Quentin	Restigouche	47 59 — 67 57
Green River See also Verte, Rivière	Rivière-Verte	Madawaska	47 18 — 68 09
Huckleberry Gully	Hardwicke	Northumberland	47 04 — 64 57
Intervale, The	Canning	Queens	45 51 — 66 13
Madawaska (County — Comté)	See Key Map — Voir Carte de référence		47 25 — 68 15
Maple Rim (Hill — Colline)	Sheffield	Sunbury	45 55 — 66 20
Marys Point (Peninsula — Péninsule)	Harvey	Albert	45 43 — 64 39
Sainte-Anne, Baie	Hardwicke	Northumberland	47 04 — 64 59
Squaws Cape (Islet — Îlet)	Alma	Albert	45 35 — 64 58
Verte, Rivière Voir aussi Green River	Rivière-Verte	Madawaska	47 18 — 68 09
Wolves, The (Islands — Îles)	Pennfield	Charlotte	44 58 — 66 43

NATIONAL STANDARDIZATION

Report presented by Madagascar*

FIELD COLLECTION OF NAMES

The Geographical Service is the only body dealing with all geographical names throughout Madagascar — villages, populated places, hydrographic features (lakes, seas, rivers), orographic features (peaks, mountains), indeed any features which may have a geographical name.

Basic map coverage for Madagascar consists of standard topographic maps on the scale 1:100,000, or 1:50,000 for regions with high population density or of particular economic interest. By the end of 1971, 410 sheets out of a total of 464, or 89 per cent, had been published, and completion of the coverage is planned for the end of 1975. It should, however, be pointed out that the areas to be covered by the 54 sheets which have not yet been published in the standard topographic map series are covered by maps produced from original surveys dating from before 1949, or by preliminary maps which provide brief data of a low standard of accuracy on the spelling and planimetric position of the features indicated.

Topographers from the Geographical Service are responsible for collecting names in the field. The fact that

* The original text of this report, submitted in French and prepared by the Toponymy Commission of the Geographical Service, was contained in document E/CONF.61/L.39.

the written and spoken national language, Malagasy, is homogeneous (despite dialectal variants) ensures faithful transcription of geographical names and facilitates the task of the topographers.

Before undertaking their field work, the topographers have at their disposal the standard 1:100,000 or 1:50,000 topographic map (or, if the area has not so far been mapped, the preliminary map); a list of village names compiled by the National Institute of Statistics and Economic Research with the assistance of local administrative authorities, the official geographical code and the official list of villages; and, if appropriate, the forestry map published by the Water and Forest Service, or cadastral documents. Names collected in the field are listed in a notebook, with any variants revealed by the above documents, their meaning (if any), and the form proposed by the topographer.

However, the existence of many dialectal variants gives rise to problems on which the Geographical Service has at present no precise guidelines. Rudimentary linguistic training is given to the topographers, and the use of tape-recorders is planned. Application of the International Phonetic Alphabet (or any other suitable conventional phonetic alphabet) would be desirable for certain problematical cases, but the Geographical Service is as yet only studying this possibility.

Office treatment of names

The Toponymy Commission, which was established in December 1968, is the body responsible for the office treatment of names within the Geographical Service. It is competent to deal with all questions relating to the toponyms which are to appear on all Geographical Service publications. It is composed of six to eight surveyors and cartographers of the Geographical Service who, through their duties, their abilities and their interest, are concerned with geographical names.

The Commission works closely with local administrative authorities. Before leaving the field, the topographers submit their list of names to the local official (mayor, sub-prefect or prefect). However, errors remain after this initial examination, and the role of the Commission is to consider all the resulting problems and seek the most satisfactory solution. For this purpose, all disputed names are listed and sent to the official authority concerned, together with all the necessary information (nature of the error, etymological and morphological analysis of the name, and the Commission's opinion and proposal, if any); the role of the official authority is to provide the correct spelling and, if necessary, the planimetric position of the feature with supporting proof. This method has produced excellent results, and we intend to continue to follow it pending the establishment of a national names authority.

Treatment of names in multilingual areas

This problem does not arise in Madagascar.

National gazetteers or other similar publications in which countries make available their standardized names

The Toponymy Commission, which is part of the Geographical Service, has studied the compilation of a national gazetteer of standardized names, and has drawn up a draft model gazetteer including the following data:

Standardized name (or any variant);
Nature of the feature (or code symbol);
Geographical co-ordinates;
The administrative district in which the feature is located;
Reference to the Geographical Service map which contains the feature.

This is an enormous task, and lack of staff has made it impossible to begin the project.

There is already in existence a historical and geographical dictionary, which deals in part with this problem and contains some very interesting information on the names of villages of economic or historical importance.

Administrative structure of national names authorities

The Toponymy Commission has consulted various governmental and scientific bodies concerned with toponymy with a view to establishing a national names authority. These bodies are the Malagasy Academy, the Office of the Vice-President of the Government responsible for Internal Affairs, the Ministry of Cultural Affairs, the Office for Overseas Scientific and Technical Research, the Topographic Service, the National Institute of Statistics and Economic Research, the Humanities and Social Science Faculty (Malagasy Department of Humanities), the Directorate of Posts and Telecommunications, the National Assembly and the Senate.

At preparatory meetings, representatives of these bodies were provided with a definition of the standardization of geographical names, and an outline of all the problems which it poses nationally and internationally. This broad survey produced agreement on the need to establish a national names authority. It will be necessary to specify the authority's duties, underlying principles, Composition (members and secretariat) and Working methods. Preparation is under way, and it is expected that the project will succeed.

STANDARDIZATION OF GEOGRAPHICAL NAMES IN JAPAN

Report presented by Japan*

ORGANIZATION FOR CONTROLLING GEOGRAPHICAL NAMES

In Japan there is an organization called the Joint Committee on the Standardization of Geographical Names, as is mentioned in volume 1 of the Report of the First United Nations Conference on the Standardization of Geographical Names. This, however, is merely an organization which was set up by two agencies, the Geographical Survey Institute of the Ministry of Construction and the Hydrography Department of the Maritime Safety Agency, Ministry of Transport, with the object of standardizing the geographical names used on land maps and marine charts. It is not an over-all official organ established for the purpose of registering and controlling Japanese geographical names. Other government offices etc. are therefore not bound by the decisions of the joint Committee.

GEOGRAPHICAL NAMES THAT REQUIRE STANDARDIZATION

The procedure for establishing the names of such local public bodies as cities, towns and villages is prescribed by the Local Autonomy Law. Under this law, the name of a local public body of this kind is fixed by its by-law, and the approval of the prefectural governor concerned must be obtained for it. When the approval has been given, the Minister of Home Affairs issues a notification to that effect. Under this law, too, the name of a street or section within a city, town or village is fixed by a resolution passed by the general assembly of the city, town or village concerned, and the prefectural governor concerned issues a notification of it.

Thus, the name of a city, town or village, and the name of a street or section within a city, town or village, are subject to legal regulation, so each of them is invariably called by one name. In such circumstances, there is no problem of their standardization.

Geographical names other than those mentioned above (e.g. names of natural features), however, are not governed by any comparable legal regulations, and there are cases in which a place is called by two or more names. Standardization of these names should therefore be considered.

PRESENT STATUS OF THE STANDARDIZATION OF GEOGRAPHICAL NAMES

A particular problem is that the names used by seamen for some natural features in coastal districts differ from those used by other people. For this reason, land maps and marine charts sometimes show different names for the same place. It was for the purpose of standardizing these names that in 1960 the Joint Committee on the Standardization of Geographical Names was established. Since then, the committee has been proceeding with the work of standardization by such means as checking data and referring to the cities, towns and villages concerned.

Up to the present, about five thousand names of natural features have been standardized and compiled into the list, *Standardized Geographical Names (Names of Natural Features)*, which was published (in Japanese) in July 1971. The committee intends to continue making consultations and to strive for such standardization of geographical names all over Japan including inland areas.

* The original text of this report was contained in document E/CONF.61/L.44.

COASTAL NAME LISTS

Report presented by the United States of America*

The publication of a series of gazetteers covering the coastal areas of the United States is being planned and prepared by the National Ocean Survey. The series will comprise a number of paper-bound booklets covering the various coastal Coast Guard districts of the nation, and each booklet will give the name, designation, state, and geographical co-ordinates of every coastal feature of any significance within its area. The names in the lists will come from all available map series covering the areas, including National Ocean Survey nautical charts, to make certain that no named feature of possible significance is overlooked. These names will, of course, be processed so as to constitute standard names, and alternative names will be cross-referenced. The first of these booklets should be ready in a matter of months.

This series will serve a very definite need. The rescue operations of the Coast Guard have been expanded in recent years to meet an unprecedented demand for such services brought on by dramatic increase in the use of coastal areas by small-craft operators. The incidence of mishap has naturally multiplied, and often rescue operations have been delayed by the inadequate location of mishap sites. If a Coast Guard centre receives a message that a drowning is taking place in a certain cove, and the personnel at the centre do not know where the cove is, they may have to spend time searching for it laboriously on charts, possibly delaying fatally the radioing of an emergency craft to the rescue. A names list such as the gazetteers of the National Ocean Survey will provide would be invaluable in such situations.

* The original text of this report was contained in document E/CONF.61/L.53.

These coastal gazetteers will naturally serve more purposes than that of rescuing lives, although that end alone might well justify them. A survey made among small-craft owners showed that these definitely desired them, particularly for the purpose of finding the small places they often wish to visit. Even shippers and shipping associations want them, for billing purposes; and many others will find them useful for a variety of other reasons. Since the limits of the Coast Guard districts are in general coincident with state boundaries, these lists, according to the response to an inquiry, are acceptable to the various coastal states. Some districts cover only one, two, or three states; and such lists could reasonably serve individual state needs.

PROGRESS REPORT

Presented by Lebanon*

REGIONAL SITUATION

The General Secretariat of the League of Arab States (Cultural Section) held a regional conference of Arab states on the standardization of geographical names in the UNESCO Building at Beirut from 23 to 31 August 1971. This Conference was attended by delegations from the following countries: Jordan, Tunisia, Sudan, Iraq, Saudi Arabia, Syrian Arab Republic, Libyan Arab Republic, Egypt, Lebanon, Palestine and Abu Dhabi.

Recommendations were adopted in favour of the following:

The revision of the lists of geographical names in the International Map on the Millionth Scale of the Arab countries;

The transcription in accordance with a single romanization system established by the Commission for the Transliteration of Arabic Geographical Names into Roman characters;

The preparation of the Map on the Millionth Scale of each Arab country in Arabic characters (classical) and in Roman characters (according to the recommended system);

The adoption of European figures and of the decimal system for angles, altitudes and distances;

The preparation by the League of Arab States of a thematic atlas of the Arab countries in accordance with the official lists of the member countries, with internationally known geographical names included in brackets after the toponym in Arabic pronunciation, e.g. "Sour (Tyre)", "Jbatl (Byblos)" — to be regarded as an international document on the Arab countries.

NATIONAL SITUATION

Lebanon has just completed its basic map on the scale 1:20,000 (121 sections) in Arabic and Roman characters in accordance with the system established in 1962.

In 1970, the Office of Geographical Affairs published an alphabetical list of geographical names in French and in Arabic (preliminary edition). This list contains the toponyms of the inhabited localities marked on the basic maps, and the names of the "uninhabited" places such as forests and woods, mountain ranges, important peaks, watercourses, basins and canals, main springs, plains, valleys, islands, rocks, capes and bays, in several addenda. The last addendum lists the main historical sites.

At the request of the League of Arab States, Lebanon has:

Revised the list of geographical names included in the International Map on the Millionth Scale, in accordance with the 1972 principles adopted in Lebanon;

Established transliteration principles that take account of the previous systems (these new principles will be applied whenever any geographical document is revised);

Compiled a gazetteer, in accordance with the recommendations of the Regional Conference, listing administrative districts (with population of the chief town, and number of villages); names of towns, villages and tribes in Arabic and Roman characters, local pronunciation, geographical co-ordinates, altitude, population and distance from the capital; orography (names of mountains, hills, plains, large valleys and flat lands, bays); hydrography (names of rivers, springs, lakes, basins, forests, canals, reservoirs and dams); and names of important historical, archaeological and tourist sites;

Prepared an official map on the scale 1:1,000,000 containing names transcribed into Arabic and Roman characters in accordance with the 1972 principles.

When an international romanization system has been adopted, Lebanon will review these principles. In the meantime, it will revise its basic map and its lists in accordance with the 1972 principles.

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.63.

NATIONAL STANDARDIZATION: FIELD COLLECTION OF NAMES

Report presented by France*

In 1971, the National Geographical Institute revised the model form for the surveyor's list of names which is used in France for the collection of all place-name data. The earlier forms had already been revised in 1961 and 1965 to provide for the preparation of punched cards and for some automatic processing of the data so recorded. The new model form, illustrated here, is mainly intended to facilitate the task of field staff, while retaining the advantages of the earlier forms.

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.65.

A BRIEF STATEMENT OF THE POSITION IN IRELAND

Report presented by Ireland*

There are two official languages in Ireland, Irish and English, so that, generally speaking, each place will have an Irish-form and an English-form name. The Irish language was, from its introduction in prehistoric times until very recently, the language of the majority, if not the entirety, of the population; so the great majority of the place names have an Irish-language origin, and the difference between the Irish-form and the English-form names is basically one of orthography in most cases. Although the orthography of the English-form names is based on that of the English language, some additional guidance to the pronunciation would be needed by the English speaker. The two forms of name will be discussed separately here: it may be more convenient to consider the English-form names first.

English-form names for administrative areas.

The smallest, and the basic, administrative area is the townland (there are some 60,000 of these covering the whole of Ireland, varying considerably in area but averaging approximately 140 hectares); other administrative areas include counties, baronies, parishes (now largely obsolete for administrative purposes), electoral divisions and urban districts. The English-form names of all these units have a definite official form, generally that decided on in connexion with the first large-scale (1:10560) survey of the country, made about 1830. Apart from a very small number of exceptions, where the most widely used form differs from the official one, the official forms are accepted as being the correct ones.

The boundaries of these administrative areas are clearly defined and unambiguous. In many cases, however, the same name may have a number of different applications: it may happen, for instance, that a village (which does not have a defined boundary), a townland, a parish and an electoral division all bear the same name. In practice this is rarely a cause of confusion, as the context normally indicates which is being referred to; if necessary, however, the particlar unit or territorial division referred to must be specified.

* The original text of this report was contained in document E/CONF.61/L.70.

English-form names for non-administrative areas (excluding streets)

There is no designated authority for settling the English-form names of features such as villages, undefined districts, valleys, mountains, rivers or lakes. The forms given on the large-scale Ordnance Survey maps are generally, but not always, taken to be correct. It would seem that less care was taken with names of this type in the first large-scale surveys in the last century than with names of administrative areas, and some revision of the names appearing on the maps would be desirable; this would, of course, involve research.

From the nature of the features listed in the previous paragraph, it will be clear that their boundaries are, generally speaking, undefined. It does not seem practical, or necessary in most cases, to attempt definition. There may possibly be an exception in the case of small rivers which may have different names at different points in their course, but it is doubtful whether there would really be much benefit in specifying, probably arbitrarily, a point where the river changed its name from one to another. If rationalization were to be attempted in these cases, it would probably be better to aim at using only one name throughout the course of the river.

English-form names for streets

The authority in the case of street names is the local authority (generally the county or city council), but the staffs of these authorities have no training in place-name work and moreover deal with the naming of new streets only on an *ad hoc* basis and generally in a rather superficial way. There is room for improvement here. Some tidying of already existing street names might also be desirable, although changes in existing street names are rather difficult under present legislation (see below "Change of names").

The Irish-form names for administrative and non-administrative areas

Both classes of name may be taken together. The Placenames Branch of the Ordnance Survey, with the

N° du département
Arrondissement
Canton
Commune
Habitants (100)

RENSEIGNEMENTS DIVERS Formes anciennes ou locales Origine, signification, prononciation etc... 5	X 6	Y 7	NOM PROPOSÉ PAR L'OPÉRATEUR 8	NOM RETENU PAR LA COMMISSION de toponymie 9	NATURE du détail 10	CODE détail 11	CODE caract. 1/25 000 12	1/50 000 13

Cadastre datant de _____ refait, révisé, refait

Nombre d'habitants de la commune (statistique) _____

NOMS D'APRÈS			
LES CARTES EN SERVICE	LE CADASTRE	LES HABITANTS	LES ADMINISTRATIONS PUBLIQUES
1	2	3	4

advice of a commission established by the Government, is in the process of providing the material on which sound official forms can be based. Since the work is being done on the basis of scientific place-name research, the process is necessarily a slow one. It has, however, already been completed for all the town and village names and for many major physical features.

It is expected that legislation will be introduced under which these fully researched Irish-form names will be given legal recognition as they are decided on. This will probably be done by reference to the existing English-form names, so that their area will be defined or undefined, and their application normally single or multiple, following the usage of the corresponding English-form names.

Irish-form names for streets

These are not generally dealt with by the Placenames Branch of the Ordnance Survey, except in so far as they may incorporate a place name. Whatever provision might be made for English-form street names, as suggested above, should also apply to Irish-form street names.

New names

A certain number of new coinages emerge and in some cases gain currency with changing circumstances. They are generally of popular origin and partake of the nature of nicknames. They can, however, also arise by extension from the arbitrary usage of an individual (so that what was, in origin, the name of a house or of a tavern or of a shop may be applied to a railway station or to a district).

There is no name authority to deal with these. Even if there were, the names would probably have become rooted in local usage before they came to the notice of the authority. The most that could be done would be to decide on a particular spelling for the name.

Change of names

There is a special procedure laid down by legislation for changing names. Although the procedure varies slightly depending on the class of name involved, it is based on the agreement of the local authority and a poll of the ratepayers (i.e. payers of a local property tax) of the area, a majority of whom must vote in favour of the change. It also requires consulting the director of the Ordnance Survey about the proposed change but, as no attention need be paid to his comments, this is no more than a formality.

For the names of administrative areas, as well as for the names of villages and streets, the procedure laid down works reasonably well. If anything it may be over-conservative. In some instances where the same name referred to more than one entity (say, to both a village and an electoral division), a change has been made, by inadvertence, only in the case of one application, leading to some uncertainty and ambiguity.

Generally speaking, for names of non-administrative areas apart from villages, no use has been made of the rather expensive and troublesome procedure laid down, and it is unlikely that it would ever be resorted to in these cases.

Summary of the position regarding standardization

The necessary standardization has already been done in the case of English-form names and is in process in the case of Irish-form names. New names may need supervision, and name changes should be made in a rather tidier way than has been the case heretofore. Street names also need supervision, but are a rather different problem.

Gazetteers

The *General Topographical Index*, published in connexion with various censuses of population, fulfils the main functions of a gazetteer for a number of classes of English-form names (townlands), towns (defined as clusters of 20 houses or more), parishes, baronies, district electoral divisions and similar administrative units, as well as islands). It does not include the names of natural features (although any of the names in the Index may include, or may in origin refer to, a natural feature). The latest such *General Topographical Index* published was that for 1901 (with a later supplement for 1911 giving changes made up to that date). Both are now out of print, but are available in libraries. Although some of the areas concerned have changed since 1911 (in particular the parliamentary areas), the basic townland, parish, barony and country network has not, so that the last edition available has lost virtually none of its value as a gazetteer.

REPORT ON WORK RELATING TO GEOGRAPHICAL NAMES IN COSTA RICA

Report presented by Costa Rica*

Costa Rican Committee on Nomenclature

By Executive Decree No. 161-C of 15 October 1971, the following members were appointed to the Costa Rican Committee on Nomenclature, which had been established by Act No. 3535 of August 1965: Enrique Soto Borbón, representing the Minister of Culture, Youth and Sports; Rafael Obregón Loría, representing the University of Costa Rica; Carlos Aguilar Piedra, representing the Academy of Geography and History; Ricardo Fernández Peralta, representing the Board of Trustees of the National Museum; and Eduardo Protti Martinelli, representing the National Geographical Institute. Our own representative, Mr. Protti, was appointed secretary of the Committee, having been nominated by the Deputy Minister

* The original text of this report, submitted in Spanish, was contained in document E/CONF.61/L.13.

of Transport. Substantial progress was made at the Committee's four meetings. One of the achievements of the Committee was the conclusion of the necessary agreements for designating, by Executive Decree, 11 administrative districts, established by the National Commission on the Designation of Territorial Units, under the following names: Magote, Sámara, Carrandi, Guaycara, Mayorga, Nacascolo, Curubandé, Cereceda, Cutris, Pará and Tures. These designations have the effect of simplifying the names used, preserving the indigenous character of the areas in question and perpetuating the memory of famous Costa Rican Indians and citizens. The most important effect of the measure, from the toponymic point of view, is that it marks the beginning of a period of review of identical names, thereby complying with resolutions adopted at meetings and conferences on geographical names. In addition steps are being taken, in conjunction with the Legal Department of the Ministry, to prepare a draft decree embodying regulations under the Act by which this Committee was established and amplifying its provisions to enable the Committee to assume real authority for geographical names in Costa Rica. This will make it possible for the Committee to review and standardize our chaotic nomenclature with its heavy emphasis on the names of saints, most of which are used many times over.

Geographical names

The Chief of the Designation of Territorial Units Section, Eduardo Protti, is responsible for the compilation of the series *Indexes of Geographical Names*. Since studies on problems in that sphere take up much of his time, he has been assigned subordinate personnel with university qualifications, who are actively engaged in work on geographical names. The texts on *insunimia* and lithonymy, containing a total of approximately 900 toponyms, are now ready for publication. The texts on oronymy, hydronymy and inhabited places are also expected to be completed shortly. These publications will contain, for each toponym, information on the kind of feature, its geographical position, its geodesic co-ordinates and a basic map; and, where appropriate, its altitude and area and the politico-administrative unit to which it belongs. The *Index of Inhabited Places* was left until last because, in view of the extremely dynamic nature of the process of designating territorial units in Costa Rica, we are having to operate on the basis of Act No. 4865 of October 1971, which provides that no changes may be made in existing territorial units between 1 January 1972 and 31 December 1973; consequently, no new administrative units can be established in Costa Rica during that period. The political and administrative classification of inhabited places will thus be stabilized, thereby creating a very favourable situation for census and electoral purposes. It will also facilitate the geographical, economic and social studies now being undertaken in Costa Rica by such bodies as the National Geographical Institute, the Land Survey Department, the Office of National Planning, the University of Costa Rica, the Municipal Development and Assistance Institute, and specialized government departments.

In the execution of this project, use is being made of the toponymic information contained in our basic maps, the information furnished by field collectors, and the information obtained by the census-takers of the Supreme Electoral Tribunal and the Statistics and Census Department, both of which have numerous auxiliary personnel throughout the country. This toponymic documentation will be of great assistance to persons interested in geographical names for various purposes. For our own part, we regard this codification of geographical names as extremely important, especially since it will form the basis for the compilation of our provisional *Geographical Dictionary*.

Geographical Dictionary of Costa Rica

We have engaged the services of Pedro Ugalde Arce, to compile information on all subjects related to geography, with a view to accelerating work on, and ensuring the speedy completion of, our provisional *Geographical Dictionary*. A "Vocabulary" has already been compiled and we hope to publish it shortly, subject to the report of the Committee on Nomenclature, and to declare it official, in order that it may be of use to publishers of geographical texts and other works now being prepared in Costa Rica.

It will thus be seen that we have made substantial progress in this sphere, and we hope to carry out the proposed programme successfully. The fact that the programme is being undertaken at all is due in large measure to the enthusiastic and unselfish spirit of co-operation which you, like the good teacher you are, have always displayed in your work with us. We hope that we shall continue to have the honour of receiving your intellectual support.

GEOGRAPHICAL NAMES OF COSTA RICA*

Report presented by Costa Rica

Volume 1 of the Gazetteer of Geographical Names of Costa Rica, covering the coastal areas and the islands, published by the National Geographical Institute, Ministry of Public Works and Transports, was distributed to the participants. Copies of this gazetteer are available for reference in the Map Collection of the United Nations.

* The original text of this paper, submitted in Spanish, was contained in document E/CONF.61/L.96.

STANDARDIZATION OF GEOGRAPHICAL NAMES OF SMALLER FEATURES

Report presented by Hungary*

As field collection of geographical names requires a basis of linguistic knowledge, methods were studied to ensure that the standardization of geographical names was done against a linguistic background. As the Institute for Linguistics of the Hungarian Academy of Sciences is sponsoring a country-wide movement for the collection of existing geographical names, it seemed obvious that the results of this collection should be used for their standardization as well.

The collection is carried out by teachers and pupils of high schools familiar with the dialect of the given region, according to instructions prepared by qualified linguistic experts. The names are listed by towns, and at the same time shown on a sketch-maps on the scale 1:10,000. The spelling always records the exact pronunciation, including dialect characteristics. The geographical names in this collection therefore inevitably contain deviations from the standard language, as well as additional diacritical marks. The collected names are checked by linguists on the spot as well as in later phases.

As a result of this work, the first linguistic collection of an entire county of Hungary was published in 1964.[1]

On the basis of this work, a programme of standardization of geographical names for map use has been started.

For standardization purposes the dialect forms collected are not suitable. Besides, the quantity of names appearing in the collection is much greater than is needed for even large-scale topographic mapping. For these reasons, the selection of geographical names has been reduced to quantity small enough to be shown on a map of the scale 1:25,000; and the names have been converted into the standard language, eliminating the additional diacritical marks and dialect peculiarities. While the first task was carried out by cartographers using various detailed maps, the second one was done according to instructions from and under the supervision of linguists.

As a next step towards standardization, map sketches on the scale 1:25,000, as well as lists, were prepared, both by towns, and sent to the town councils concerned for approval or comments. Remarks on the names themselves, as well as on their application, were generally approved, provided they were compatible with the standard language. Disputed cases, like all other geographical names, are considered by the Committee on Geographical Names. It has been suggested that the approval of such lists should be forwarded to regional committees.

Publication of the standardized geographical names will be by counties, and within counties by towns. Each volume will have a list and a sketch-map for each town, as well as an alphabetic list containing all the geographical names of the county.

* The original text of this report was contaned in document E/CONF.61/L.99.

[1] L. Papp and J. Végh (eds.), *Zala megye földrajzi nevei* ("Geographical names of the county of Zala") (Zalaegerszeg, 1964) (with German and Russian explanatory text).

GEOGRAPHICAL NAMES OF CERTAIN BODIES OF WATER WITHIN PHILIPPINE TERRITORIAL WATERS

Report presented by the Philippines*

The Philippine Committee on Geographical Names has unanimously approved the inclusion in the official maps, charts and publications of the Philippine Government of the following geographical names for the bodies of water within Philippine territorial waters defined and described hereunder.

Luzon Sea: to include all water areas west of the Luzon Strait, west of Luzon Island, west of Mindoro, the Calamianes and Palawan, and included within the western treaty limits of the Philippines, but excluding the Palawan Passage.

Bohol Sea: to include all water areas between Bohol and Mindanao Island, theretofore called Mindanao Sea.

Mindanao Sea: to include all water areas east of the Samales Group and Basilan Island, south of Moro Gulf and Cotabato province and north of the southern treaty limits of the Philippines.

The foregoing decision of the Philippine Committee on Geographical Names was made after due consideration of the aspects of international law concerned with territorial waters and of the view that the ocean waters along the shores of the Philippines should of necessity be given placenames of national character, the bodies of water named being in close proximity to the islands from which their names are derived.

It is to be noted that the adoption and use of these geographical names in Philippine maps, charts and publications do not in any way prejudice the interests of other States. Similarly, it is considered that the adoption and use by other States of these same geographical names will not in any manner adversely affect their interests.

* The original text of this report was contained in document E/CONF.61/L.110.

AGENDA ITEM 10

Geographical terms

(*a*) Classification of geographical entities and geographical names
(*b*) Glossaries
(i) Process of compilation
(ii) Uniformity of presentation
(iii) Generic terms
(iv) Designations
(v) Coded items
(vi) Abbreviations
(vii) Other

PREPARATION OF TOPOGRAPHICAL GLOSSARIES: SOME PROBLEMS WITH AFRICAN TOPONYMS*

Report presented by Kenya

INTRODUCTION

At the First United Nations Conference on the Standardization of Geographical Names, held at Geneva in 1967, a resolution was adopted which recommended that national gazetteers should include a glossary.[1]

A glossary was defined for this purpose as a "collection of generic terms with their meanings in geographical names".

A generic term was defined as a "term included in a geographical name, indicating the type of the named entity and having the same meaning in current local use".

The resolution did not make any reference to languages, but at the United Nations Technical Conference on the International Map of the World on the Millionth Scale, held at Bonn from 3 to 22 August 1962, it was recommended that a producing country should give on each map sheet a glossary "with a translation into one of the official languages of the United Nations".[2]

The purpose of the pioneers of modern glossaries was to enable map-users to understand the significance of generic terms found on maps of foreign countries. Thus General Parmentier in 1881 published a *Vocabulaire arabe–français des mots qui entrent le plus fréquemment dans la composition des noms de lieu*, one of a series of glossaries for French use abroad. In 1904 Alexander Knox published in London a *Glossary of Geographical and Topographical Terms* explaining in English the meanings of generic terms used in many parts of the world for which maps existed, notably including most of Asia and parts of Africa. Some more recent glossaries of world-wide coverage have been published by the geographer L. D. Stamp[3] and by the British Hydrographic Department.[4]

However, the need for glossaries is not confined to the international field: they are also valuable for internal use in multilingual countries. There are few countries in the world which do not have minority-language groups and some have a great many. For example, the people of Kenya spring from four main ethnic groups and within each group many vernaculars are in use. There are more than 30 main languages. Probably no more than a few score of the half-million inhabitants (mainly Bantu and Nilotic) of Nairobi know the meanings of the terms used on the maps of the north-eastern half of Kenya, inhabited predominantly by Hamitic people.

Even apparently monolingual countries need glossaries. An investigation in the United States of America into the local meanings of common generic terms disclosed an astonishing range. For example, the word "glade" is locally applied to such diverse features as swamps, streams, forest clearings, upland meadows, and patches of smooth ice or of unfrozen ground.[5]

* The original text of this report, prepared by John Loxton, University of Nairobi Kenya, was contained in document E/CONF.61/L.2.

[1] *United Nations Conference on the Standardization of Geographical Names*, vol. 1, *Report of the Conference* (United Nations publication, Sales No. E.68.I.9), p. 14.

[2] *United Nations Technical Conference on the International Map of the World on the Millionth Scale*, vol. 2, *Specifications of the International Map of the World on the Millionth Scale* (United Nations publication, Sales No. 63.I.20), p. 17.

[3] L. D. Stamp (ed.), *Glossary of Geographical Terms* (New York, Penguin Books, 1962).

[4] *Glossary of Terms used on Admiralty Charts* (London, Hydrographic Department, 1953).

[5] M. F. Burrill and E. Bonsack, "Use and preparation of specialized glossaries", *International Journal of American Linguistics*, 1962.

It should be evident that any toponymic exercise must be an interdisciplinary project.[6] The basic requirement before any work can begin is a reasonably accurate and up-to-date topographic map at a suitable scale, to which have been added as many geographical names as the mapping authority can collect. The foundation-member of the toponymic team must be a topographer with intimate knowledge of the detailed geography of the area being studied — in other words, either a native of the area or an expert prepared to spend some time there. He should know the local language of daily use; if he does not know it, a linguist must be the next member of the team. Historians and anthropologists may be needed in a consultative capacity.

Although a national authority on geographical names is obviously the most appropriate body to arrange for the preparation of a glossary, it is important to avoid confusion between this work and the main function of such an authority, which is the standardization of names. The execution of the process of standardization may involve changing spellings, changing the generic terms used or changing positions on maps, for example. Preparing a glossary is not a similar dynamic exercise, but a presentation of facts as they are. M. Aurousseau, a distinguished former secretary of the Permanent Committee on Geographical Names (PCGN) of the United Kingdom emphasized that, "if it is to be of any use, a glossary to maps must be first of all a list of the very words found on maps. Map language often confronts the linguist with obsolete spellings, archaic words, dialect words, words not in dictionaries, or words used in senses not given in dictionaries".[7] Examples from the maps of Kenya are presented in several reference works prepared by the present author.[8]

Scope of a glossary

A start has been made in preparing some local glossaries of Kenyan generic terms, with a view to producing a comprehensive national glossary. This preliminary exercise has thrown up some problems, the solution of which will affect the form of the final product.

One such fundamental problem is to decide the coverage of a glossary. "Coverage" does not mean here a geographical area but what a "generic term" comprises. By the definition given above, a generic term indicates the type of a "geographical entity". Aurousseau's useful definition of a geographical entity[9] includes "any feature of the earth's surface or any bounded unit of human organization". But this is not restrictive enough: a puddle of water on a road is a feature, a room in a hotel is a bounded human unit. The limit of admissible entities must clearly be drawn at a more practical level. One obvious criterion is the degree of permanence, but here again it is difficult to establish a critical minimum duration for "permanence". As all geographers know, everything on the face of our earth is in a state of evolution, albeit some rates of change are extremely slow.

The first step is, of course, to examine all the place names in the area of study and to list the generic parts. This is simple enough with a name like "Indian Ocean", where "Ocean" is the generic term and "Indian" the specific term. But many specific terms include a generic element — for example, "Kilimanjaro" could be written "Kilima Njaro" ("Mount Njaro")—and in many place names a generic is used alone as a specific term—there are villages in Kenya named "Lwanda" (Luo for "a rock"), "Soy" (Nandi for "a low hot plain") and "Kianda" (Kikuyu for "a valley with water"). These are clear and obvious cases, but it is probably true to assert that a very high proportion of place names contain a generic element; this is often not apparent without research, because the generic term may be no longer in daily use, or distorted out of immediate recognition. If the scope of a glossary is too extensive, it will be longer than the gazetteer which it seeks to explain and will tend to become a place-name dictionary.

Having listed all the apparent generic terms from the names of the area under study, the next step is to classify them. It will then be easier to decide which are acceptable for inclusion in the glossary and which are not. Classification also has its problems, since many features do not fall into a single, clear-cut category but have characteristics of more than one: a canal, for example, is a product of land shape, water movement, and development by man.

However, most features appearing on maps may generally be classified as either natural or cultural. Natural features can be subdivided into physical features (land forms), water, vegetational and climatic features. Examples will illustrate this division:

(*a*) Land forms :	mountain, valley, plain;
(*b*) Water forms :	spring, river, lake;
(*c*) Vegetation forms :	forests, prairie, mangrove swamp;
(*d*) Climatic forms:	desert, tundra.

Purists will no doubt object that desert and tundra are more vegetational than climatic forms. Better examples of this last category are found in the *Gazetteer of Kenya*:

Olenkijape	(Maasai for "windy")
Boji	(Boran for "dusty")
Sinet	(Nandi for "cold")
Olo-ikurukurr	(Maasai for "where there is thunder")

How effectively do such climatic attributes define geographical entities? If the definition is considered inadequate they should not be classed as generic terms or included in the glossary.

As mentioned above, some names do not fit into a single category. "Subuko" (with variant spellings) is a

[6] J. Loxton, "Administrative structure of national names authorities", *United Nations Conference on the Standardization of Geographical Names*, vol. 2, *Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. E.69.I.8), pp. 103-104.

[7] M. Aurousseau, *Rendering of Geographical Names* (London, Hutchinson, 1957).

[8] J. Loxton, *Names on the Map* (Corona, 1959, and Her Majesty's Stationery Office, 1959); "Geographical names in emergent multilingual countries", *First United Nations Regional Cartographic Conference for Africa*, vol. 2, *Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. 66.I.13), pp. 298-299; "Geographical names", in W. T. W. Morgan, *Nairobi City and Region* (Nairobi, Oxford University Press, 1967), chap. 12.

[9] Aurousseau, *Rendering of Geographial Names.*

fairly common area name in Maasailand and it denotes a high, cool place good for summer grazing. It is thus a compound of (*a*), (*c*) and (*d*) above, with cultural activity added.

All entities that can be classified as (*a*) or (*b*) can go into the glossary without question. Class (*c*) provides some marginal examples. A large number of Kenyan place names, especially in the Ukambani districts, are names of trees. The origin is obvious: probably a prominent tree (or sometimes a group of trees) of a particular species, standing perhaps at a track junction, became a local geographical reference point, and the subsequent settlement adopted the name. Thus we have villages named

Mukuyu (Kikuyu and Kamba for "wild fig-tree")
Tarakwet (Nandi for "cedar-tree")
Ol Tukai (Maasai for "palm-tree")

Other kinds of wild vegetation also give their names to areas:

Mutwot (Nandi for "papyrus")
Ogada (Luo for "Napier grass")

to cultivation:

Sukari (Swahili for "sugar-cane")
Kyanga (Kamba for "cassava")

and also to cultural activities:

Ithembo (Kamba for "sacred grove")

If individual items of vegetation are admitted as generic terms, what of animals? Very many places in Kenya are named after animals:

Simba (Swahili for "lion")
Kinyang (Turkana for "crocodile")
Nganga (Kamba for "guinea-fowl")

and some from animal activity:

Kithumba (Kamba for "termite nest")

But in assessing such meaningful toponyms as indicating geographical entities it is necessary to apply criteria not only of permanence but also of limited mobility. Features such as glaciers or marine sandbanks are mobile, but usually within definable limits. The continuous presence of some form of animal life within a particular area must be considered as uncertain and not therefore acceptable as defining an entity.

The classification of cultural features, that is, of man-made development, parallels that of natural features and includes some items that must be inserted in the glossary and some that are dubious. There is no argument about generic terms such as quarry, dam, bridge, prison, farm and airport. The problem comes with names like

Muthaiga (a suburb of Nairobi) (Kikuyu for "medicine")
Ikutha (Kamba for "arrowshot")
Bahati (Swahili for "luck")
Il-ainyamok (Maasai for "thieves")
Chisa (Boran for "sleeping-place")

The criterion of permanence in time and place will eliminate all of these.

It is in the description of cultural features that most geographical neologisms (newly coined words) are found: for example, "car park", "lay-by", "heliport". In Kenya such words are usually corruptions of foreign words, such as *kampi* (Swahili for "camp-site"), or *bunta* (Swahili for "jetty", from English "pontoon").

Most of the names noted above are nouns. Frequently the specific part of a name is an adjective—"Long Island", for example. Such adjectives usually indicate size, shape, colour, number, position, or some other quality (hot, pleasant, grassy, spotted). Sometimes a place name is an adjective standing alone, that is, a specific without a generic term. In most such cases "place" is the implied generic, as for example:

Rongai (Maasai and Turkana for "narrow")
Baragoi (Massai for "brown")

In some cases we can trace the lost generic term: for instance, the city of Nairobi ("cold") took its name from "Enkare Nairobi"—"the cold river" in Maasai.

In many languages this indefinite generic may be replaced by locative suffix (*-ni* in Swahili and Kamba, *-ini* in Kikuyu) or a relative possessive prefix (*oloo-* in Maasai). Examples are:

Kilindini (Swahili for "by the deep water")
Njogu-ini (Kikuyu for "place of elephants")
Oloo-nongot (Maasai for "which has valleys")

The last-mentioned word is usually printed in its corrupted form, "Longonot", the name of a ridged mountain.

Conclusions

It is hoped that the above analysis will clarify the nature of the problem of selecting terms to be included in a glossary. The factors which affect the final choice may now be considered. Each compiling authority will have to make its own decision.

A prime factor is, inevitably, economy. If there are no restrictions on time and money and the objective is to produce a comprehensive work of reference, then all terms, of however marginal generic significance, will be included.

If production conditions are less than this optimum, the next factor is, probably, frequency of occurrence. If a term occurs only once or twice in a national gazetteer then its inclusion in a glossary is of less use than the inclusion of a term of high frequency.

The other main factor, mentioned frequently above, is permanence: will the explanation of a generic term made now assist a future user of the glossary? Kilima Kiuu (Kiuu Hill) is a permanent feature of the Kenya landscape, hence *Kilima* must be included in a glossary. But there may no longer be sugar-cane at Sukari or Lions at Simba; there is therefore little value in including such terms.

GEOGRAPHICAL TERMS*

Report presented by Austria, the Federal Republic of Germany, the Netherlands and Switzerland

Classification of geographic entities. The classification of geographical names (into, for example, oronyms, hydronyms, minor names) is of no use for the purpose of international standardization, and may even lead to confusion, because place names may originally have been river names, river names originally field names etc. Therefore classification of geographical names would be better deleted from the agenda and recommended to the International Congress of Onomastics.

The classification of geographical entities must provide the framework for the glossaries (the glossary of designations and the glossary of generic terms) which are to be included in the gazetteers. If this classification has to promote the uniformity of presentation of these glossaries, it should be restricted to large categories, leaving to the individual gazetteers the task of working out the subgrouping and the small details in accordance with national needs. For the time being it seems impossible to achieve a generally acceptable systematization within these large categories. The classification of geographical entities may read as follows (see also the examples in the annexes to this paper):

1. Hydrographic entities;
2. Relief and land forms;
3. Terrain: fields, meadows, forests etc.;
4. Political entities, administrative divisions;
5. Regions, natural and historical;
6. Populated places, buildings, structures;
7. Routes: railways, roads, streets etc.

Uniformity of presentation of glossaries in gazetteers. Uniformity in the presentation of glossaries in gazetteers is achievable to the extent that each gazetteer could contain the four glossaries or lists described below.

(*a*) A survey of designations and generic terms in use in the gazetteer, grouped in accordance with the classification of geographical entities mentioned above. The designations should be numbered, and a short definition should be given where the meaning of any designation is not obvious. See the example in annex II to this paper;

(*b*) An alphabetical list of generic terms found in the gazetteer with references to the numbering in the systematic survey. See the example in annex III to this paper;

(*c*) An alphabetical list of abbreviations of designations, or of other codes used for them. See the examples in annex IV to this paper;

(*d*) An alphabetical glossary of abbreviations used in the maps on which the gazetteer is based.

Translation of designations and definitions. The proposals of the Dutch-speaking and German-speaking group in paragraph 1 (*b*) of the report presented by Austria under agenda item 9 (E/CONF.61/L.27) discuss the translation of designations and definitions into other languages.

* The original text of this report was contained in document E/CONF.61/L.26.

Annex I[a]

EXAMPLE: CLASSIFIED DESIGNATIONS

Hydrographic entities. anabranch, bay, bight, canal, channel, cove, current, deep, distributary, drainage canal, estuary, fjord, ford, geyser, glacier, gulf, harbor, headwaters, inlet, interfluve, intermittent lake, intermittent stream, lagoon, lake, marine channel, narrows, pond, rainpool, rapids, reach, reservoir, river bend, roadstead, salt lake, sea, section of lake, section of river, section of stream, sound, spring, stream, stream mouth, swamps, wadi, waterfall, waterhole, waterway, well.

Relief and land forms. arch, bar, basin, beach, bluff, canyon, cape, cave, cleft, cliff, coast, dale, delta, depression, ditch, divide, dune, escarpment, gorge, gully, headland, heights, hill, hillock, hummock, island, isthmus, kettle, landslide, lowland, massif, mesa, mound, mountain, mountain pass, mountain ridge, nunatak, pass, peak, peninsula, plain, plateau, promontory, ravine, reef, ridge, rift valley, rock in water, rock on land, sandbar, shoal, shore, slope, spit, spur, terrace, upland, valley, volcanic cone, volcano, watershed.

Terrain: fields, meadows, forest etc. abandoned airfield, airfield, airport, bog, coal basin, desert, esta, estate, farm, flat, forest, forest reserve, game reserve, gardens, gasfield, glade, grazing land, land, landing field, locality, marsh, meadow, moor, national park, peat-cutting works, salt basin, salt flat, sands, section of estate, slough, steppe, tree nursery, tundra.

Annex II

EXAMPLE: SURVEY OF DESIGNATIONS AND GENERIC TERMS

HYDROGRAPHIC ENTITIES

1. *afwateringskanaal* drainage canal
   Definition: level waterway for drainage mainly.
   Generic terms: boezem, goot, graaf, greb, grep, grub, grup, leiding, loop, ringvaart, sloot, tocht, vliet, watergang, watering, wetering, wijk, zwet.
2. *baai* bay
3. *haven* harbour
   Generic terms: dok, haven, kolk.
4. *Kanaal* canal
   Definition: level waterway for navigation mainly
   Generic terms: boezem, diep, gat, gracht, hoofdvaart, kanaal, opvaart, opvaartje, singel, vaart, vaartje, vaarweg, zeilvaart.
5. *meer* lake, pool
   Definition: body of fresh water, exceptionally brackish, of any size, surrounded either by land or by land and a bordering lake.
   Generic terms: boezem, braak, breek, dobbe, gat, kolk, meer, poel, plas, put, ven, waai, waal, weel, wiel, wijde.
6. *stromend water* flowing water
   Generic terms: beek, beekje, diep, diepje, gat, loop, maar, sprang, sprank, spreng, sprenk, sprink, strang, stroom.
7. *vaarwater in zee* marine channel
   Definition: marine channel or gully.
   Generic terms: balg, diep, gaatje, gat, geul, kanaal, nauw, priel, rak, ril, straat, stroom, vaarwater, vaarweg, zeegat.
8. *zeegebied* sea area
   Definition: part of the sea not covered by 2, 7 or 9 (bay, inlet or marine channel)
   Generic terms: zee, zeegat.
9. *zwin* inlet
   Generic terms: slenk, slufter, zwin.

[a] United States of America, Board on Geographic Names, *Gazetteers* Nos. 14, 42, 106, 108, 113, 114 (Washington, D.C.).

Annex III

EXAMPLE: ALPHABETICAL LIST OF GENERIC TERMS, WITH REFERENCES TO THE DESIGNATIONS

balg 7
beek 6
beekje 6
boezem 1, 4, 5
braak 5
breek 5
diep 4, 6, 7
diepje 6
dobbe 5
dok 3
gaatje 7
gat 4, 5, 6, 7
geul 7
goot 1
graaf 1
gracht 4
greb 1
grep 1
grub 1
grup 1
haven 3
hoofdvaart 4
kanaal 4, 7
kolk 3, 5
leiding 1
loop 1, 6
maar 6
meer 5
nauw 7
opvaart 4
opvaartje 4
plas 5
poel 5
priel 7
put 5
rak 7
ril 7
ringvaart 1
singel 4
slenk 9
sloot 1
slufter 9
sprang 6
sprank 6
spreng 6
sprenk 6
sprink 6
straat 7
strang 6
stroom 6, 7
tocht 1
vaart 4
vaartje 4
vaarwater 7
vaarweg 4, 7
ven 5
vliet 1
waai 5
waal 5
watergang 1
watering 1
weel 5
wetering 1
wiel 5
wijde 5
wijk 1
zee 8
zeegat 7, 8
zeilvaart 4
zwet 1
zwin 9

Annex IV

EXAMPLE: ALPHABETICAL LIST OF ABBREVIATIONS OF DESIGNATORY TERMS, OR OTHER CODES USED FOR THEM

AFW	*afwateringskanaal*	drainage canal
BERG	*berg*	hill
BEW	*bewoond oord*	populated place
BRUG	*brug*	bridge
DAL	*dal*	valley
DIST	*distrikt*	district
DIJK	*dijk*	dam, dike
FAB	*fabriek*	factory
GEB	*gebouw*	building
GEM	*gemeente*	municipality
HAV	*haven*	harbour
HEI	*heide*	heath, moor
HEUV	*heuvel*	hill
HRUG	*heuvelrug*	ridge
KAN	*kanaal*	canal
LAE	*landengte*	isthmus
MEER	*meer*	lake, pool
PROV	*provincie*	province
STR	*stromend water*	flowing water
VLV	*vliegveld*	airfield
VWZ	*vaarwater in zee*	marine channel
WEG	*weg*	*road*
ZEE	*zeegebied*	sea area
ZPL	*zandplaat*	flat
ZWIN	*zwin*	inlet

THE CLASSIFICATION OF GEOGRAPHICAL ENTITIES AND GEOGRAPHICAL NAMES IN THE PROVINCE OF ONTARIO, CANADA*

Report presented by Canada

THE PROBLEM

While respecting the opinions and priorities of other statutory, legal and academic authorities in matters of geographical terminology, this paper examines (*a*) the difficulties involved in making a geographical nomenclature board of Ontario operational; (*b*) the problems associated with accommodating a definitive classification of geographical features and names to older and unformulated principles and procedures; (*c*) the implementation of a local usage rationale in defining the jurisdictional boundaries of the new board.

OBJECTIVES

As the recently appointed statutory authority for the provision and maintenance of a systematic geographical nomenclature for the province of Ontario, the Ontario Geographic Names Board (OGNB) has as its aim the establishment and maintenance of principles and procedures which will provide:

A classification of geographical features within the province, as a necessary step in defining the jurisdictional boundaries of the new provincial nomenclature board;

Definitions of operating principles and procedures which would clarify the Ontario Names Board's position vis-à-vis other statutory authorities over questions of the status of geographical names and of legal and political territorial divisions as geographical entities;

A classificatory scheme of the geographical names and categories currently employed by the Ontario Names Board for the use of cartographers, geographers and other government departments;

A satisfactory definition of the terms "geographical feature" and "place", key words in the Act which currently defines the Ontario Names board's jurisdictional area with regard to the approval or rescission of names; and

An argument supporting the Ontario Names Board's claim to full jurisductional powers over all geographical names generated by local usage.

* The original text of tis report, prepared by Michael B. Smart, Executive Secretary of the Ontario Geographic Naimes Board, was contained in document E/CONF.61/L.36.

The Provincial Nomenclature Authority

The Ontario Geographic Names Board, established by statute in 1968, brought into force by royal proclamation in April 1969, and operational from July 1971 with the appointment of its full complement of seven members, is, in matters determining what names shall or shall not be applied to unincorporated places and natural geographical features, the decisive statutory authority. In decisions involving orthography, language, and the scale and degree of duplication or uniformity, the Board's recommendations to the Ontario Minister of Natural Resources (formerly Lands and Forests) are, once approved, final. Such recommendations usually take the form of submissions for the approval or rescission of names in current spoken usage or recorded in documented form. These names appear, when approved, as official nomenclature on topographical and planimetric maps of the province.

"Places" (in established departmental usage over the years) refer to physical features in the landscape containing populated built-up areas such as unincorporated villages and such small loosely organized communities as farmsteads. Legal divisions, on the other hand, such as geographical and municipal townships, parks or reserves, and municipal subdivisions such as residential suburbs, have names which are properly governed by statutory authorities other than the Ontario Geographic Names Board.

"Geographical feature" (once again in established departmental usage) refers to both natural (physiographic) and artificial (man-made) features in the landscape. In respect of natural geographical features (lakes, peninsulas, islands, rivers, mountains and so on), the Board exercises full jurisdiction. Names of man-made features such as causeways, reservoirs, canals etc. are outside the Board's decisive jurisdiction except in so far as the Board furnishes relevant name information to the authorities directly responsible for a feature's existence.

Considerations

Local usage. Prime consideration is accorded established—and current—local usage in the determination of the most accurate and fitting name or designation for officially unnamed natural features, on the strength of reliable documented evidence (in the case of local verbal authority) which is supplied to the Board.

It is important to point out that with regard to such petitions over names the Ontario Geographic Names Board is properly concerned only with the determination of the name, designation, or names in use locally. The Board, furthermore, does not assume responsibility for making moral, legal or political judgements on the suitability of a personal name in the light of a person's reputation. Ontario would hardly have a Stalin Township if it did.

The question of propriety. The Board has on record a number of name changes made in another decade, at a time when public sensibilities were different, so that names quite innocuous in today's world were then rescinded outright. Conversely, though name changes are still necessary today, they are made for reasons which would never have received a hearing in the past. The Ontario Board has, in this connexion, agreed not to interfere with or censure established names which in themselves (whether in the spoken or written record) offend no one except possibly those persons familiar with the individual's personal record. The Board would be faced with a continuous and expensive process of name revision and rescission if it assumed the role of toponymic inquisitor. It therefore treats name proposals involving moral, political or linguistic factors very cautiously.

The presence of natural features within legal divisions raises the difficult question of jurisdictional boundaries; in particular, the relatively new problem of defining the nature and range of the Board's authority in areas of decision affecting the adoption or rescission of names of natural topographic features and unincorporated communities which fall within the geographical boundaries of a municipality. The Board is already confronted with a frustratingly large number of natural features within "town" and "village" boundaries, even though the features themselves are buried miles deep in a wilderness area.

Procedure

A study of the procedures used over the years by the Ontario Department of Lands and Forests, and more recently by the nomenclature board, indicates a movement away from the arbitrary naming of natural features towards an approach which accords prime consideration to local usage. This is the basic argument supporting the choice of categories of geographical names that the Board has decided should come under its full jurisdiction, and which should reflect its policy affecting the adoption or rescission of geographical feature names.

This has brought about the careful definition of the term "geographical feature" *per se*, in the light of the categories mentioned above, as prerequisite to any attempt made to classify the name or toponym assigned to the category. The Board's jurisdiction, therefore, over a geographical feature's proposed name, in the sense of its power of veto over it, depends first and foremost on how the feature is defined. This calls for differentiating, in the interests of classification, between those features which are predominantly natural and those which are artificial. Similar logic is applied to the implementation of procedures concerned with processing names of incorporated or unincorporated communities.

The names of natural features are, in accord with the Board's enabling legislation, recommended to the new minister of natural resources for his formal approval, non-approval or rescission, as the case may be. While such decisions are now the full responsibility of the Ontario Board, in the past such matters were channelled entirely through the cartography section of the provincial Department of Lands and Forests.

Once approved, lists of names and their locational data are forwarded to the Canadian Permanent Committee on Geographical Names (CPCGN) for transfer to national maps as official names. With the same quali-

fications and exceptions applying, the procedures governing the processing of names of unincorporated communities and toponymically related area and locality names are similar to those for natural features. Natural feature names may be those of features still in existence or those which have ceased to exist in their old form — the important factor in common being that the name itself is still in use. The Board's responsibility is, after all, names, not features.

The recording of all locally inspired nomenclature on the official maps of the land is an operation wholly dependent upon decisions made by the Board or by the Canadian Permanent Committee on Geographical Names. All names in this category share one important characteristic: they are generated by local usage, that is, they spring from the oral traditions of the community itself—not from above or outside of it.

Names of legal, political or otherwise artificial geographical features (such as incorporated communities, counties, districts, airports, parks, bridges, townships and municipal subdivisions) are governed by statutory authorities other than the Board. They are processed as received from the municipal authority, district forester, postmaster, station agent or township clerk concerned. When consulted on questions of accuracy over such matters as the location, orthography, language or origin of a name, the Board can only function in the capacity of an advisory body. The important distinction to be made here is that the implementation of such a policy is ultimately conditioned by information indicating whether a particular name is the result of purely local or, at least, regional generation or the consequence of decisions handed down arbitrarily by statutory authority.

Conclusions

In summing up, it would be useful to outline the two arguments central to the present nomenclature policy of the Ontario Board.

First, in cases where a person or group is directly responsible for a given feature's existence in the landscape and therefore its configuration on topographical maps, that person or group has the right to name that feature (or place). The Ontario Board acts only as official recorder of the submitted name and assists in the implementation of the necessary recommendatory steps for its approval. Exceptions to this procedure are made in cases where problems of duplication, orthography, propriety, language etc. arise; the presence of any of these factors dictates that the Board's recommendations be respected—the onus is on the Board to inform and direct the person or persons concerned, if in fact such a move can be made in time.

Second, in cases where a name of a natural feature, such as a river, burn, island, peninsula, bay, hill or lake, or a name of a former natural feature, is determined to be the one most used by the majority of persons inhabiting the area proximate to the feature, or the site of a former feature, the Board shall record, and (providing none of the above problems materialize) process the name as given, including Cree and Ojibwa forms which are transliterated as accurately as possible into English. "The Burnt Lands" near Arnprior, Ontario, is a classic example of the name of a former natural feature in current official usage, for the area has long since been reforested: the name has survived the feature. For all that, it remains a valid toponym—or choronym—independent of the fact that the original feature itself has vanished.

The exceptions which apply to the first argument apply equally to the second, for both arguments relate to categories of geographical nomenclature considered to be fully within the Board's authorized policy field. The nomenclature data so recorded are (*a*) compiled, collated and processed by the Board staff; (*b*) formally approved by the Minister of the Ontario Ministry of Natural Resources (formerly Department of Lands and Forests); and (*c*) formally submitted for adoption as toponyms destined for official use on Canadian maps. This last stage involves the Canadian Permanent Committee on Geographical Names, and the Toponymy Division of the Federal Department of Energy, Mines and Resources, which assumes responsibility for publishing the nation's topographical maps.

Recommendations

As a consequence of the conclusions derived from this study, it is recommended:

That the approval and adoption of all geographical names of natural and man-made features generated by local usage be regarded as the exclusive responsibility of the same statutory nomenclature authority as is responsible for their recording and compilation;

That the naming of features whose existence and configuration on topographical maps is the consequence of human activity be regarded as the prerogative of the person or persons accredited with being chiefly responsible for the introduction of that feature into the landscape;

That geographical features be classified and toponymic jurisdictional boundaries be designated according to whether the geographical entities are defined as being predominantly the result of natural or of man-made processes;

That the adoption of the names of such geographical entities as unincorporated communities (villages, hamlets, farmsteads and so on), and of area and locality names (usually in-use choronyms of former features and former communities), be regarded as being as much within a nomenclature authority's policy field as names of natural geographical or topographic features;

That it be recognized that the cartographic transfer of a natural geographical feature from within the boundaries of a township, county or district to the confines of a municipality in no way alters the status of its name or its relationship with the provincial toponymic authority.

THE TREATMENT OF GENERIC TERMS IN THE PROVINCE OF ONTARIO, CANADA*

Report presented by Canada

I

The publishers of Canadian maps, atlases and charts have found themselves of late confronted with the prospect of having to devise ways and means of meeting the challenge of bilingualism. Legislation is impending which may well result in a demand for total—or near total—bilingualism in many if not all of the nation's maps, atlases and charts. This would affect all the geographical nomenclatures, label or descriptive terminology and marginal textual information incorporated in current national topographic maps.

The map-maker would in fact be faced with the need to cope with demands (emanating for the most part from Quebec) for provision, at a national level, of what must either be a twofold system of maps and charts, of all areas, in separate linguistic, orthographic and typographic formats at all scales, or, alternatively, a series of single billingual maps and charts containing pairs of translations or double transliterations (into both English and French phonetic forms) of all names and other related information in the aforementioned formats and also at all scales for each individual publication. Either course presents great problems of time and expense. The problem of hammering out a new policy, acceptable to both sides, is one which deserves, therefore, all the qualified attention it can get. This analysis of the situation, will, we hope, not underestimate it.

While it may be conceded that it is not too difficult to produce a series of unilingual maps in each of the official languages at scales as small as 1:2,000,000, it is quite another matter when scales of 1:25,000 or 1:50,000 are concerned. A small-scale series does not present a map publisher with any great problem of translation, because on this only a proportionately small number of names of places and features need be translated, retransliterated or otherwise altered to the satisfaction of the second linguistic group. A very different situation exists with map editions at the larger scales mentioned, where the provision of geographical nomenclature data alone accounts for approximately 38 per cent of the production cost of the map. Nomenclature provision at this level must, of necessity, be backed up by a vast amount of toponymic research before the required degree of accuracy acceptable to both official language-groups can be provided—let alone maintained.

II

Anticipating such difficulties in the near future, the Canadian Permanent Committee on Geographical Names commissioned in 1971 a study of place-name generics as a means of examining a proposal made a few years ago by the Quebec member advocating the elimination of a large number of repetitious generic names from maps. While this was ostensibly made in the interests of easing the financial burden of bilingual translation, since a simple operation would delete a vast number of names which would otherwise have to be translated, the study which ensued led to results both surprising and revealing. It was soon obvious that the implications of such a scheme—carried to logical conclusions—would affect an entire area of toponymy not wholly understood or even taken into account by nomenclature authorities in Canada. In the final analysis, the geographical generic emerges more secure than ever. The purpose of this paper is to demonstrate why.

Particular attention is focused on generic elements in map nomenclature whose continuing existence in name form has come into question. It has been suggested that the cartographic idea conveyed by a name (that is the generic) can be just as well communicated by a standard map symbol. This presupposes, if the argument is understood correctly, that a map symbol for "lake" is as effective, as a cartographic medium for conveying the idea of *Lake*, *Lac*, *See*, *Mere*, *Lough*, *Loch* etc. as an integral part of a place-name, as a name itself. The following pages categorically disprove this notion—with all due respect to the symbolists.

It is their argument that little real purpose is served the bilingual map-user by retaining topographic generic names any longer. It is further suggested that their elimination through symbolization can only be regarded as a large step forward in solving the Permanent Committee's current dilemma over linguistic priorities. To give an example: the assumed function of such commonplace geographical generic names as "Pond" or "Étang", "Creek" or "Ruisseau"—repeated as they are a thousand times over on map after map—might understandably be taken to be the communication of the idea of "pond" or "creek" and nothing more. If so, then the same concept can most certainly be communicated by a conventional map symbol without the awkward disadvantage of being linguistically exclusive. One can understand why a map-maker who must attempt to placate the two language-groups should wonder why maps in a bilingual country need be cluttered up at all with so much generic terminology.

The idea is developed in this paper that peoples or nations of the Anglo-Saxon tradition embody their tangible and terrestrial environment of hill, dale and green in their toponymy, while a nation belonging to a Latin tradition makes itself the content of its geographical nomenclature. In France, this is seen to be especially true of the toponymy of towns and cities; in Quebec, both town and countryside names are shown to lean overwhelmingly towards national (in the French sense of that word) commemoration and glorification, with the land, the geographical environment, conspicuously absent.

Through an inquiry into some of the "whys" and "hows" of the traditions involved, this paper considers possible

* The original text of this report, prepared by Michael B. Smart, Executive Secretary of the Ontario Geographic Names Board, was contained in document E/CONF.61/L.37.

ways and means of coping with what appears to be an arbitrary programme of attrition which has as its aim the removal of Anglo-Saxon and Anglo-Celtic toponyms from the official maps of the land—especially from areas within the present political boundaries of Quebec—and this in spite of the fact that both English and French Canadian toponymists seem to agree on the principle that prime consideration should be accorded local usage in settled areas in determining which names shall appear as official nomenclature on the maps of the nation.

For example, not only is a name such as "Saint-Luc-de-Laval" an intrinsically different type of place-name from "Smoky Hollow Mountain", but the process by which it was officially established and made part of the local record through map and gazetteer is as significant in understanding the French Canadian's interpretation of what constitutes and what determines local usage—as opposed to that understood by the English-speaking Canadian—as is the process by which the latter name acquired official status on the map through purely local sources and generation. One tradition moves logically from map to land, the other from land to map. The two may never meet. The genesis of generic element follows a similar course.

This linguistic and cultural dichotomy is examined in detail, and, in the process, the psychology of the two toponymic traditions—one the converse of the other—is made more comprehensible. It is argued that while one tradition tends to invest its geography, inclusive of features within it which others have cultural claim to, with its nationality, the other, in contrast, regards its geography, that is its terrestrial environment, as a source of inspiration not only for its purely local place names and feature names, but also for the official names of its roads, streets, boroughs, residential suburbs, houses, clubs, parks and, ultimately, even its cemeteries. That the two traditions call for separate treatment becomes self-evident. How dual treatment is to be translated into policy is another matter—and a subject which this paper pursues to its final conclusions in the pages that follow.

III

The Ontario Geographic Names Board (OGNB) has been invited to state its position on the proposal, that, in the interests of bilingualism, the generic term be eliminated from as many geographical names as possible on Canadian maps. On the understanding that "generic" in this sense refers to the descriptive element found in most geographical names of features places, such as "Creek" in "Coldwater Creek" or "Corners" in "Hemlock Corners", and that all topographic generics of this form are involved (not only such very common ones as "Lake", "River" and "Creek"), the Ontario Board has decided, after due consideration, against the elimination proposal. In point of fact, the Board's policy has continued to be to make every effort to determine which generic names are actually in use for particular places and features, and to record and submit these for official approval. This paper advances a number of compelling reasons in support of the Ontario Board's current procedures dealing with topographic generics, in the hope that the recommendations which ensue will be carefully considered in the formulation of a new national names policy.

Basically, the overriding consideration behind the Board's position is that, in English place names and feature names, the site element is an inseparable part of any true toponym. "Topos" and "place", after all, mean the same thing. In spite of their sometimes long evolution from purely verbal and descriptive forms to inhabited place-name terms—and to surnames and frequently back to place names again—relatively few Anglo-Saxon toponyms have ever lost their place or topographic element. The place or site generic remains the immemorial link with the land.

Significantly, such is not the case with the majority of toponyms in French Canada. Other priorities and other traditions—quite foreign to the Celtic, Teutonic or even Amerindian traditional sense of empathy with the land—prevail. It is this central fact which accounts for the facility with which most French Canadian toponyms can be shorn of their geographical elements, such as *Lac*, *Rivière*, *Ruisseau*, *Mont*, *Étang*, without any significant effect on their intrinsic meaning in the cultural landscape. Not so in English—with the exception of a proportionately small number which belong to a tradition more akin to the prevailing form in French Canada.

Another reason for the stand taken by the Ontario Geographic Names Board against any proposal ostensibly designed to eliminate place generics from the map is that such a procedure clearly contravenes the Board's policy of according prime consideration to local usage —which includes local generics. English, in its spoken and written form, unlike French (or Italian for that matter), is governed by popular usage—a continuing process, whose authority is demonstrated by the fact that the language defers to no official linguistic academy. By a similar logic, England, and regions of the world settled by its people, quite unlike France and lands colonized by Frenchmen, also has a commmon law, i.e. an unwritten law of the land laying claim to derivation from ancient usage. And the referendum versus the edict approach to what constitutes usage can be seen in the generic names controversy just as it can in questions of juridical or linguistic norms.

Governed by the same logical tradition is the analogous procedure of raising English words used in the vernacular to official status and position in the dictionary. Words (like names) observed and recorded in popular usage are recorded in the addenda. After a suitable period of exposure in print they may receive official approval and be incorporated within the body of the dictionary. It is a comparable tradition that governs the evolution of the Anglo-Saxon toponym from its unrecorded place in oral tradition to its approved status on the map as an official name.

IV

The proposal to consider total elimination of place-name generics as a national policy could hardly have arisen in an area dominated by Anglo-Saxon and

Amerindian toponyms. Emphasis in the Anglo-Saxon place name is on place: only in the French place name is it on the name. The exception in French is the *toponyme descriptif* such as "*Anse* à l'Orme", similar to "Parry *Sound*" or the "Ojibwa Nottawa*saga*". "Anse", "Sound" and "Saga" represent water-feature generics.

With emphasis placed upon the commemorative-name element in French Canadian nomenclature, it is understandable that an argument against terrestrial generics on the grounds that they are redundant should find favourable response in French Canada. This is particularly the case at the moment, when great numbers of historically fixed Anglo-Saxon place names and feature names are being submerged in translation or have disappeared completely from map and signpost.

In general, nineteenth-century and twentieth-century toponyms in French Canada stress the commemorative name only. This emphasis is, however, quite unlike that in place names dating from the exploration and colonization period (sixteenth and seventeenth centuries)—or, for that matter, that in most names on modern maps rural France. Compared to place names which stress the geographical concept, French Canadian toponyms tend to function as place-name memorials to national heroes and saints. In topographic terms they make little sense, but, like French street names, they were not intended to make that sort of sense in the first place. In short: where Anglo-Saxon usage normally uses a name to describe a lake, hill or village—in French Canadian usage the same lake, hill or village would be used to commemorate a name.

Significantly, most feature names and place names on rural Saint-Pierre-et-Miquelon (off Newfoundland) are not of this genre. The fact that these islands—unlike Quebec—retain their cultural links with France may account for the fact that their place names still are *toponymes descriptifs*. Like their Anglo-Saxon, German, or Amerindian counterparts, *toponymes descriptifs* are names in which the specific element (oak, burnt, mud, smoky) qualifies the place element (point, creek, lake, hollow). These names are, as I have explained, not the rule in rural Quebec, though a proportionately small number of names, such as Le-Long-Sault, Rapide-Blanc and Pointe-aux-Trembles indicate that toponymy was once otherwise inspired in French Canada. In the latter example, the specific element "Trembles" ("aspen") qualifies the place element "Pointe". Had the descriptive (that is the topographic) approach to place naming not given way in French Canada to the memorial and nationally commemorative, the current discussion dealing with the feasibility of doing away with geographical generic names (river, lake, brook, pond, hill etc.) on Canadian maps might never have arisen. The arguments advanced for their elimination would hardly have been seriously considered either.

A French toponym such as "Île-à-l'Orme" belongs to the same descriptive naming tradition as the English "Island Pond" or "Church Hill". It is neither nationalistic nor patronymic. A "Sainte-Émelie-de-l'Énergie" on the other hand, represents an entirely different approach altogether.

The very existence on modern maps of such names as Laprairie, Trois-Rivières, Bout-de-l'Île and Rivière-des-Prairies bears witness to the early inhabitant's essentially visual approach to his new territory—and his descendants' obvious departure from it. The shift in focus from place to name identification seems to go hand in hand with the geopolitical events in late eighteenth-century New France which brought about the transfer of French Canada to the English crown. The ensuing struggle for national and linguistic identity found expression in a national toponymy which provided a medium of cultural sublimation. Though the right to one's own tongue was guaranteed constitutionally, the land itself passed from French political control and the old seigneurial system disappeared. French nomenclature for places and features was in large measure retained, but transformed in that it became dissociated from the land and its topography. Honorific place names thus became an early vehicle of French Canadian cultural nationalism.

It goes without saying that the integration of a nationally inspired nomenclature — one laid down arbitrarily in written form — with one topographically inspired — based on a close cultural interrelationship with the land — presents great problems. With French and English accorded equal status as official languages in Canada, a bicultural policy in toponymy is unavoidable — perhaps resulting in two official names in the gazetteer and one on the map. A unilingual policy in Quebec leaves one with few alternatives.

Teutonic and Latin nomenclature traditions have their roots in very different cultural environments — a fact readily demonstrated by the street names which the peoples use in their cities and towns. A glance at any map of a French city or town reveals a galaxy of name variations based on heroic, historical and canonical themes, all expressive of a national character having little in common with the ethos embodied in Anglo-Saxon toponymy, be it of a residential suburb or a wilderness glen. An English street often bears a name descriptive of its topography, historical associations or destination. Names such as Upper Ground, Lower Marsh, London Wall, Skinner's Lane, Cornhill, Dover Street and Bath Road are typically English and, as a type of place name, have been adopted everywhere in the English-speaking world. French streets, on the other hand, usually carry names descriptive of anything but the streets themselves. The use of street nomenclature for commemorative purposes is the norm in French towns and cities: this may well date from the Revolution and its code of arbitration in nomenclature based on written law, making it so different from the pre-revolutionary toponymy of the countryside.

V

A nation's metropolitan nomenclature — the type and character of the names given to street and square — gives one considerable insight into that nation's hierarchy of values, and some measure of the degree of empathy which it as with its physical environment, at least as far as things that can be named are concerned.

Names with rural connotations are not unusual within the urban fabric of English towns and cities — being simply toponymic survivals of former peripheral village communities absorbed into the urban fabric in the process of urbanization. Such names have not often survived in French urban nomenclature, having been submerged in a sea of name-memorials. There are of course the usual exceptions—Montreal has its rue du Marché-Bonsecours. However, normal usage in French towns and cities tends to be overwhelmingly nationally commemorative rather than place-descriptive. Unlike France, Quebec has carried this memorial — and sometimes political — tradition in names into its countryside. It is this fact of Canadian usage which presents the sub-committee with little alternative but to opt for a dual policy regarding generics.

Geographical generics are as essential to the one tradition as they are not to the other: consequently, a generic elimination programme disastrous to Ontario would scarcely affect most Quebec toponyms. Descriptive toponyms such as Stone Bridge or Hardwood Ridge would be doomed — Saint-Émile-de-Montcalm would not (unless the canonical generic itself were purged).

The theme central to this report is the cultural difference between the two official toponymic traditions in this country. An example of such a difference in tradition can be found in a comparison of French Canadian place names with place-name usage in similar landscapes in other French-speaking parts of the world. Significant to the present discussion is the fact that a naming tradition typical of urban environments in France should have been transplanted not only to the urban environments of French Canada but also to its countryside. It is precisely here, in the countryside (a wilderness), that the Commission de Géographie du Québec and the Ontario Geographic Names Board have jurisdiction (municipal areas are governed by other statutory authorities).

As already indicated, the pattern of geographical names of features and populated places on the islands of Saint-Pierre-et-Miquelon is so dissimilar to that of Quebec as to invite further comparisons. One notes considerable affinity between the type of toponyms used on the French islands and those of nearby Newfoundland. In both places the names are predominantly descriptive. And while most landscapes settled and named by English-speaking settlers follow this same toponymic pattern, this does not seem to have been followed by the French in Quebec. As far as the rural areas are concerned, French Canadian toponymy possesses a unique character. Its political-national origins seem clear. In this regard Saint-Pierre-et-Miquelon, on the other hand appears to belong to the pre-revolutionary tradition of rural France, as did New France before 1763.

VI

The low status of terrestrially descriptive generics in French Canadian topography is a feature to be reckoned with in the formulation of any national policy for geographical names on Canadian maps. A policy which seems to be aimed at the elimination of the vast number of frequently occurring and easily translated generic names — especially those considered replaceable by cartographic symbols — may in the final analysis create more problems than it sets out to solve. This is particularly true if any degree of consistency is applied. Where does one draw the line? Easily translated and symbolized generics like "Lake", "Creek", "River" and "Marsh" may indeed seem more effective as symbols than as names, particularly on bilingual maps. However, it is quite another matter when these generics form the basic part of a feature name or place name. Such names must not be usurped by cartographic symbols. One needs only to consider some of the various forms the generics take in popular usage, such as "Glen", "Vale", "Burn", "Tarn", "Butte", "Slough" or "Muskeg". Clearly far more is involved in a place name or feature name than a description of physiographic or man-made features. Some places and features have qualities and historical associations that can only be communicated in a name —never in a mere symbol. Topographical generics are the basis of Anglo-Saxon toponymy. The implementation of a policy eliminating generics from official maps in Quebec would mean the ruin of many Anglo-Saxon place names. In view of the status of the generic name in the rest of the country, the likelihood that such a policy will be implemented nationally is considered to be remote.

Perceived in its deeper psychic and social context, the real content of Quebec toponymy is French Canada. In English (or even Amerindian or Eskimo) Canada, it is the land. Similarly, in French urban toponymy it is clearly the nation. Paris demonstrates this graphically in its street nomenclature. The city is a geographical register of folk heroes, saints and national events. Toponymy in such a setting has precious few links with topography. The Gallic detachment from things terrestrial is attested to (at least since the Revolution) in his choice of designation for street and square. In marked contrast, the Anglo-Saxon's choice of name for the same feature bears witness to the bond he consciously preserves with the land. (Commemorative nomenclature does exist in English-speaking countries, to be sure, but it is far from being the rule.) Both traditions co-exist in Quebec. Whether they will be permitted to continue to do so, however, is less certain.

English street names, and English names for rivers, mountains, lakes, hills and valleys, become quite meaningless and intrinsically placeless designations once they are deprived of their place elements. But topographically detached names constitute the norm in Quebec: there toponymy tends to be regarded as a logical expression of the national image. While such usage may be considered acceptable and logical in Quebec, any procedure which strips the descriptive generic from Anglo-Saxon toponymy completely deprives it of its territorial identity and meaning. Such a system must be resisted.

No more effective illustration of the contrast in name usage between French and English Canada exists than in the contrast between London and Paris — the cultural mainsprings of the two Canadian traditions under discussion. The street and boulevard names of Paris are remarkable in their conformity to a genre. So, in the

opposite tradition, are those of London, Melbourne, Toronto and Auckland.

Consider Paris. Begin, for argument's sake, at the Place du Trocadéro and proceed in a north-easterly direction towards Montmartre. Such a cross-city trip takes in names such as Avenue du Président Wilson, Place d'Iéna, Place de l'Alma, Avenue Montaigne, Avenue des Champs-Élysées, Place de la Concorde, rue de Rivoli, rue Saint-Roch, Avenue de l'Opéra, rue Sainte-Anne, rue Gramont, Boulevard des Italiens, rue Lafitte, rue Bourdal and rue des Martyrs. All manifestly non-topographical. No need therefore for topographical generics.

A similar study of the road and street nomenclature of metropolitan London reveals a very different usage and one typical of the Anglo-Saxon world. London streets carry names that can boast of a purely local evolution, having sprung from local usage. Rarely are they designations that have been imposed or laid down by rule of law. Their immemorial role in providing linguistic contacts with the topographic and cultural past has been explored by the British archæologist Jacquetta Hawkes:

> "There is a sense in which the ordering of speech has a direct effect... on the land. Names could be attached to all those features of the countryside that attracted men's attention or were of significance in their lives. Mountains, rivers, springs, places where reindeer congregated, where a giant mammoth had been trapped or a famous hunter killed. Above all, places associated with ancestral spirits, gods and heroes. Place names are among the things that link men most intimately with their territory. As the generations pass on these names from one to the other, successive tongues wear away the syllables just as water and wind smooth the rocks; so closely, indeed, that often place names outlast the language that made them, remaining as evidence of the former presence of dispossessed or submerged peoples....
>
> "A name can become a part of the character of a place, and, when caught up in the art of its people, can assume a life and significance of its own. The Forest of Arden, Benbulbin, the River Duddon, Wenlock Edge or Flatford Mill, they are all strands woven into our culture. Count these peoples fortunate who, like ourselves, have been able to keep the warp threads of the fabric long their histories in one piece. [Anglo-Saxon] place names, although much changed by passage across English tongues, have survived to be fixed at least in the neat lettering and regular spelling of the Ordnance Survey maps."

The rich variety of geographical generics in London's street-names is in sharp contrast to the sameness and insignificance of the generics in the French capital. London's generics are part and parcel of a tradition that has been exported to every suburb and countryside in the English-speaking world — including most of Ontario.

An examination of a large-scale map of central London, in the manner of the French example, presents one at once with a different orientation in names. A journey from Hammersmith to St. Paul's *Churchyard* yields the following cross-section of English generics: Hammersmith *Broadway*, Hammersmith *Road*, Kensington *Court*, Kensington *High Street*, Kensington *Gardens*, Kensington *Road*, Hyde Park *Gate*, Kensington *Gore*, Knights*bridge*, Hyde Park *Corner*, Park *Lane*, North *Row*, Ox*ford* Street, Piccadilly *Circus*, *Haymarket*, Leicester *Square*, Long *Acre*, Covent *Garden*, Ald*wych*, the *Strand*, Temple *Bar*, *Fleet* Street, Lud*gate* Circus, and Ludgate *Hill*, to name only the obvious ones. Names all manifestly topographical, all meaningless without their geographical generics and none commemorative in the French chauvinistic sense.

The richness of English in such generics is amply borne out in an example from London — an example which illustrates particularly well the range and flexibility of the topographic generic in English urban toponymy. Linked to the name West*bourne* (itself a *toponyme descriptif* in origin), we find in West London the following different terms to designate the site: Avenue, Bridge, Crescent, Drive, Gardens, Grove, Grove Terrace, Park Road, Park Villas, Place, Road, Street, Terrace and Terrace Road. Corresponding examples of such precision in generic usage hardly exist in the French tradition. Cartographic symbols accordingly make more sense on a French map.

English-speaking urban areas within Quebec have their: Beaverhall *Hill*, Bowling *Green*, Lakebreeze *Road*, Sunny *Acres*, Beacons*field Court*, Oak*ridge Drive*, Spruce *Crescent*, Sunny*side Avenue* etc. Beyond the built-up urban areas the tradition carries on in the countryside in such names as *Glen* Sutton, Cold *Spring*, Oak *Lake*, *Lake* View, Garden *Hill*, Highland *Grove* and Rocky *Point*. No policy proscribing geographical generics in the name of cartographic symbolization can hope to avoid interfering with such names.

VII

The Ontario Geographic Names Board maintains its policy of bringing the written and cartographic names record into line with contemporary spoken usage ground. This is in keeping with the referendum as opposed to the edict approach to proposals for names and name-changes — Anglo-Saxon procedure since time immemorial. In the modern context, district foresters, postmasters, township clerks and similarly placed persons serve as spokesmen for the local record. On this point of principle and procedure, it would seem inevitable, as well as logical, that English and French Canadian names boards should be expected to function independently.

The root of the generics issue is cultural — even emotional — and one not easily resolved by academic or logical analysis. Even within Anglo-Saxon toponymy itself, local usage in generics shows a considerable degree of variation. Witness the use of "Glen", "Ravine", "Dell", "Dale", "Valley", "Hollow", "Dingle", "Combe", "Coomb" or "Bottom" for a geographical feature identified simply as "valley" in gazetteers.

On the question of local generic usage the Ontario Board proposes that the current gazetteer listing under "Feature" (as it appears in the 1962 edition and its

supplements) be headed "Local generic" or even "Local and legal generic" if the present column of feature generics is retained in a new edition. The Newfoundland hydrographic feature "Pool's Island Tickle" would accordingly be listed as "Tickle" and not as "Channel" (as it is currently). It is the former form which constitutes local usage. If the Canadian Permanent Committee on Geographical Names rules, or recommends, that a Newfoundland "tickle" be classified as a channel, and a "pond" as a lake, then by the same logic Ontario's "Blue Mountain" is a hill. Members from British Columbia and Alberta would certainly concur. Far better, therefore, that the local generic be recognized on its own merits. Definitions and explanations would be comprehensively provided in the foreword.

In any purge of geographical, chorological or topographical generics, especially one pursued with the degree of thoroughness implied above, not only would Anglo-Saxon toponyms face ruin and extinction, but so would those bearing a similar relationship to the land inherited from other languages — for the most part, in Ontario, from Cree and Ojibwa.

The Ontario Board reaffirms, in order to retain in Ontario, on principle, geographical generics in descriptive nomenclature for places and features, its resolution that these linguistic contacts with our present and past geographical environments not be eliminated from map or gazetteer for the cartographic or cultural reasons mentioned in this paper. On the contrary, they should receive special consideration as inherited characteristics of our multinational past. Our landscapes would be impoverished without them.

In this regard, the Board also proposes to adopt, and implement, with the assistance of authorized persons in the field, a policy according official approval to local forms of generics for populated places and topographic features in established usage. In the "Blue Mountain" example cited above, an escarpment feature near Collingwood (Ontario) is known locally as a "mountain". This being so, the generic (or common topographical term) used should be recorded (as it is in this case) — in spite of the fact that in Western Canada such a designation would appear ludicrous.

In a related field of terminology, on the other hand, such legal generics as "Village (incorporated)". "Town (municipal)" and "Rural Improvement District" might well be eliminated from future gazetteers. If this were done, there would then be little reason to include "legal" (as suggested) in the heading to the feature generic column. As proposed last year by the Secretary of the Canadian Permanent Committee on Geographical Names, the generic term "community" might well be used in future for all incorporated places. Involvement with confusing municipal terminology would thereby be avoided. These designations are not considered by the Ontario Board to be geographical names in any traditional physiographic or topographic sense, and the Board accordingly expresses complete agreement to the proposal that they be so amalgamated.

On the strength of conclusions derived from the arguments in this report, in the matter of formulating a national policy on geographical generics applicable to both official linguistic traditions of this country, the following recommendations are made.

(1) That it be recognized that the case for or against geographical generics is essentially a cultural and emotional one. Little, therefore, is to be gained by the arbitrary imposition of a purely logical and objective solution.

(2) That it be recognized that there is a place for cartographic symbolization on maps in situations where the inordinate use of map space for repetitious and translatable terminology in two languages calls for it. Nevertheless, there is no justification for stereotyped symbols used indiscriminately in substitution for nomenclature representing established and respected linguistic and historical links between people and land.

(3) That it be recognized that English and French Canadian toponymic traditions require separate treatment.

(4) That geographical, chorological and topographic generics not be taken out of their original choronymic or toponymic context, as such procedures only result in destroying the meaning of the place name altogether.

As implied throughout this paper, the probability that the Commission de Géographie de Québec will implement new policies detrimental to the interests of Anglo-Saxon traditions in the province must be taken into account. This would be the logical course for an autonomous board to take, working exclusively, and defensively, within the French Canadian nomenclature tradition. Though draft legislation exists which promises fair treatment, the prospects of its becoming law, remain, at the time of writing, uncertain.

In conclusion, one can only trust that some of the arguments presented in this paper have not fallen on deaf ears and that they will serve to impress upon the Permanent Committee, and, in particular, upon the Quebec Board, the importance of understanding the true function of the geographical generic in place-names of Anglo-Saxon or Anglo-Celtic origin. This is especially important today in areas of Quebec where such names still exist and are in use locally, having so far survived attempts at rescission or alteration through partial or complete translation. (An example of such alteration is provided by a tributary of the West River in Southern Quebec known as the "East Branch", which is now toponymically extinct, for the "translation" "Rivière de l'Est" has recently been approved by the Quebec Board and the new name now appears in recent topographic publications. Needless to say, as long as the English-speaking population survives in the area, the names "West River" and "East Branch" will also survive — even if only in the spoken tradition.) It is self-evident that names which have their beginnings in the original Scottish and English settlements of this country must be kept beyond the grasp of political interests opposed to them if anything of our early colonial heritage of place names is to be preserved for posterity.

Maps may have to reflect the political realities of the day, but surely not at the very high price of sacrificing a people's right to what is essentially a non-political record of its own cultural past.

GENERIC TERMS USED IN GEOGRAPHICAL NAMES IN BOARD ON GEOGRAPHIC NAMES GAZETTEERS OF COUNTRIES IN THE AMERICAS SOUTH OF THE UNITED STATES*

Report presented by the United States of America

This list of geographical terms[1] was compiled from the Board on Geographic Names gazetteers covering the countries of Central and South America and the Caribbean. Terms from Mexico, Portugal and Spain have been added. The gazetteers, produced under the direction of the United States Board on Geographic Names, contain place names recommended for official use by agencies of the United States Government. The generic term is part of the recommended name; other gazetteer data — designation, co-ordinates, and area number — are for information purposes.

The first column is the alphabetic list of generic terms in several languages. The second is the list of designator terms used to describe features named by each generic. The third indicates gazetteers in code in which each designator is used with the generic shown. The code employed is one recently set up for use by agencies of the United States Government. *BW* and *FW* were added to replace codes for individual islands of the Lesser Antilles because of the nature of the gazetteers concerned.

The list of generics in Dutch, English, French, Portuguese, Spanish and several Indian languages offers an opportunity for the comparison of terms. Words derived from French and Portuguese appear along Spain's frontiers; in Brazil, derivatives from Spanish turn up in the southern and western marches, terms like "arroio", "banhado", and "coxilha". In the West Indies, French and Spanish generics are often retained in English-speaking islands, reflecting earlier sovereignties and settlement. Some Danish words ("baek", "strand") survive in the United States Virgin Islands. Some similar terms, though, are less adaptable to rationalizing, such as the Portuguese "sapal", the Colombian "zapal" and the "zibal" in British Honduras.

Unfortunately, the list cannot show the area of coverage or the frequency of usage of the words. Gazetteers are based on best available mapping, and often complete coverage could be found only in small-scale cartography when the gazetteer was compiled. That for Brazil, for example, was provided by a map on the scale of 1:1,000,000, whereas Portugal was covered at 1:25,000, and many types of features named on the larger scale maps cannot be shown on the smaller-scale ones. As mapping improves, added detail results in an increased volume of names, including generic terms. Then, too, such cultural features as named mines and bridges were not included in earlier gazetteers. And frequency of use cannot even be estimated without reviewing the file or publication entry by entry, because the glossary of each gazetteer does not indicate how many times each generic is used — some generics may have been used only once.

A generic term is defined in dictonaries either by means of equivalent words or in a statement telling what sort of feature it is applied to and the characteristic that sets the sort of feature in question apart from similar sorts. This is a standard meaning and must be accepted as correct. But generics in place names are often applied to features of a different but related sort — sometimes related only in the eye of the person doing the naming. The application of these words cannot be standardized. Hills are called mountains, and mountains hills. Ponds are called lakes, and lakes ponds. Brazil's long escarpment, the Serra do Mar, probably did look like a mountain range from the deck of a ship off shore. Saltwater inlets called rivers in the shores of Chesapeake Bay seemed perhaps to be river mouths from boats in the bay. The North Sea, the Baltic Sea, and the Black Sea are each less than half the size of the Gulf of Mexico or Hudson Bay. The Aral Sea is smaller than Lake Superior. What is a sea, a gulf, a bay, or a lake?

In gazetteer compilation the generic term is accepted as found. The choice of a designator, though, rests primarily on evidence from maps showing the feature itself; the commonly understood meaning is of secondary consideration, though it is always in mind. Features named on modern large-scale map sheets are easier to identify, because cartographic programmes have been developed in the Americas, and mapping has been much improved since the gazetteer programme was begun.

More complete glossaries are needed to cope with the secondary uses mentioned above. Certainly it is impossible to include in a glossary every conceivable application of each generic term. But as an aid to the selection of more accurate designator terms and thus to the production of better gazetteers, it is clear that the generally accepted meaning of the terms used within each country should be understood by the compilers. Terms derived from Indian words deserve particular attention, because most are restricted in use to one country. In other cases, generics are applied to different features from one country to another, as illustrated by the contrasting use of "pampa" in Argentina and in Guatemala, or by the use of "creek" to mean a freshwater stream in the United States and a saltwater inlet in the United Kingdom. Another interesting point is the difference between one land and another in the types of features named. The word "slope", well understood and widely used in English, rarely appears in a geographical name in North America; on the Iberian Peninsula and in Latin America the general equivalents, "falda", "umbría" and "solana" are found as parts of place names, and a distinction is even made between sunny and shady slopes. They should be as important in North America as elsewhere, as landmarks and crop-bearing tracts. The "bight" has been so named for centuries on coasts of English-speaking countries, but no word seems to exist in

* The original text of this paper, prepared by the staff of the Board on Geographic Names, Washington, April 1971, was contained in documents E/CONF.61/L.51 and E/CONF.61/L.51/Add.1.

[1] Copies of this list are available, for reference, at the Map Collection of the United Nations.

Spanish or Portuguese to distinguish the bight from any other bay or cove. It has been found advisable to define many of the words used as designators as meaning particular things in particular gazetteers. More glossaries of geographical terms have been published, and there is a need for more still to keep pace with modern mapping.

Annex I

COUNTRIES WHOSE GEOGRAPHICAL TERMS ARE REPRODUCED IN THE LIST

Country	*Code*	*Date*	*Entries*	*Remarks*
Argentina	AR	1968	48,300	
Bolivia	BL	1955	18,800	
Brazil	BR	1963	62,500	
British Guiana (Guyana)	GY	1954	3,200	in *The Guianas*
British Honduras	BH	1956	2,000	
British Lesser Antilles	BW	1955	2,600	in *British West Indies and Bermuda*
British West Indies and Bermuda		1955	10,500	omitting Bermuda and The Bahamas
Canal Zone	PQ	1969		in *Panama and the Canal Zone*
Chile	CI	1967	39,700	
Colombia	CO	1965	27,000	
Costa Rica	CS	1956	3,700	
Cuba	CU	1963	44,000	
Dominican Republic	DR	1957	14,000	
Ecuador	EC	1957	14,850	
El Salvador	ES	1956	4,860	
French Guiana	FG	1954	2,800	in *The Guianas*
French West Indies	FW	1957	3,250	
Guatemala	GT	1965	14,900	
The Guianas		1954	8,500	
Guyana (British Guiana)	GY	1954	3,200	in *The Guianas*
Haiti	HA	1956	3,000	
Honduras	HO	1956	19,000	
Jamaica	JM	1955	4,450	in *British West Indies and Bermuda*
Mexico	MX	1956	53,000	
Netherlands Antilles	NA	1952	600	
Nicaragua	NU	1956	3,800	
Panama and the Canal Zone	PN	1969	19,000	
Paraguay	PA	1957	2,300	
Peru	PE	1955	24,100	
Portugal	PO	1961	25,700	
Puerto Rico	RQ	1958	5,000	in *United States Possessions in the Caribbean*
Spain	SP	1961	50,400	
Surinam	NS	1954	2,500	in *The Guianas*
Trinidad and Tobago	TD	1955	1,850	in *British West Indies and Bermuda*
United States Miscellaneous Caribbean islands	BQ	1958	100	in United *States Possessions in the Caribbean*
United States Possessions in the Caribbean		1958	8,500	
United States Virgin Islands	VQ	1958	3,400	in *United States Possessions in the Caribbean*
Uruguay	UY	1956	8,600	
Venezuela	VE	1961	17,200	

Annex II

ABBREVIATIONS

admd	administrative division
agri.	agricultural
cont.	continued from previous column
drg.	drainage
entr.	entrance
int.	intermittent
irg.	irrigation
mtn.	mountain
nav.	navigation
ppl	populated place
resvn.	reservation
rk(s)	rock(s)
r.r.	railroad
sect.	section
stm.	stream
wtr.	water

Plural forms are indicated in parentheses, as (s), (es), (en), (len), where sometimes used either as generic or as designation. In cases where a diacritic is dropped in forming a plural, the latter is spelled out.

The note "(as suffix)" means the word is added to the specific name to form a compound, like "berg" and "dal" in the United States Virgin Islands and "tepuy" in Venezuela. "Tepuy" is joined by hyphen and is not capitalized.

THE CLASSIFICATION OF GEOGRAPHICAL ENTITIES AND GEOGRAPHICAL NAMES*

Report presented by France

The National Geographical Institute, being a public cartographic establishment, classifies geographical names and the objects to which they refer not only according to the nature of the objects but also in the light of traditional conventional symbols. The Institute's classification is not as systematic as it would be if it were a classification directed towards the geographical names alone, regardless of the technology applied to them. It suffers, too, from limitations imposed by a two-figure code, which is used for automatic data processing. However, since the classification has a definite practical value, it is reproduced below in detail together with the relevant code-numbers.

1. *Miscellaneous objects*

00 Road, avenue, track, ride, fire-break, path
01 Roundabout, crossroads, square
02 Bridge, foot-bridge, ford, tunnel, arch
03 Monument, cross, statue, tumulus, dolmen, menhir, inscribed stone
04 Marker post, pylon, transformer, electricity sub-station
05 Ruin, remains
06 Water-tower, reservoir
07 Spring, tapped spring, fountain, well, wash-house, resurgence
08 Quarry, sand-pit, marl-pit, mushroom bed, gravel-pit
09 Fish farm
10 Lock
11 Hole, cave, swallow-hole, chasm, cavern
12 Beacon
13 Viewpoint, observatory
14 Pool, pit
15 Characteristic tree
16 Road numbers and special cartographic information
17 Sports ground, racecourse
18 Cemetery

2. *Named places*

19 Named place, meadow pasture, grassland, arable land, vineyard, field, clearing, heath, brushwood

3. *Woods and forests*

20 State forest
21 Forest
22 Wood, grove, park

4. *Populated places*

23 Prefecture
24 Sub-prefecture
25 Canton
26 Municipality
27 Hamlet
28 Isolated group of buildings
29 District, quarter
30 Group of dwellings
31 Isolated house
32 Forest lodge, chalet, mountain refuge
33 Country house, estate
34 Farm, agricultural tenement
35 Hut, shed, shelter, shack, store, warehouse, wine depot, barn, pen, glasshouse
36 Market, covered market
37 Sheep farm, livestock station
38 Official building, public hall
39 Railway station, bus or coach station, marine terminal, air terminal, halt
40 Airfield
41 Penitentiary establishment
42 Health establishment
43 Teaching or research establishment
44 Religious establishment
45 Industrial establishment, pumping station, slaughter-house
46 Mine
47 Tower
48 Mill
49 Citadel, fort, blockhouse
50 Barracks, quarters
51 Military camp
52 Training ground
53 Deconsecrated church
54 Religious building

5. *Hydrography*

60 Ocean, sea
61 Island
62 Peninsula
63 Strait
64 Isthmus
65 Cape
66 Bay
67 Rock, reef
68 Beach, strand
69 Lighthouse, light
70 Harbour, quay, dike, pier
71 Marine activity; salt-pan, oyster-bed etc.
72 Estuary, mouth
73 River
74 Stream
75 Brook, torrent, cascade, ditch
76 Lake, pond
77 Aqueduct
78 Marsh, peat-bog, swamp, fen, moat
79 Canal
80 Dam, sluice

6. *Orography*

81 Mountain, aiguille, peak, pinnacle, summit, point, massif
82 Ridge, crest
83 Hillside, slope, rise, flat, flank, shelf, ledge
84 Mountain range
85 Plateau
86 Valley, vale, glen, ravine, transverse valley, coomb, gorge, defile, thalweg
87 Hill, hummock, bank, mound
88 Pass, saddle
89 Basin, dolina, closed basin, hollow, amphitheatre
90 Plain
91 Glacier, firn, crevasse
92 Dune, sand
93 Rocks, scree, landslip

* The original text of this paper, submitted in French, was contained in document E/CONF.61/L.66.

THE FRENCH-ENGLISH GLOSSARY OF TERMS USED IN THE CARTOGRAPHIC PUBLICATIONS OF THE NATIONAL GEOGRAPHICAL INSTITUTE*

Report presented by France

For the needs of its own services and to satisfy cartographic requirements, the National Geographical Institue is at present preparing a French–English glossary of designations used in its publications. This glossary is to be produced in two parts, the first consisting of an alphabetical list of terms, together with the corresponding abbreviations, and the second classifying the terms according to the nature of the objects and cartographic usage.

The document[1] submitted to the Conference is a partial and provisional edition of the first part of the glossary. It includes designations, generic terms and abbreviations. For each French term, it gives, on separate lines, one or more English (or American) terms which are regarded as the principal equivalents; in some cases, secondary English equivalents are given below the principal equivalents.

* The original text of this paper, submitted in French, was contained in document E/CONF.61/L.68.

[1] Copies of this provisional edition of the glossary were distributed to the participants as document E/CONF.61/L.68/Add.1, and are available for reference in the Map Collection of the United Nations.

EXPERIENCE IN THE STUDY OF POPULAR (LOCAL) GEOGRAPHICAL TERMS AND THE COMPILATION OF TERMINOLOGICAL GLOSSARIES*

Report presented by the Union of Soviet Socialist Republics

The First United Nations Conference on the Standardization of Geographical Names (Geneva, 1967) noted, in resolution 19, that geographical terms were of great importance for standardization, and urgently requested national bodies on geographical names to consider thoroughly recommendations on the study of the different meanings of words employed in those names.

Furthermore, the Conference recommended the publication of glossaries which would be collections of geographical (generic) terms with the meanings they acquire in proper names.

A popular, or local, term is a term included in a geographical name and indicating the type of a particular geographical feature. Such a term may be used alone in the same sense (see recommendation A).

Lists of geographical terms have been published in this country for a long time; but, in accordance with the above-mentioned recommendations, the gathering and systematization of generics have been notably expanded and many glossaries have therefore been issued as a result (see annex). The compilation of these glossaries was an arduous job, as the USSR is a multinational and multilingual country, all the nationalities being politically equal and each having a state organization of its own.

The study of popular (local) geographical terms in this country has a history covering almost two hundred years. Russian scholars long ago noticed that terms provide much valuable information of various kinds. It is therefore not surprising that they interest linguists, cartographers and geographers. N. I. Nadezhdin of Moscow University (1804-1856) was probably one of the first persons to notice the great store of scientific information contained in the geographical nomenclature of maps. Since geographical names which include generics as an element frequently occur on maps, it is especially important for cartographers to be acquainted with these terms and to interpret them consciously. Otherwise errors, with dire consequences, are inevitable.

There are two related aspects to the study of popular geographical terms. The first one is the gathering and systematization of terms. The very problem is enormous in the case of the USSR, which counts approximately 130 languages. In working at this task cartographers take the lead. It was they who used to compile lists of local generics employed in geographical names, to meet the requirements of cartography and map production. A brief list of terms is compulsory in guides on the transcription of geographical names. Such lists are also included in name indexes of the fundamental cartographic works, such as the World Atlas and the Naval Atlas. But such lists, in spite of their unquestionable usefulness, could not entirely satisfy topographers and cartographers.

The Department of Geographical Names of the Central Research Institute of Geodesy, Aerosurveying and Cartography launched the publishing of a series of glossaries of local generics and other words employed in geographical names occurring on the territories of Soviet republics and regions as well as in some foreign countries. Since 1959 the Cartographic Service has been developing a new service — the compilation of toponymic glossaries. It is important that these publications indicate not only the spelling of a term and its different meanings but also the change of its meaning between different places and its dialectal forms. Moreover, occurrences of geographical names using generics are always given in glossaries, thus enabling information to be established on toponymic patterns, including those concerned with the structure and position of terms in the name. The work on glossaries continues, while many have already been published. They cover the greater part of the Soviet Union: Azerbaijan, Kazakhstan, Western and

* The original text of this paper, prepared by E. M. Murzaev, Institute of Geography, the USSR Academy of Sciences, was contained in document E/CONF.61/L.74.

eastern Siberia, the far east (several issues), the Byelorussian SSR, Daghestan, the Gorno-Altai Autonomous Region, the north European USSR, and other regions. Among the glossaries of terms covering foreign countries a large work on terms of Iran should be mentioned (1971). Of special interest are three bilingual dictionaries of languages of Daghestan — Lak–Russian, Lezghin–Russian and Avar–Russian — which include toponymic glossaries and lists of local geographical terms as appendices.

The systematization and the determination of the local meanings of popular geographical terms proved to be such a fascinating task that many organizations and individuals not immediately connected with cartography and map production joined forces in it. Thus the USSR Geographical Society issued "The vocabulary of geographical terms of western Siberia" (1970), the Byelorussian Academy of Sciences published a big glossary of Byelorussian topographic and hydrological terms (1971), and Ukrainian geomorphological terms are included in the list of geographical appellations given in the collection "Poles'je" (1968). The Mongol Commission of the USSR Academy of Sciences published as early as 1934 a list of Mongolian geographical terms.

It is natural that such a brief account does not permit even mentioning a great number of articles contained in various toponymic works, transactions, reviews and other publications which in some way include information about the geographical terminology of the Soviet nationalities. It should only be noted here that the gathering and systematization of local terms produced in some instances bulky regional card indexes containing a large amount of valuable information for scientific studies and generalization. Such indexes are already in use in Moscow, Sverdlovsk, Tomsk, Minsk, Baku and some other cities, while compilation is in progress in Tbilisi.

This whole complex of records of terms enabled Soviet scholars to approach the second aspect of the study of local terms. It concerns the difficulties which arise in comparative analysis — the variation in the form and meaning of terms between different regions of the USSR and foreign countries — and the determination of the areas where they occur.

The development of this aspect is closely related to the toponymic studies which have continually increased in scope in this country for the last 20 years. No one can doubt this relationship since no toponymic system has been discovered which does not employ popular (local) terms.

In some cases a frequently used geographical name with a long history has become elliptical, i.e. had its generic term cut off, but this is the result of a change which the original name has undergone. The only difference between linguistic communities and regions is in the proportion of toponyms using generic terms. Any toponymic study would under these circumstances be useful provided that it began with the gathering and systematization of common geographical terms.

Reserach in local terms has advanced considerably in the last decade. In 1966 Moscow was the venue of the toponymic conference dealing with the problem "Local Geographical Terms in Toponymy". The proceedings were published in 1970 (*Voprosy geografii*, No. 81). The semasiology of Slavic geographical terminology was thoroughly analysed in Moscow in 1969. A particular study of Slavic holo-terminology was made in Leningrad. A monograph on Azerbaijani generics was issued in Baku in 1966. A similar work on Turkmen terminology has been completed but has not been published yet. A large work on Ukrainian popular generics is awaiting publication. Undoubtedly, these manuscripts will soon be available to the public as printed works.

Numerous articles and notes dealing with the subject that interests us, have appeared in various periodicals and collections. A bibliographical list would require hundreds of entries. Among the best-known serial publications which carry research works on popular geographical generics one should note: the collection "Voprosy toponomastiki" (five issues, Sverdlovsk, 1962-1971); "Jazyki i Toponimija Sibiri" (three issues, Tomsk, 1966-1970), and other publications of the Tomsk Pedagogical Institute and University; "Toponimika Vostoka" (three issues, Moscow, 1962-1969, with the fourth issue now in the press); "Onomastika Povolzja" (two issues, Ul'janovsk, Gorkij, 1969-1971, with the third one is in the press in Ufa); proceedings of the Ukrainian conferences on onomastics, "Pytann'a toponimiki ta onomastiki", "Pytann'a onomastiki" and "Pytann'a gidronimiki" (Kiev, 1962-1971); and the scientific periodical of the Moscow branch of the Geographical Society, *Voprosy geografii*, Nos. 58, 70 and 81 (Moscow, 1962-1970).

The following conclusions may be drawn from Soviet studies in local geographical terminology.

1. Generics used in geographical names presuppose the existence of the features these generics signify. Very frequently, though not necessarily, both the toponym and the term it employs completely agree with the corresponding geographical feature. Such correspondence can be labelled toponymic affirmation.

2. In any toponymic study it proves to be more accurate and effective to proceed from an ordinary word to a proper name than vice versa. In other words, a term is a general key in revealing the etymology of a great many toponyms.

3. Popular geographical generics are the main source of scientific terminology. Many of them have come into scientific and literary usage. The extensive borrowing from the languages of Soviet nationalities has enriched the Russian vocabulary. Some generics have in turn been borrowed from Russian by international scientific terminology: such words as "taiga", "tundra", "steppe", "podzol" and "chernozom" have become part of many European languages. But in fact the rich terminology of the Soviet nationalities is seldom used in other countries. The international *Glossary of Geograpical Terms* by L. D. Stamp (three editions: New York, 1961, 1962) contains only 29 Russian terms, including those borrowed by the Russian from the languages of the Soviet nationalities. Meanwhile it gives 77 Arabic, 105 French and 41 Scottish terms, and 127 from India and Sri Lanka.

4. A comparative analysis of the local generics of the USSR enables one to visualize the areas of occurrence of terms with stable or changing semantics over the surprisingly vast territories of Eurasia. In the process one

can see many specific (non-generic) terms which remain extremely localized and are rarely used in geographical names and the literary language. To name a few: "polonina" in the Carpathians, "golec" among Siberian mountain terms and "kamen'" in the Urals.

5. Apart from the requirements of cartography and toponymy, the study of popular geographical terms is of great interest and importance to a number of sciences, including geography, historical geography, linguistics and ethnology. As early as 1915 a prominent Russian geographer, L. S. Berg, wrote: "The distribution of popular terms and the variation in their meaning which they undergo in different localities indicate the course of colonization, the migration of population and the mutual influence of neighbouring peoples. The result of the settlers' observations of their environment over the centuries and the creative work of such brilliant collective bodies, i.e. the people — popular terms — deserve close attention from, in particular, both the philologists and the geographers." (*Zemlevedenye*, Vol. IV, Moscow, 1915)

Annex

The following regional glossaries of geographical terms have been published in the USSR:

Sovremennaya mongol'skaya toponimika (Leningrad, 1934)

Slovar' russkoy transkriptsii i slov, chasto vstrechayushikhsya v geograficheskikh nazvaniyakh Kazakhskoy SSR (Moscow, 1960)

Slovar' geograficheskikh terminov i drugikh slov, obrazuyushikh komi toponimiyu (Moscow, 1968)

Slovar' geograficheskikh terminov i drugikh slov, vstrechayushchikhsya v nanayskoy toponimii (Moscow, 1968)

Slovar' geograficheskikh terminov i drugikh slov, vstrechayushchikhsya v toponimii Khakasskoy Avtonomnoy oblasti (Moscow, 1968)

"Materialy k slovaryu ukrainskikh geograficheskikh apellyativov", in *Polesye* (Moscow, 1968)

Slovar' geograficheskikh terminov i drugikh slov, vstrechayushchikhsya v toponimii Gorno-Altayskoy Avtonomnoy oblasti (Moscow, 1969)

Slovar' russkoy transkriptsii geograficheskikh terminov i drugikh slov, vstrechayushchikhsya v toponimii Azerbaydzhanskoy SSR (Moscow, 1971)

Slovar' terminov i drugikh slov, vstrechayushchikhsya v nenetskikh geograficheskikh nazvaniyakh (Moscow, 1971)

Slovar' geograficheskikh terminov i drugikh slov, vstrechayushchikhsya v toponimii Tuvinskoy ASSR (Moscow, 1971)

Slovar' geograficheskikh terminov Zapadnoy Sibiri (Leningnad, 1970).

Slovar' chukotskikh, koryakskikh i eskimosskikh terminov i drugikh slov, vstrechayushchikhsya v geograficheskikh nazvaniyakh SSSR (Moscow, 1971)

Belaruskiya geografichnyya nazvy (Minsk, 1971)

Slovar' geograficheskikh terminov i drugikh slov, formiruyushchikh toponimiyu Irana (Moscow, 1971)

REQUIREMENTS AND SUGGESTIONS CONCERNING THE STANDARDIZATION OF GEOGRAPHICAL TERMINOLOGY*

Report presented by Czechoslovakia

It was as early as the latter half of 1951 when Czechoslovakia started to make efforts to solve the problems connected with an approach to geographical terminology according to principles fully respecting the political and constitutional organization of the country concerned.

The main reason why Czechoslovak experts were so much concerned about this problem was the fact that both world atlases and foreign maps had been using German names in referring to the territory of Czechoslovakia. This meant that there was an urgent need to solve the problem of geographical terminology in a new way which would not only fully respect national sovereignty but also give equal rights to all countries within their administrative boundaries.

Geographical terminology is only a part of the information provided by a map or atlas, but even within this very limited field it is necessary to respect the sovereignty of every country and the official names of all individual geographical units within its frontiers.

In maps, the press, literature and elsewhere, geographical terminology must fulfil its informative function, and this it can only do when it fully respects the existing political and constitutional structure of every country in the world.

If this is borne in mind, Czechoslovakia will support all positive efforts aimed at standardizing geographical terminology, as well as the idea of international collaboration with full respect for the participating countries and regional groups.

This was also the aim and purpose of the Prague Conference on the Standardization of Geographical Terminology. Participating in this Conference were the representatives of national geographical organizations and cartographic services concerned with geographical terminology, as well of as scientific institutions, of the socialist countries, members of the Seventh and Eighth Regional Groups. The representatives of the German Democratic Republic also took part in the Conference, which was held from 4 to 6 October 1971.

* The original text of this report was contained in document E/CONF.61/L.88.

PROJECT OF THE INTERNATIONAL DICTIONARY OF GEOGRAPHICAL TERMS USED ON GENERAL GEOGRAPHICAL MAPS*

Report presented by Czechoslovakia

Following the recommendation of the conference on the standardization of geographical names held from 4 to 6 October 1971 in Prague, a project of an international dictionary of geographical names has been worked out. Its publication is planned for 1974.

The Czechoslovak cartographical service submits on behalf of the cartographical services of socialist countries to the participants in the Second United Nations Conference on the Standardization of Geographical Names a project of the dictionary and has the pleasure of inviting the cartographical services to participate.

General conception of the dictionary

The purpose of the dictionary is the international unification of geographical terms used on general geographical maps. Its contents will comprise general parts of geographical names used on maps (such as upland, mountains, basin), and general geographical terms used directly on the map or in the map key (such as crater, dunes, rapids).

The dictionary will be a terminological work with short definitions of geographical terms. It will be published in all the languages of the participating countries, with the terms will be given in all the national languages concerned, and then defined in the language of the keyword only. In the case of the languages using the Cyrillic alphabet, the official transcription into Roman letters will be given in brackets. The definitions will either be unequivocal or — in intricate cases — involve a proposal for the standardization of the term. They will serve the needs of cartography. Complicated definitions will be supplemented with drafts or maps.

The dictionary will include the 800 to 1,000 most important terms.

The dictionary will be edited by the Czechoslovak cartographical service in the English version and by the cartographical service of the USSR in the official Russian version. These versions will be the obligatory bases for the national versions in the languages of the countries involved.

Technical instructions for the compilers

The terms will be arranged in the dictionary according to the main thematic groups:

1. Dry land relief and relief of sea bottoms;
2. Waters;
3. Biogenic formations;
4. Settlements, industrial and engineering structures;
5. Communications;
6. Frontiers and borders;
7. Other groups.

The terms within the thematic groups will be given serial numbers according to their importance.

At the end of the dictionary there will be alphabetic indexes of all terms in the different languages of the countries involved. Cross-references will be provided where necessary (thus, "field, lava, see also lava field").

As an illustration we present the term "jezero" (English "lake"), in the Czech version, from the terminological dictionary:

jezero — s. jazero; b. esepo (ezero); sch. jezero; m. tó; n. der See; p. jezioro; r. озеро (ozero):

přirozená vodní nádrž, vyskytující se ve sníženinách zemského povrchu; mají tvar plochých van, hlubších pánví nebo velmi hlubokých vpadlin dokole. obklopených svahy; jsou úplně odloučeny od moře (a natural water basin occurring in the depressions of the earth's surface; their form is that of flat bathtubs, deeper pans, or very deep hollows surrounded with slopes/hills; they are entirely separated from the sea.

(Remark: s. = Slovak, b. = Bulgarian, sch. = Serbo-Croatian, m. = Hungarian, n. = German, p. = Polish, r. = Russian.)

In languages with a variable accent, the position of the accent will also be marked in the entry.

Forms of terms in languages using non-Latin alphabets will be given in the national script. In the edition in the Roman alphabet the official transliteration of the term will be given according to the mode of transliteration valid in the individual countries concerned.

A bibliography will be attached to the dictionary.

Schedule of work

May 1972 — presentation of the project

31 March 1973 — compilation of the list of entries

31 December 1973 — preparation of entries

31 March 1974 — compilation of the official English and Russian versions

31 December 1974 — handing over of the dictionary to the press.

The project of the dictionary has been sent to all participants in the Prague conference on standardization for amendments. After collecting all the amendments, the Commission on Terminology of the Czech Board of Geodesy and Cartography will work out the final project. On the basis of this all participating countries will present their suggestions for terms which they consider important enough to be included in the dictionary. Czechoslovak experts will then co-ordinate all the suggestions and make the final selection of the terms. These will be sent back to all the participants for amendments and, if need be, for suggestions on the definitions of individual terms.

The final preparation and publication of the International Dictionary of Geographical Terms Used on Maps have been entrusted to Czechoslovakia.

Viewpoint

The Czechoslovak delegation, considering the dictionary a valuable contribution to the unification and standardization of geographical names, suggests that it be recommended for implementation, welcoming simultaneously the participation of other countries.

* The original text of this paper was contained in documents E/CONF.61/L.86 and E/CONF.61/L.89.

AGENDA ITEM 11

Writing systems

(*a*) Transfer of names from one writing system into another
(i) Into a single romanization system[1]
(ii) Into other writing systems
(*b*) Writing of names from unwritten languages

REPORT OF THE WORKING GROUP ON A SINGLE ROMANIZATION SYTEM, PART 1, 19 FEBRUARY 1970 TO 6 DECEMBER 1971*

In accordance with resolution 9 of the First United Nations Conference on the Standardization of Geographical Names,[2] the *Ad Hoc* Group of Experts on Geographical Names agreed at its second session, held at United Nations Headquarters from 10 to 20 March 1970, to set up a Working Group on a Single Romanization System charged with making a comparative study of the various systems of transliteration and with analysing the advantages and disadvantages of each for the international standardization of geographical names. The *Ad Hoc* Group of Experts recognized that such a comparative study would need to be extremely detailed and would have to be carried out by correspondence, at least in its early stages. Later, the working group would have to meet when and where necessary. The members of the working group are J. Breu, Chairman (Austria), P. J. M. Geelan (United Kingdom of Great Britain and Northern Ireland), G. Gómez de Silva (Mexico), A. M. Komkov (Union of Soviet Socialist Republics), F. Nédélec (France), C. Page (United States of America) and D. N. Sharma (India).

The working group met twice during the second session of the *Ad Hoc* Group of Experts. At the first meeting, held on 19 February 1970, Mr. Gómez de Silva was unanimously elected chairman of the working group. During the second meeting, held on 20 February 1970, the following decisions were taken:

1. That the working group should begin its work without meetings, by correspondence;

2. That the working group should hold its third meeting during the third session of the *Ad Hoc* Group of Experts on Geographical Names in 1971;

3. That each member of the working group should send to all the other members, if possible, by the end of May 1970, any romanization table (or short article on the subject) he thought might be of general interest, the names of books or long articles dealing with the question of romanization, and any suggested solution to the problem.

The following activities took place between the second and third sessions of the *Ad Hoc* Group of Experts.

The Chairman issued four circulars. He listed 46 official national languages, including the official languages of the constituent republics or states of India and the Union of Soviet Socialist Republics, that are not normally written in the Roman script, and suggested that the work be divided among the members according to the alphabetical sequence of the names of the alphabets (in English) and of the names of the members. This division of work was generally accepted, but some changes were necessary as C. Page and D. N. Sharma expressed preferences for certain languages.

2. Eighteen circulars, including the four circulars of the Chairman, were distributed, containing discussions of the principles of romanization and of terms used in the work of the working group, as well as material concerning the writing systems of the following alphabets: Amharic, Arabic, Armenian, Assamese, Azerbaijani, Bengali, Greek, Gujarati, Hebrew, Hindi, Japanese, Kannada, Kashmiri, Khmer, Korean, Malayalam, Marathi, Nepali, Oriya, Punjabi, Persian, Russian, Sinhalese, Tamil, Telugu, Thai and Urdu.

The third meeting of the working group took place on 3 February 1971 during the third session of the *Ad Hoc* Group of Experts on Geographical Names and was attended by J. Breu, P. J. M. Geelan, P. Hovda, A. M. Komkov, F. Nédélec, C. Page and D. N. Sharma. Present as observers were Y. M. Nawabi (Iran) and C. H. Wang (China). In the absence of the Chairman,

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[1] The Working Group on a Single Romanization System for each Non-Roman Writing System has presented under this subitem papers on the transliteration of the Japanese, Korean, Laotian, Macedonian, Maldivian, modern Greek, Mongol, Persian, Serbo-Croatian, Somali and Thai alphabets. The original text of these papers appeared in the addenda to document E/CONF.61/L.5. The study of these alphabets has been referred back to the Group of Experts for further study and presentation at the third United Nations Conference on the Standardization of Geographical Names, and they are therefore not reproduced here below.

* The original text of this report was contained in document E/CONF.61/L.5.

[2] *United Nations Conference on the Standardization of Geographical Names*, vol. I, *Report of the Conference* (United Nations publication, Sales No. E.68.I.9), pp. 12-13.

Mr. Breu was appointed acting chairman of the working group by the Group of Experts.

Three written statements were distributed to the members of the working group, one of them containing a full comparative study on the transliteration of Khmer writing submitted by Mr. Page.

The working group realized that the title of resolution 9 of the First United Nations Conference on the Standardization of Geographical Names[3] was subject to misinterpretation. It was suggested, therefore, that the title of resolution 9 should be amended to read: "A single romanization system for each non-Roman writing system for international application". This amendment is submitted as a proposal to the present Conference.

The need for defining certain terms to be used within the working group was recognized, and the following definitions were suggested by Mr. Page and agreed upon by the working group.

Script: a set of graphic symbols which may be variously employed in the representation of the phonological and/or morphological elements of a language in languages (the items of an alphabetic script typically represent phonemes; those of a syllabic script, syllables; and those of an ideographic script, morphemes).

Alphabet: a specific set of graphic symbols which may be employed in the representation of the phonological elements of a particular language.

Transcription: the process of recording the phonological and/or morphological elements of a langage in terms of a specific writing system.

Transliteration: the process of recording the graphic symbols of one writing system in terms of the corresponding graphic symbols of a second writing system.

The following general principles for romanization systems were agreed upon:

1. Systematic reversibility should be sought in so far as is practical;

2. Consistent employment of graphic symbols within any given romanization system should be sought.

Whereas the main activity of the working group between the second and third sessions of the *Ad Hoc* Group of Experts had been related to the collection of material, in the period between the third and fourth sessions of the *Ad Hoc* Group of Experts the members of the working group decided to concentrate on elaborating comparative study.

The division of work was revised and determined as follows.

Greek: Mr. Gómez de Silva.

Amharic: Mr. Breu. In connexion with paragraph 52 of the report of the *Ad Hoc* Group of Experts on its second session (ESA/RT/C/GN/1), Mr. Breu was requested to study the implications of the Ethiopian reply to an inquiry made by the Cartography Section of the United Nations Secretariat.

Hebrew: Mr. Gómez de Silva.

Arabic: Mr. Breu. The meeting further recommended that the expert for the Arabic division contact authorities in the various Arabic-speaking countries with a view to implementing resolution 12 of the First United Nations Conference on the Standardization of Geographical Names.

Persian: Mr. Gómez de Silva. The meeting ascertained from the expert from Iran that proposed alterations to the recommended system for the transliteration of Persian names cited in *Transliteration of Farsi Geographic Names to Latin Alphabet* (Government of Iran, 1967) had not been made up to that time. If modifications were made, the expert from Iran would inform Mr. Gómez de Silva.

Pashtu: Mr. Geelan. Particular consideration will be given to document E/CONF.57/L.61, dated 22 October 1970, of the Sixth United Nations Regional Cartographic Conference for Asia and the Far East.

Somali: Mr. Gómez de Silva.

Serbian: Mr. Gómez de Silva was asked to prepare a draft resolution for the Second United Nations Conference on the Standardization of Geographical Names. Special consideration was to be given to the fact that Serbo-Croatian uses both a Cyrillic and a Roman writing system.

Macedonian: Mr. Nédélec.

Bulgarian: Mr. Geelan.

Mongol: Mr. Nédélec.

Maldivian: Mr. Geelan.

Burmese: Mr. Geelan.

Thai: Mr. Page. The meeting further suggested that Mr. Page should enumerate alterations to the recommended system for the transliteration of Thai names as cited in "Romanization guide for Thai script" (United States Board on Geographic Names, Washington, D.C., 1968).

Khmer: Mr. Page's comparative study revealed some inconsistencies in the joint Cambodian and Board on Geographic Names/Permanent Committee on Geographical Names system drawn up in 1962 and referred to in paragraph 51 of the report of the *Ad Hoc* Group of Experts on its second session (ESA/RT/C/GN/1). These will be brought to the attention of the authorities of the Khmer Republic in the hope that a definitive system may be presented to the Second United Nations Conference on the Standardization of Geographical Names for adoption.

Laotian: Mr. Page.

Chinese: With regard to the last sentence of paragraph 50 of the report of the *Ad Hoc* Group of Experts on its second session, the East Central and South-East European division will submit to the *Ad Hoc* Group of Experts at its fourth meeting a report on the romanization of Chinese script. The United Kingdom division will also prepare a statement, as will Mr. Wang of the East Asian division.

Korean: Mr. Page.

Japanese: Mr. Page.

Languages of the Indian division: It was recommended that the transliteration tables distributed by Mr. Sharma

[3] *Ibid.*

should be circulated for consideration, and comments directed to him in time for discussion at the Second United Nations Conference on the Standardization of Geographical Names in relation to paragraph (*b*) of recommendation D in resolution 4 of the First United Nations Conference on the Standardization of Geographical Names.[4] The writing systems of the following languages are involved: Hindi, Nepali, Gujarati, Marathi, Punjabi, Oriya, Bengali, Assamese, Urdu, Telugu, Kannada, Malayalam, Tamil, Kashmiri, Sinhalese and Bhutanese.

Languages of the Union of Soviet Socialist Republics division. Mr. Komkov will present a statement on the romanization of Russian to the Second United Nations Conference on the Standardization of Geographical Names. Subsequently, he will give consideration to romanization systems for the state languages of the constituent Republics other than the Russian Soviet Federated Socialist Republic (Ukrainian, Byelorussian, Moldavian, Tajiki, Uzbek, Turkmen, Kirghiz, Kazakh, Azerbaijani, Armenian and Georgian). In that connexion, it was proposed that the following modifications should be made to recommendation D of resolution 4 of the First Conference: paragraph (*c*) should be redesignated (*d*); and a new paragraph (*c*) should be inserted to read, "Give a recommendation as to which linguistic form or forms should be used for international standardization".

At its fourth meeting on 12 February 1971 the working group, on the basis of information received from Mr. Gómez de Silva, unanimously elected Mr. Breu to be the new chairman.

Since the third session of the *Ad Hoc* Group of Experts, eight circulars have been distributed amongst the membership of the working group. These circulars included a proposal made by the Chairman on the representation of the comparative studies; material on the writing systems of the Bulgarian, Arabic, Hebrew, Amharic, Chinese and Japanese alphabets, and on the alphabets of non-Slavic languages of the USSR; and comparative studies on the romanization of the Bulgarian, Macedonian, Mongolian, Arabic, Amharic and Maldivian alphabets.

[4] *Ibid.*, p. 11.

REPORT OF THE WORKING GROUP ON A SINGLE ROMANIZATION SYSTEM, PART 2, 7 DECEMBER 1971 TO 15 APRIL 1972*

Since the composition of part 1 of this report (reproduced immediately above), 13 circulars have been distributed among the membership of the working group. These circulars include draft systems for the romanization of the Devanāgarī alphabet and of Khmer writing, a comparative study of the romanization of the Russian alphabet, comparative tables showing the romanization of the Thai, Laotian, Japanese and Devanāgarī writing systems, and comments on the romanization of the Arabic, Pashtu, and Burmese alphabets.

The Chairman of the group corresponded with the expert of the Arabic division on the subject of a uniform romanization of the Arabic alphabet.

It is planned that the working group will hold its fifth meeting in London on 9 May 1972, i.e. the day immediately before the opening of the Second United Nations Conference on the Standardization of Geographical Names.

* The original text of this report was contained in document E/CONF.61/L.5/Add.1.

TRANSLITERATION INTO ROMAN AND DEVANĀGARĪ OF THE INDIAN GROUP*

REPORT PRESENTED BY THE WORKING GROUP ON A SINGLE ROMANIZATION SYSTEM

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* The original text of this report prepared by D. N. Sharma, member of the Working Group on a Single Romanization System was formerly contained in document E/CONF.61/L.5/Add.2.

TRANSLITERATION OF DEVANĀGARÎ ALPHABET

INTRODUCTORY

1. Devanāgarī or Nāgarī is the alphabet in which Sanskrit and several modern languages of the Indian Division are written. With the exception of Urdū, alphabets of the other languages have retained the same or very similar sounds and the same alphabetical sequence although many of these use altogether different or modified form of characters and have a few more or less sounds. Urdū alphabet is mainly borrowed from Persian and Arabic alphabets and is written the same way.

2. Devanāgarī is a phonetic and highly scientific alphabet. It is *consistent* in that the same letter or combination of letters, always stands for the same sound and no letter indicates more than one sound. There are never any redundant or silent letters in a word. It is *complete* in that no words contain sounds of which spelling takes no account and proper accentuation is inherent in the spelling itself.

3. To begin with many eminent scholars of Sanskrit devised for their own use different systems of transliteration of Devanāgarī into Roman. With the passage of time there has emerged a practically uniform system of transliteration of Devanāgarī and allied alphabets. Nevertheless, no single system of Romanization has yet developed. The comparative table that follows makes this clear.

The system of transliteration which I have now prepared for adoption does not depart from whatever has come to be accepted as standard practice. It offers standard transliteration where there has been lack of uniformity and also provides for sounds peculiar to the other languages of the Indian Division.

As far as possible Roman transliteration has been so chosen as will not materially affect pronunciation even if diacritical marks get omitted.

4. I had sent copies of my booklet 'Transliteration into Roman and Devanāgarī of the Languages of the Indian Group' to the Vice Chancellors of the various Indian universities to elicit the opinion of their linguists. I am happy to say that I received their whole hearted co-operation. Taking into consideration their critical and valuable appraisal I have now revised the transliteration tables.

EXPLANATORY NOTES FOR SHARMA'S TRANSLITERATION TABLES

5. (*a*) VOWELS

(*i*) I have omitted the vowels ॠ (r̄ wrongly pronounced by some as rī) and ऌ (l̤ wrongly pronounced by some as lri) as these are no longer in use.

(*ii*) I have invariably used macron over a vowel (ā) to show it is long and breve (ĕ) to indicate that it is shorter than normal.

(*iii*) I would have preferred to transliterate ऐ as ae but have accepted ai as it has become more or less established.

(*b*) CONSONANTS

(*i*) Although previously I had used the diacritic ‿ above diagraphs such as dh, kh, which stand for Devanāgarī letters ध् ख् etc., I have now discarded this to fall in line with the general practice. I have, however, suggested that where each of the letters of a diagraph has a distinct independent sound, then it should be indicated by placing a hyphen between the two i.e. d-h.

(*ii*) I have accepted cha for च in preference to ca as the former is widely used and understood by those conversant with English language. Similarly chha for छ in preference to cha.

(*iii*) Previously I had transliterated व as va or wa ; now I have discarded the alternative wa for the sake of consistency.

(*iv*) As far as possible I have avoided the use of diacritics to (a) lessen the work of composing (b) avoid confusion which arises by their omission. In parts of India many names have come to be mispronounced because diacritics originally used for transliteration were dropped in popular publications. For example Sharma has become Sarma.

Because of these considerations I have accepted the transliteration of श as sha in preference to Śa or Ça.

(*v*) The letter ज्ञ is a combination of ज (j) with ञ (ña) and must therefore be transliterated as jña. It has been suggested that it should be transliterated as gya as a large number of people in North India have come to pronounce it as such. Doing so will give rise to inconsistency I have, therefore, not accepted the suggestion.

(*vi*) The nasal (5th letter) of a group of consonants always precedes the other four consonants of that group. In other cases *anuswāra* is used. However the distinction is neither marked nor widely understood. Hence inter-change of these nasals with *anuswāra* does not affect pronunciation to a discernible degree.

COMPARATIVE TABLE OF DEVANĀGARĪ—ROMAN SYSTEMS

A = Handbook for the Study of Sanskrit, edited by Max Müller, M.A. London—Longman Green & Co., 1866. (In the original text the inherent 'a' is not given).

B = Sanskrit Grammar by William Dwight Whitney. 2nd. Edition 1888.

C = The Department of Public Instruction, Bombay. A Grammar of the Sanskrit Language by F. Kielhorn, Ph.D., C.I.E. Published by Bombay Government Central Book Depot. 3rd. Edition 1888.

D = A Grammar of the Hindi Language by Rev. S. H. Kellogg. Published 1893.

E = A Higher Sanskrit Grammar by Moreshwar Ramchandra Kale. 4th. Edition 1912.

F = First Book of Sanskrit by A. S. Bhandarkar, Indore, (India). 28th. Edition 1936.

G = Royal Asiatic Society of Bengal Yearbook 1941.

H = Hindi First Year Course by Missionary Language Board, Mussoorie (India).

I = Library of Congress 195[illegible] This table is adopted from the Journal of the Bombay Branch of the Royal Asiatic Society, with exception of the anuswāra and anunāsika, both of which are transliterated here by m, and the ri for the P[illegible]'s r.

This transliteration does not describe Library of Congress practice prior to February 1945.

J = Adolf Friedrich Stenzler Elementarbuch Der Sanskrit-sprache, 14th. Edition 1960. Published by Verlag Alfred Töpelmann Berlin W 35, revised and completed by Samarendra Nath Biswas.

K = Der Grosse Bertelsmann Weltatlas, Published 1961.

L = Lothar Lutze Zwölf Lektionen Hindi Arbeitsheft Für An fänger. Published 1966. South Asia Institute of the University of Heidelberg (W. Germany) Delhi Branch.

M = United States Board on Geographic Names (Nepali).

N = German Library Transliteration.

O = The Hunterian System (Used by the Survey of India).

Devanāgarī	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Vowels															
अ	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
आ	â	ā	â	â	â	ā	ā	á	ā	ā	ā	ā	ā	ā	ā
इ	i	i	i	i	i	i	i	i	i	i	i	i	i	i	i
ई	î	ī	î	í	î	ī	ī	í	ī	ī	ī	ī	ī	ī	ī
उ	u	u	u	u	u	u	u	u	u	u	u	u	u	u	u
ऊ	û	ū	û	ú	ú	ū	ū	ú	ū	ū	ū	ū	ū	ū	ū
ऋ	ṛi	ṛ	ṛi	ṛi	ṛ	ṛ	ṛ	ri	ṛí	ṛ	rí	ri	ri	ṛ	Not given
ॠ	ṝi	ṝ	ṛî	ṛí	ṛ́	ṝ	ṝ	Not given	ṝ	ṝ	Not given	Not given	rī	ṝ	"
ऌ	ḷi	ḷ	ḷi	ḷri	ḷ	ḷ	ḷ	"	ḷ	ḷ	"	"	Not given	ḷ	"
ए	e	e	e	e	e	e	e (or ē)	e	e	e	e, ē	ē	e	e	e
ऐ	âi	āi	ai	ai	ai	ai	ai (or ai)	ai	ai	ai	ae, ai	ä	ai	ai	ai
ओ	o	o	o	o	o	o	o (or ō)	o	o	o	o, ō	ō	o	o	o
औ	au	āu	au	au	au	au	au (or au)	au	au	au	ao, au	o	au	au	au

Devanāgarī	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Anuswāra ं	ṁ	ṁ or ṅ	ṁ	ṉ	Not given	ṁ	ṁ	ṉ	ṁ	ṁ	ṅ	Not given	ṅg, ñ, ṉ, ṅ, ṁ	ṁ	n
Anunāsika ँ	m̐	m̐ or n̐	ँ	n̐	,,	Not given	~	Not given	m̐	ँ ~	m̐	,,	~	n̐	Not given
Visarga :	ḥ	ḥ	ḥ	ḥ	,,	ḥ	ḥ	h	ḥ	ḥ	Not given	,,	ḥ	ḥ	,,
Hal ्															
Consonants															
क	ka	ka	ka	ka	ka	ka	k	ka	k	ka	k	ka	k	ka	k
ख	kha	kha	kha	kha	kha	kha	kh	kha	kh	kha	kh	kha	kh	kha	kh
ग	ga	ga	ga	ga	ga	ga	g	ga	g	ga	g	ga	g	ga	g
घ	gha	gha	gha	gha	gha	gha	gh	gha	gh	gha	gh	gha	gh	gha	gh
ङ	ṅa	ña	ṅa	ña	ṅa	ṅa	ṅ (or ŋ)	ṉ	ṅ	ṅa	ng	na	ng	na	n
च	cha	ca	cha	cha	ca	ca	c	cha	c	ca	ch (ts)	ca	ch	ca	ch
छ	chha	cha	chha	chha	cha	cha	ch	chha	ch	cha	chh	cha	chh	cha	chh
ज	ja	ja	ja	ja	ja	ja	j	ja	j	ja	j	ja	j	ja	j
झ	jha	jha	jha	jha	jha	jha	jh	jha	jh	jha	jh	jha	jh	jha	jh
ञ	ña	ña	ña	ṅa	ña	ña	ñ (or ɲ)	ṉ	ñ	ña	ñ	na	ñ	na	n

Devanāgarī	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Consonants															
ट	ṭa	ṭa	ṭa	ṭa	ṭa	ṭa	ṭ	ṭa	ṭ	ṭa	ṭ, ṭ’	ṭa	ṭ	ṭa	ṭ
ठ	ṭha	ṭha	ṭha	ṭha	ṭha	ṭha	ṭh	ṭha	ṭh	ṭha	ṭh	ṭha	ṭh	ṭha	ṭh
ड	ḍa	ḍa	ḍa	ḍa	ḍa	ḍa	ḍ	ḍa	ḍ	ḍa	ḍ	ḍa	ḍ	ḍa	ḍ
ढ	ḍha	ḍha	ḍha	ḍha	ḍha	ḍha	ḍh	ḍha	ḍh	ḍha	ḍh	ḍha	ḍh	ḍha	ḍh
ण	ṇa	ṇa	ṇa	ṇa	ṇa	ṇa	ṇ	ṛṇ	ṇ	ṇa	ṇ	ṇa	ṇ	na	n
त	ta	ta	ta	ta	ta	ta	t	ta	t	ta	t, t’	ta	t	ta	t
थ	tha	tha	tha	tha	tha	tha	th	tha	th	tha	th	tha	th	tha	th
द	da	da	da	da	da	da	d	da	d	da	d	da	d	da	d
ध	dha	dha	dha	dha	dha	dha	dh	dha	dh	dha	dh	dha	dh	dha	dh
न	na	na	na	na	na	na	n	na	n	na	n	na	n	na	n
प	pa	pa	pa	pa	pa	pa	p	pa	p	pa	p	pa	p	pa	p
फ	pha	pha	pha	pha	pha	pha	ph	pha	ph	pha	ph	pha	ph	pha	ph
ब	ba	ba	ba	ba	ba	ba	b	ba	b	ba	b	ba	b	ba	b
भ	bha	bha	bha	bha	bha	bha	bh	bha	bh	bha	bh	bha	bh	bha	bh
म	ma	ma	ma	ma	ma	ma	m	ma	m	ma	m	ma	m	ma	m

Devanāgarī	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Consonants															
य	ya	ya	ya	ya	ya	ya	y	ya	y	ya	y	ya	y	ya	y
र	ra	ra	ra	ra	ra	ra	r	ra	r	ra	r, r′	ra	r	ra	r
ल	la	la	la	la	la	la	l	la	l	la	l, l̇, yl̇	la	l	la	l
व	va	va	va	va	va	va	v (or w)	wa	v	va	v	va	w	và	w or v
श	śa	ça	sha	sha	śa	śa	ś	sha	ś	śa	sh	sha	ś	śa	sh
ष	sha	ṣa	ṣha	ṣha	sha	ṣa	ṣ	ṣha	ṣ	ṣa	ṣh	sha	ṣ	ṣa	sh
स	sa	sa	sa	sa	sa	sa	s	sa	s	sa	s (ts)	sa	s	sa	s
ह	ha	ha	ha	ha	ha	ha	h	ha	h	ha	h	ha	h	ha	h
क्ष	Not given	kṣa	Not given	kṣha	k-sha	k-ṣa	Not given	ksha	Not given	Not given	ksh	ksha	Not given	Not given	ksh
त्र	,,	tra	,,	tra	t-ra	t-ra	,,	tra	,,	,,	Not given	tra	,,	,,	Not given
ज्ञ	,,	jña	,,	jña	j-ña	Not given	,,	gyaṉ	,,	,,	jy	gya, jña	,,	,,	gy

SHARMA'S TRANSLITERATION TABLES OF TRANSLITERATION OF DEVANĀGARĪ ALPHABET INTO ROMAN

VOWELS AND DIPHTHONGS

Devanāgarī	Roman	Pronunciation	Organs and method of pronunciation	Remark
अ	a	Like **u** in cut, run or **e** in her	Guttural–pronounced from the throat.	
आ	ā	Like **a** in harm, far	,,	
इ	i	Like **i** in hit, bin	Palatal–pronounced from the palate, tongue tending to flatten.	
ई	ī	Like **ee** in feet or **e** in me or **i** in machine	,,	
उ	u	Like **u** in bull, full or **oo** in foot, good	Labial–spoken from the lips-shaped as for whistling.	
ऊ	ū	Like **u** in rude, **oo** in moon, fool	,,	
ऋ	ṛ	This sound is peculiar to Nāgarī. Nearest rendering is as **ri** in ring	Cerebral–pronounced from the roof of the mouth with tip of the tongue curled up.	Occurs in very few words of modern Indian languages.
ॠ	ṝ	Rare sound even in Sanskrit	,,	Will not be considered further.
ऌ	ḷ	Does not exist in western languages	Dental–pronounced from teeth with tongue touching the back of the front teeth.	This vowel is used in a few Vedic hymns, but is not at all used in any modern Indian language. It has been shown here for academic interest only and will not be considered further.
ए	e	Like **e** in grey or **a** in fate, name		ए = अ or आ + इ or ई
ऐ	ai	Like **ai** in aisle or **a** in at or angle		ऐ = अ or आ + ए or ऐ
ओ	o	Like **o** in bone, cold		ओ = अ or आ + उ or ऊ
औ	au	Like **ou** in mouse, house or **ow** in frown		औ = अ or आ + ओ or औ

Note :—A long vowel takes approximately double the time required for pronouncing a short one.

MODIFIED VOWELS AND DIPHTHONGS

Devanāgarī	Roman	Pronunciation	Remarks
ऑ	ă	Somewhat shorter sound like **o** in oppose, officer.	Used in English.
ऍ	ĕ	Somewhat shorter sound like **e** in envy.	Used in Telugu, Kannada, Malayālam, Tamil and Simhala.
ऑ	ŏ	Somewhat shorter sound like **o** in oblige.	,,
ऐ	ăi	Like e in yes.	Used in Simhala

MODIFIED CONSONANTS COMMON TO SOME LANGUAGES

Devanāgarī	Roman	Pronunciation	Remarks
ऌ	ḷa	Pronounced like l with tongue curled to touch the hard palate. A combination of l, r and ṛ sounds. Used in Gujarātī, Marāthī, Oṛyā, Telugu, Kannada, Malayāḷam, Tamil and Simhala.	
ॠ	r̄a	Slightly whirring sound. Used in Telugu, Malayāḷam, Tamil.	

Note :—Sounds peculiar to only one language represented by the modified letters of Devanāgarī are not included here.

SPECIAL SYMBOLS

Name	Symbol	Place	Roman	Pronunciation	Organs and method of pronunciation	Remarks
अनुस्वार Anuswāra	ं	Above a vowel	ṁ	Pronounced like m in bamboo or bumble	Strong nasalization of the preceding vowel.	Very often used after a short vowel, to express the nasal of the class of a following mute consonant; and may thus represent any of the five nasals ṅ, ñ, ṇ, n, m thus बन्दर = Baṅdara or Baṁdara अंश = aṁsha गङ्गा = gaṅgā or gaṁga Modern practice is to use anuswāra instead of the requisite nasal letter.
अनुनासिक Anunāsika	ँ	,,	m̐	Softer nasalization of anuswāra	,,	Not used in geographical names
विसर्ग Visarga	ः	After a vowel	ḥ	A breathy sound like ah ejected rapidly.	A weak aspiration	,,
हल् Hal	्	At the foot of consonant like क्	k			Indicates loss of inherent अ (a) in a consonant.

CONSONANTS

Mutes	Hard non-aspirate		Hard aspirate		Soft non-aspirate		Soft aspirate		Soft nasal		Organs and method of pronunciation
	Devanāgarī	Roman with pronunciation	Devanāgarī	Roman with pronunciation	Devanāgarī	Roman with pronunciation	Devanāgarī	Roman with pronunciation	Devanāgarī	Roman with pronunciation	
कवर्ग Group of क	क	**ka** as **k** in kind, king	ख	**kha** as **kh** in link-hut spoken rather quickly	ग	**ga** as **g** in gun	घ	**gha** as **gh** in log-hut spoken rather quickly	ङ	**ṅa** as **n** in singer	Guttural
चवर्ग Group of च	च	**cha** as **ch** in chain	छ	**chha** as **chh** in church-hill spoken rather quickly	ज	**ja** as **j** in just	झ	**jha** as **dge** in hedgehog	ञ	**ña** as **n** in singe	Palatal—tongue touching the palate
टवर्ग Group of ट	ट	**ta** as **t** in cat	ठ	**tha** as **th** in port-hole spoken rather quickly	ड	**da** as **d** in bird	ढ	**dha** as **dh** in bird-house spoken rather quickly	ण	**na** as **n** in runt or as nasal sound in colonel	Cerebral or retroflex—tongue curled up and touching the roof of the mouth
तवर्ग Group of त	त	**ta** as **t** in French carte	थ	**tha** as **th** in thin	द	**da** as **d** in French madame	ध	**dha** as **th** in father, there	न	**na** as **n** in none	Dental—tongue touching the back of the front teeth
पवर्ग Group of प	प	**pa** as **p** in pun	फ	**Pha** as **ph** in up-hill spoken rather quickly	ब	**ba** as **b** in bat	भ	**bha** as **bh** in abhor	म	**ma** as **m** in mug, mud	Labial—by closing and then opening the lips

Note :—If each letter of a diagraph has a distinct independent sound then it should be indicated by a hyphen, thus d-h.

SEMI VOWELS AND SIBILANTS

Devanāgarī	Roman	Pronunciation	Organs and method of pronunciation	Remarks
		Semi vowels		
य	ya	Like y in yet, yes	Palatal–unaspirated	
र	ra	Like r in rib	Cerebral	
ल	la	Like l in look	Dental–aspirated	
व	va	Like v in vent	Labial	
ह	ha	Like h in hut	Guttural–aspirated	
		Sibilants		
श	sha	Like sh in shout, should	Palatal—as if pronouncing s by touching the palate with the tip of the tongue.	These two sounds are very similar. Only with experience one can know the correct use of the letters.
ष	ṣha		Cerebral—as if pronouncing s by curling up the tongue & touching the roof of the mouth by its tip.	
स	sa	Like s in sit, sun	Dental	

COMPOUND CONSONANTS

Devanāgarī	Roman
क्ष = क् + ष	= kṣha
त्र = त् + र	= tra
ज्ञ = ज् + ञ	= j̃ña

Note.—All Devanāgarī letters shown above i.e., क, च, etc., have inherent अ. When a letter does not have this vowel it is written as क्, च् that is, a stroke is added to the foot of the letter. They should then be rendered as k, ch, etc., in roman.

CONSONANTS FOLLOWED BY VOWELS—ABBREVIATED OR MEDIAL FORMS OF VOWELS

When a consonant is not followed by a vowel a stroke is shown at its foot like क् or it is written in its abbreviated form. Vowels are added to the consonants as shown below, each consonant losing its stroke,

अ	is inherent and is not written at all	क् + अ = क
आ	is abbreviated as ा that is	क् + आ = का
इ	" " " ि "	क् + इ = कि
ई	" " " ी "	क् + ई = की
उ	" " " ु "	क् + उ = कु
ऊ	" " " ू "	क् + ऊ = कू
ऋ	" " " ृ "	क् + ऋ = कृ
ए	" " " े "	क् + ए = के
ऐ	" " " ै "	क् + ऐ = कै
ओ	" " " ो "	क् ओ = को
औ	" " " ौ "	क् + औ = कौ

TREATMENT OF VOWEL अ (a) IN ROMANISATION

It is recommended that the vowel अ (a) should always be rendered in roman except when it ends a name. If a name ends with a consonant, the consonant should be underlined. Such cases, however, will be very rare.

Examples :—(i) Names ending with the vowel 'a' कानपुर = Kānapur not Kānapura
अलवर = Alawar not Alawara
राम = Rām not Rāma

(ii) Names ending with a consonant जगत् = Jagat̲
(In Sanskrit only)

MODIFIED DEVANĀGARĪ LETTERS TO REPRESENT WELL-KNOWN SOUNDS BORROWED FROM URDŪ

Urdū	Devanāgarī	Roman	Pronunciation	Organs & method of pronunciation
ق	क़	qa	Pronounce क with affrication.	Guttural
خ	ख़	kha	Pronounce ख with affrication as if cleaning the throat.	,,
غ	ग़	gha	Pronounce ग with affrication as if cleaning the throat.	,,
ظ ض ز ذ	ज़	za (see foot note)	z as in razor.	Palatal
ڑ	ड़	ṛa	r pronounced from the throat by moving uvula.	Cerebral and guttural
ڑھ	ढ़	ṛha		Ditto
ف	फ़	fa	f as in foot.	Labial

It is not worth while to attempt to differentiate the Devanāgarī transliteration by a multiplicity of diacritics as done earlier as all the Urdu letters sound exactly the same. For reverse transliteration reference should be made to a good dictionary.

TRANSLITERATION OF NEPĀLĪ

Nepālī uses Devanāgarī alphabet

TRANSLITERATION OF MARĀṬHĪ

The Marāṭhī alphabet is the same as Devanāgarī with the following exceptions :—

(a) Letter ळ (ḷa) is peculiar to Marāṭhī. It represents a combination of the sounds l, r and ṛ and is spoken like l with tongue curled back to touch the hard palate.

(b) Following alternative forms of vowels, when these are used as initial letters of words, are also in vogue, but have not been accepted and given recognition by the Marāṭhī Sāhitya Mahāmaṇḍala and Mahārāṣṭra Sāhitya Pariṣhida.

अि (इ), अी (ई), अु (उ), अू (ऊ), अे (ए), अै (ऐ)

TRANSLITERATION OF GUJARĀTĪ ALPHABET

(a) Gujarātī alphabet is akin to Devanāgarī alphabet with the differences as stated under :
Letter फ (pha) is replaced by ફ (fa) in Gujarātī. Letter ળ (ḷa), is peculiar to Gujarātī and is pronounced like l with tongue curled back to touch the hard palate.

(b) Pronunciation of all Gujarātī letters except the two mentioned in (a), and જ્ઞ which is pronounced as jna is the same as for the equivalent Devanāgarī letters.

(c) No line is drawn through top of the letters forming a word.

Gujarātī	Devanāgarī	Roman	Letter symbol with example	
			Symbol	Example
		Vowels and diphthongs		
અ	अ	a	Inherent	પ Pa
આ	आ	ā	ા	પા Pā
ઇ	इ	i	િ	પિ Pi
ઈ	ई	ī	ી	પી Pī
ઉ	उ	u	ુ	પુ Pu
ઊ	ऊ	ū	ૂ	પૂ Pū
ઋ	ऋ	ṛ	ૃ	પૃ Pṛ
એ	ए	e or ĕ	ે	પે Pe
ઐ	ऐ	ai	ૈ	પૈ Pai
ઓ	ओ	o or ŏ	ો	પો Po
ઔ	औ	au	ૌ	પૌ Pau

The Anuswāra (ं) and Visarga (ः) are used in the same fashion as in Devanāgarī.

Gujarāti with inherent 'a'	Devanāgarī with inherent 'a'	Roman	Remarks	Gujarāti with inherent 'a'	Devanāgarī with inherent 'a'	Roman	Remarks
ક	क	ka		ત	त	ta	
ખ	ख	kha		થ	थ	tha	
ગ	ग	ga		દ	द	da	
ઘ	घ	gha		ધ	ध	dha	
ઙ	ङ	ṅa		ન	न	na	
ચ	च	cha		પ	प	pa	
છ	छ	chha		ફ	फ़	fa	
જ	ज	ja		બ	ब	ba	
ઝ	झ	jha		ભ	भ	bha	
ઞ	ञ	ña		મ	म	ma	
ટ	ट	ṭa		ય	य	ya	
ઠ	ठ	ṭha		ર	र	ra	
ડ	ड	ḍa		લ	ल	la	
ઢ	ढ	ḍha		વ	व	va	
ણ	ण	ṇa		શ	श	sha	
				ષ	ष	ṣha	
				સ	स	sa	
				હ	ह	ha	
				ળ	ऴ	ḷa	

TRANSLITERATION OF PANJĀBĪ ALPHABET

Panjābī letter	Name of letter	Devanāgarī transliteration	Roman transliteration	Remarks
ੳ	Ūṛā			This letter is never used by itself. But with the symbols ੁ & ੂ ie, ੁੳ , ੂੳ it reads ੁ (u), ੂ (ū) respectively and with the top loop open, i. e., ੋ reads ਓ (o).
ਅ	Āyā, Aiṛā	अ	a	
ੲ	Īṛī			This letter is never used by itself. But with the symbols ਿ,ੀ,ੇ i.e.,ਇ, ਈ, ਏ it reads ਿ (i), ੀ (ī) and ੇ (e) respectively.
ਸ	Sassā	स	sa	
ਹ	Hāhā	ह	ha	
ਕ	Kakkā	क	ka	
ਖ	Khakkhā	ख	kha	
ਗ	Gaggā	ग	Ga	
ਘ	Ghagghā	घ	Gha	
ਙ	ṅaṅṅā	ङ	ṅa	
ਚ	Chachchā	च	cha	
ਛ	Chhachchhā	छ	chha	
ਜ	Jajjā	ज	ja	
ਝ	Jhajjhā	झ	jha	
ਞ	ñaññā	ञ	ña	
ਟ	Ṭaiṅkā	ट	ṭa	
ਠ	Ṭhaṭṭhā	ठ	ṭha	
ਡ	Ḍaḍḍā	ड	ḍa	
ਢ	Ḍhaḍḍhā	ढ	ḍha	
ਣ	ṇāṇṇā	ण	ṇa	
ਤ	Tattā	त	ta	
ਥ	Thatthā	थ	tha	
ਦ	Daddā	द	da	
ਧ	Dhaddhā	ध	dha	
ਨ	Naṇṇā	न	na	
ਪ	Pappā	प	pa	

Panjābī letter	Name of letter	Devanāgarī transliteration	Roman transliteration	Remarks
ਫ	Phapphā	फ	pha	
ਬ	Babbā	ब	ba	
ਭ	Bhabbhā	भ	bha	
ਮ	Mammā	म	ma	
ਯ	Yayyā	य	ya	
ਰ	Rārā	र	ra	
ਲ	Lallā	ल	la	
ਵ	Vavvā	व	va or wa	
ੜ	Ṙāṙā	ड़	ṙa	
ਸ਼	Shashshā	श	sha	
ਖ਼	Ḳẖaḳẖẖā	ख़	ḳẖa	
ਗ਼	Ġaġġā	ग़	ġha	
ਜ਼	Zazzā	ज़	za	
ਫ਼	Faffā	फ़	fa	

SYMBOLS

Name of Symbol	Symbol	Explanation
Muktā	Inherent	A letter with inherent 'a' is called a muktā
Kannā	ਾ Slightly shorter than the height of the letter	Stands for ā and is added to the right of a letter as :—ਮਾ = mā
Sihārī	ਿ	Stands for i and is added to the left of a letter as :—ਹਿ = hi
Bihārī	ੀ	Stands for ī and is added to the right of a letter as :—ਹੀ = hī
Auṅkaṙa	ੁ	Stands for u and is added below the foot of a letter as :— ਹੁ = hu
Dūlaiṅkaṙā	ੂ	Stands for ū and is added below the foot of a letter as :— ਹੂ = hū
Lāvāṁ	ੇ	Stands for e and is added to the top of a letter as :— ਹੇ = he
Dulāvāṁ	ੈ	Stands for ai and is added to the top of a letter as :— ਹੈ = hai
Hoṙā	ੋ	Stands for o and is added to the top of a letter as :— ਹੋ = ho

Name of symbol	Symbol	Explanation
Kanauŕā	ੱ	Stands for au and is added to the top of a letter as :—ਹੌ = hau
Tippī	ਂ	Form of anuswāra used after short vowels and the letters with symbol dūlaiṅkaŕā (≃) except ੳ
Bindi	ਁ	Anuswāra of Devanāgarī used after long vowels and diphthongs except the letters with dūlaiṅkaŕā excluding letter ੳ
Adhaka	ੁ	Is added between and above two letters and has the effect of doubling the following letter i.e., ਕੁਤਾ = kuta but ਕੁੱਤਾ = kuttā
Has no name	੍	Stands for ra and is added at the foot of a letter as ਪ੍ਰਦੀਪ=Pradīpa

Vowels and dipthongs

Devanāgarī vowels and diphthongs will be transliterated as under :—

अ = ਅ , आ = ਆ , उ = ੁ , ऊ = ੂ , इ = ਇ , ई = ੀ ,

ए = ੇ , ऐ = ੈ , ओ = ੋ , औ = ੌ

TRANSLITERATION OF BĀNGALĀ ALPHABET

Bāngalā alphabet is akin to devanāgarī alphabet and pronunciation and names of its letters are the same except a few which will be clarified hereafter.

Vowels and diphthongs

Bāngalā	Devanāgarī	Roman	Letter symbol with example		Remarks
			Symbol	Example	
অ	अ	a	Inherent	ক ka	Exceptions ঔ not শ্
আ	आ	ā	া	কা kā	ক্র not ক্র
ই	इ	i	ি	কি ki	ঐ not ঙ্র
ঈ	ई	ī	ী	কী kī	
উ	उ	u	ু	কু ku	
ঊ	ऊ	ū	ূ	কূ kū	
ঋ	ऋ	ṛ	ৃ	কৃ kr	
ৠ	ॠ	ṝ			Obsolete
ঌ	ऌ	ḷ			ditto
ৡ	ॡ	ḹ			ditto
এ	ए	e	ে	কে ke	
ঐ	ऐ	ai	ৈ	কৈ kai	
ও	ओ	o	ো	কো ko	
ঔ	औ	au	ৌ	কৌ kau	
ং Anuswāra	ं	n, ñ, ṇ, n or m		কং	
ঁ Anunāsika	ँ	m̐			
ঃ Visarga	ः	ḥ		কঃ kaḥ	

Bāngalā	Devanāgarī	Roman	Remarks	Bāngalā	Devanāgarī	Roman	Remarks
ক	क	ka		প	प	pa	
খ	ख	kha		ফ	फ	pha	
গ	ग	ga		ব	ब	ba	Since the letter ব stands for both the sounds ba and va it is necessary that while writing Bāngalā ব should be differentiated by underlining it i. e., ব̲ = ব
ঘ	घ	gha		ভ	भ	bha	
ঙ	ङ	ṅa		ম	म	ma	
চ	च	cha		য	ज̲	j̲a	Since both letters জ and য stand for the sound ja and their correct use depends upon local usage, the Devanāgarī ज and Roman ja have been underlined to enable reverse transliteration.
ছ	छ	chha		র	र	ra	
জ	ज	ja		ল	ल	la	
ঝ	झ	jha		ৱ	व	va	
ঞ	ञ	ña		শ	श	sha	
ট	ट	ṭa		ষ	ष	ṣha	
ঠ	ठ	ṭha		স	स	sa	
ড	ड	ḍa		হ	ह	ha	
ঢ	ढ	ḍha		ক্ষ	क्ष	kṣha	
ণ	ण	ṇa		ত্র	त्र	tra	
ত	त	ta	Halant ত is written as ৎ	ড়	ड़	ṙa	
থ	थ	tha		ঢ়	ढ़	ṙha	
দ	द	da		য়	य	ya	
ধ	ध	dha		ৎ	त्		
ন	न	na					

TRANSLITERATION OF ASAMĪYĀ (ASSAMESE) ALPHABET

Vowels and diphthongs

Asamiyā	Devanāgarī	Roman	Letter symbol with example		Remarks
			Symbol	Example	
অ	अ	a	Inherent	ক ka	
আ	आ	ā	া	কা kā	
ই	इ	i	ি	কি ki	
ঈ	ई	ī	ী	কী kī	
উ	उ	u	ু	কু ku	
ঊ	ऊ	ū	ূ	কূ kū	
ঋ	ऋ	ṛ	ৃ	কৃ kṛ	
ঌ	ऌ	ḷ			
এ	ए	e	ে	কে ke	
ঐ	ऐ	ai	ৈ	কৈ kai	
ও	ओ	o	ো	কো ko	
ঔ	औ	au	ৌ	কৌ kau	
ং Anuswāra	ं	ṅ, ñ, ṇ, n or ṁ			
ঃ Visarga	ः	ḥ			

Asamīyā	Devanāgarī	Roman	Remarks	Asamīyā	Devanāgarī	Roman	Remarks
ক	क	ka		ফ	फ	pha	
খ	ख	kha		ব	ब	ba	
গ	ग	ga		ভ	भ	bha	
ঘ	घ	gha		ম	म	ma	
ঙ	ङ	ṅa		য	ज़	ja	Since both letters জ and য stand for the sound ja and their correct use depends upon local usage, the Devanāgarī ज and Roman ja have been underlined to enable reverse transliteration.
চ	च	cha		ৰ	र	ra	
ছ	छ	chha		ল	ल	la	
জ	ज	ja		ৱ	व	va	
ঝ	झ	jha		শ	श	sha	Pronounced softer and gutturally
ঞ	ञ	ña		ষ	ष़	ṣha	Pronounced softly and gutturally
ট	ट	ṭa		স	स	sa	Somewhat similar to 'sha' but softer and guttural
ঠ	ठ	ṭha		হ	ह	ha	
ড	ड	ḍa		ক্ষ	क्ष	kṣha	
ঢ	ढ	ḍha		ত্র	त्र	tra	
ণ	ण	ṇa		ড়	ड़	ṙa	
ত	त	ta		ঢ়	ढ़	ṙha	
থ	थ	tha		য়	य	ya	
দ	द	da		ৎ	त्	t	Consonant form of ত
ধ	ध	dha					
ন	न	na					
প	प	pa					

TRANSLITERATION OF ORIYĀ ALPHABET

Vowels and diphthongs

Oṛiyā	Devanāgarī	Roman	Medial or abbreviated form		Remarks
			Symbol	Example	
ଅ	अ	a		Inherent	
ଆ	आ	ā	ା	କା kā	
ଇ	इ	i	ି	କି ki	
ଈ	ई	ī	ୀ	କୀ kī	
ଉ	उ	u	ୁ	କୁ ku	
ଊ	ऊ	ū	ୂ	କୂ kū	
ଋ	ऋ	ṛ	ୃ	କୃ kṛ	Obsolete
ୠ	ॠ	ṝ	ୄ	କୄ kṝ	Obsolete
ଏ	ए	e	େ	କେ ke	
ଐ	ऐ	ai	ୈ or େ (modern practice)	କୈ kai	Modern form is କି
ଓ	ओ	o	ୋ	କୋ ko	
ଔ	औ	au	ୌ or ୋ (modern practice)	କୌ kau	Modern form is କୀ
ଂ Anuswāra	ं	ṁ, ṅ, ṇ, ṁ, n		କଂ	
ଁ Anunāsika	ँ	m̆		କଁ	
ଃ Visarga	ः	ḥ		କଃ	

CONSONANTS

Oṛiyā	Devanāgarī	Roman	Remarks	Oṛiyā	Devanāgarī	Roman	Remarks
କ	क	ka		ପ	प	pa	
ଖ	ख	kha		ଫ	फ	pha	
ଗ	ग	ga		ବ	ब	ba	
ଘ	घ	gha		ଭ	भ	bha	
ଙ	ङ	ṅa		ମ	म	ma	
ଚ	च	cha		ଯ	य़	ya	अन्तःस्थ when ज is pronounced without touching the teeth. Phonetically between ज and य
ଛ	छ	chha		ର	र	ra	
ଜ	ज	ja		ଲ	ल	la	
ଝ	झ	jha		ଶ	श	sha	
ଞ	ञ	ñ		ଷ	ष	ṣha	
ଟ	ट	ṭa		ସ	स	sa	
ଠ	ठ	ṭha		ହ	ह	ha	
ଡ	ड	ḍa		କ୍ଷ	क्ष	kṣha	Pronounced more like ख्ष
ଢ	ढ	ḍha		ଯ୍ଯ	य्य	ya	
ଣ	ण	ṇa		ଳ	ळ	ḷa	As Marāthi ळ
ତ	त	ta		◌୍	◌्		
				Hal			
ଥ	थ	tha		ଡ଼	ड़	ṛa	
ଦ	द	da		ଢ଼	ढ़	ṛha	
ଧ	ध	dha					
ନ	न	na					

TRANSLITERATION OF TELUGU ALPHABET

Vowels and diphthongs

Telugu	Devanāgarī	Roman	Abbreviated letter, its name and example: Abbreviated letter	Name	Example		Remarks
అ	अ	a	✓	Talakattu	క	Ka	Talakattu is inherent in the following letters :— ఖ ఙ ఛ ణ ఐ ఱ ల kha Ja ṭa ṇa ba r̄a la
ఆ	आ	ā	ా	Dīrghamu	కా	Kā	
ఇ	इ	i	ి	Guṙi	కి	Ki	
ఈ	ई	ī	ీ	Guṙidīrghamu	కీ	Kī	
ఉ	उ	u	ు	Kŏmmu	కు	Ku	
ఊ	ऊ	ū	ూ	Kŏmmudīrghamu	కూ	Kū	
ఋ	ऋ	ṛ	ృ	Suṙi	కృ	Kṛ	
ౠ	ॠ	ṝ	ౄ	Suṙidīrghamu	కౄ	Kṝ	
ఌ	ऌ	ḷ					Obsolete
ౡ	ॡ	ḹ					"
ఎ	ऍ	ĕ	ె	Ĕtvamu Shortened e sound	కె	Kĕ	Short 'e' sound peculiar to Telugu like in 'envy'
ఏ	ए	e	ే	Etvamu	కే	Ke	
ఐ	ऐ	ai	ై	Aitvamu	కై	Kai	
ఒ	ऑ	ŏ	ొ	Ŏtvamu Shortened o sound	కొ	Kŏ	Short 'o' sound as in 'Oblige'
ఓ	ओ	o	ో	Otvamu (Long) o	కో	Ko	
ఔ	औ	au	ౌ	Autvamu	కౌ	Kau	
ఁ	ँ	m̐	ఁ	Ardhanuswāra	కఁ	Kam̐	Rarely used
ం	ं	ṁ	ం	Anuswāra	కం	Kaṁ	
ః	ः	ḥ	ః	Visarga	కః	Kaḥ	

CONSONANTS

Telugu	Devanāgarī	Roman	Remarks	Telugu	Devanāgari	Roman	Remarks
క	क	ka		న	न	na	
ఖ	ख	kha		ప	प	pa	
గ	ग	ga		ఫ	फ	pha	
ఘ	घ	gha		బ	ब	ba	
ఙ	ङ	ṅa		భ	भ	bha	
చ	च	cha		మ	म	ma	
ఛ	छ	chha		య	य	ya	
జ	ज	ja		ర	र	ra	
ఝ	झ	jha		ఱ	ऱ	ṟa	Slightly whirring sound.
ఞ	ञ	ña		ల	ल	la	
ట	ट	ṭa	Dental	ళ	ळ	ḷa	Never used as an initial letter. It is a sound produced where 'l a' is pronounced with the tip of the tongue slightly folded back to touch the hard palate.
ఠ	ठ	ṭha		వ	व	va	
డ	ड	ḍa		శ	श	sha	Palatal
ఢ	ढ	ḍha		ష	ष	ṣha	
ణ	ण	ṇa		స	स	sa	
త	त	ta		హ	ह	ha	
థ	थ	tha					
ద	द	da					
ధ	ध	dha					

TRANSLITERATION OF KANNADA ALPHABET

Vowels and diphthongs

Kannada	Devanāgarī	Roman	Abbreviated letter, its name and example				Remarks
			Abbreviated letter	Name	Example		
ಅ	अ	a	◌	Talakattu	ಕ	Ka	Talakattu is inherent in the following letters :— ಖ,ಜ,ಣ,ಬ,ಲ kha ja ṇa ba la
ಆ	आ	ā	◌ಾ	Talakattudīrgha	ಕಾ	Kā	
ಇ	इ	i	◌ಿ	Gudisi	ಕಿ	Ki	
ಈ	ई	ī	◌ೀ	Gudisidīrgha	ಕೀ	Kī	
ಉ	उ	u	◌ು	Kŏmbu	ಕು	Ku	
ಊ	ऊ	ū	◌ೂ	Kŏmbudīrgha	ಕೂ	Kū	
ಋ	ऋ	ṛ	◌ೃ	Vaṭṛsuli	ಕೃ	Kṛ	
ಎ	ऍ	ĕ	◌ೆ	Ĕtva	ಕೆ	Kĕ	
ಏ	ए	e	◌ೇ	Ĕtvadīrgha	ಕೇ	Ke	
ಐ	ऐ	ai	◌ೈ	Aitva	ಕೈ	Kai	
ಒ	ऑ	ŏ	◌ೊ	Ŏtva	ಕೊ	Kŏ	Short 'O' sound as in 'Oblige'.
ಓ	ओ	o	◌ೋ	Ŏtvadīrgha	ಕೋ	Ko	
ಔ	औ	au	◌ೌ	Autva	ಕೌ	Kau	
ಂ	ं	ṁ	ಂ	Anuswāra	ಕಂ	Kaṁ	
ಃ	ः	ḥ	ಃ	Visarga	ಕಃ	Kaḥ	

CONSONANTS

Kannada	When used as ligatured consonants	Devanāgarī	Roman	Remarks	Kannada	When used as ligatured consonants	Devanāgarī	Roman	Remarks
ಕ	ಕ	क	ka		ಪ	ಪ	प	pa	
ಖ	ಖ	ख	kha		ಫ	ಫ	फ	pha	
ಗ	ಗ	ग	ga		ಬ	ಬ	ब	ba	
ಘ	ಘ	घ	gha		ಭ	ಭ	भ	bha	
ಙ	ಙ	ङ	ṅa		ಮ	ಮ	म	ma	
ಚ	ಚ	च	cha		ಯ	ಯ	य	ya	
ಛ	ಛ	छ	chha		ರ	ರ	र	ra	
ಜ	ಜ	ज	ja		ಲ	ಲ	ल	la	
ಝ	ಝ	झ	jha		ವ	ವ	व	va	
ಞ	ಞ	ञ	ña		ಶ	ಶ	श	sha	
ಟ	ಟ	ट	ṭa		ಷ	ಷ	ष	ṣha	
ಠ	ಠ	ठ	ṭha		ಸ	ಸ	स	sa	
ಡ	ಡ	ड	ḍa		ಹ	ಹ	ह	ha	
ಢ	ಢ	ढ	ḍha		ಳ	ಳ	ळ	ḷa	Never used as an initial letter. It is a sound produced when 'ḷa' is pronounced with the tip of the tongue slightly folded back to touch the hard palate.
ಣ	ಣ	ण	ṇa		ಕ್ಷ		क्ष	kṣha	
ತ	ತ	त	ta		ತ್ರ		त्र	tra	
ಥ	ಥ	थ	tha		ಜ್ಞ		ज्ञ	jña	
ದ	ದ	द	da						
ಧ	ಧ	ध	dha						
ನ	ನ	न	na						

TRANSLITERATION OF MALAYĀḶAM ALPHABET

Vowels and diphthongs

Malayāḷam	Devanāgarī	Roman	Abbreviated letter, its name and example			Remarks
			Abbreviated letter	Name	Example	
അ	अ	a	Inherent		ക ka	
ആ	आ	ā	ാ	Dirgham	കാ kā	
ഇ	इ	i	ി	Valli	കി ki	
ഈ	ई	ī	ീ	Nīṇḍāvalli	കീ kī	
ഉ	उ	u	ു	Chunuppu	ചു chu	The sign of 'ഉ' 'u' and 'ഊ' 'ū' has no uniformity with all the consonants. Examples കു -ku കൂ -kū, ഗു -gu ഗൂ -gū, ഛു -chhu ഛൂ -chhū, ജു -ju ജൂ -jū, ണു -ṇu ണൂ -ṇū, തു -tu തൂ -tū, രു -ru രൂ -rū, ഭു -bhu ഭൂ -bhū
ഊ	ऊ	ū	ൂ	Nīṇḍāchu nuppu	ചൂ chū	
ഋ	ऋ	ṛ	ൃ	Hṛaswāram	കൃ kṛ	
എ	ऍ	ĕ	െ	Pulli	കെ kĕ	
ഏ	ए	e	േ	Nīṇḍāpulli	കേ ke	
ഐ	ऐ	ai	ൈ		കൈ kai	
ഒ	ऑ	ŏ	ൊ		കൊ kŏ	
ഓ	ओ	o	ോ		കോ ko	
ഔ	औ	au	ൗ	Aumātra	കൗ kau	
ം	ं	ṁ	ം	Anuswāra	കം kaṁ	
ഃ	ः	ḥ	ഃ	Visarga	കഃ kaḥ	

CONSONANTS

Malayāḷam	Devanāgarī	Roman	Remarks	Malayāḷam	Devanāgarī	Roman	Remarks
ക	क	ka		ബ	ब	ba	
ഖ	ख	kha		ഭ	भ	bha	
ഗ	ग	ga		മ	म	ma	
ഘ	घ	gha		യ	य	ya	
ങ	ङ	ṅa		ര	र	ra	Sharp & thinnish sound of r spoken with flattened out tongue.
ച	च	cha		ല	ल	la	
ഛ	छ	chha		വ	व	va	
ജ	ज	ja		ശ	श	sha	
ഝ	झ	jha		ഷ	ष	ṣha	
ഞ	ञ	ña		സ	स	sa	
ട	ट	ṭa		ഹ	ह	ha	
ഠ	ठ	ṭha		ള	ळ	ḷa	This sound is peculiar to Malayāḷam and is a combination of l, r & ṛ.
ഡ	ड	ḍa		ഩ	ऱ	r̂a	Slightly whirring sound.
ഢ	ढ	ḍha		ഴ	ऴ	ẓha	ẓha spoken with tongue curled up.
ണ	ण	ṇa		ക്ഷ	क्ष	kṣha	
ത	त	ta		ഺ	ऺ	l̂	l̂ is stressed and uttered with the tip of the tongue flattened. Sound is peculiar to Malayāḷam.
ഥ	थ	tha		഻	ऻ	r̂	
ദ	द	da		ൽ	ल्	l̂	
ധ	ध	dha		ൻ	न्	n̂	
				ൺ	ण्	ṇ̂	
ന	न	na		ൾ	ट्	t̂	
പ	प	pa		ത്ര	त्र	tra	
ഫ	फ	pha		ജ്ഞ	ज्ञ	jña	

Symbol ് is used to show that a letter is a consonant and does not have an inherent 'a' like: ക്–k.

TRANSLITERATION OF SIṀHALA ALPHABET

Vowels and diphthongs

Siṁhala	Name of letter	Devanāgari		Abbreviated letter and example			Remarks
				Abbreviated letter	Example		
අ	Ayanna	अ	a	Inherent	කඅ	Ka	
ආ	Āyanna	आ	ā	ා	කා	Kā	
ඇ	Ǎiyanna	ऍ	ǎi	ැ	කැ	Kǎi	'e' as in yes, beg
ඈ	Aiyanna	ऐ	ai	ෑ	කෑ	Kai	
ඉ	Iyanna	इ	i	ි	කි	Ki	Abbreviation placed above the letter
ඊ	Īyanna	ई	ī	ී	කී	Kī	Abbreviation placed above the letter
උ	Uyanna	उ	u	ු / ෘ	කු	Ku	Abbreviation placed at the foot of the letter
ඌ	Ūyanna	ऊ	ū	ූ / ෲ	කූ	Kū	Abbreviation placed at the foot of the letter
එ	Ĕyanna	ऎ	ĕ	ෙ	කෙ	Kĕ	Abbreviation placed before the letter
ඒ	Eyanna	ए	e	ෙ ේ	කේ	Ke	
ඔ	Ŏyanna	ऑ	ŏ	ෙ ො	කොෙ	Kŏ	
ඕ	Oyanna	ओ	o	ෙ ෝ	කෝ	Ko	
ඖ	Auyanna	औ	au	ෟ	කෟ	Kau	
ං	Anuswāra or Bindu	ं	ṁ	ං	කං	Kaṁ	
ඃ	Visarga	ः	ḥ	ඃ	කඃ	Kaḥ	

CONSONANTS

Simhala	Devanāgarī	Roman	Remarks	Simhala	Devanāgarī	Roman	Remarks
ක	क	ka		න	न	na	
ඛ	ख	kha		ප	प	pa	
ග	ग	ga		ඵ	फ	pha	
ඝ	घ	gha		බ	ब	ba	
ඞ	ङ	ṅa		භ	भ	bha	
ච	च	cha		ම	म	ma	
ඡ	छ	chha		ය	य	ya	
ජ	ज	ja		ර	र	ra	
ඣ	झ	jha		ල	ल	la	
ඤ	ञ	ña		ව	व	va	
ට	ट	ṭa					
ඨ	ठ	ṭha		ස	स	sa	
ඩ	ड	ḍa		ශ	श	sha	
ඪ	ढ	ḍha		ෂ	ष	ṣha	
ණ	ण	ṇa		හ	ह	ha	
ත	त	ta		ළ	ळ	ḷa	
ථ	थ	tha					
ද	द	da					
ධ	ध	dha		Halkirīma ්	हल्		Halkirīma is joined to the top right hand side of the letter as ක් = K

TRANSLITERATION OF TAMIL ALPHABET

Vowels and diphthongs

Tamil	Devanāgarī	Roman	Abbreviated letter	Example		Remarks
அ	अ	a	Inherent	க	Ka	
ஆ	आ	ā	ா	கா	Kā	
இ	इ	i	ி	கி	Ki	
ஈ	ई	ī	ீ	கீ	Kī	
உ	उ	u	ு	கு	Ku	Abbreviated letter changes in form as, கு, து, பு, ஜு. ku, tu, pu, ju.
ஊ	ऊ	ū	ூ	கூ	Kū	Abbreviated letter changes in form as, கூ, தூ, டூ, பூ, ஜூ. kū, tū, ṭū, pū, jū.
எ	ऍ	ĕ	ெ	கெ	Kĕ.	
ஏ	ए	e	ே	கே	Ke	
ஐ	ऐ	ai	ை	கை	Kai	Abbreviated letter changes in form as, நை , Nai.
ஒ	ऑ	ŏ	ொ	கொ	Kŏ	
ஓ	ओ	o	ோ	கோ	Ko	
ஔ	औ	au	ௌ	கௌ	Kau	

Letter ஃ pronounced अख् (Akh) does not occur in any other language. It is never preceded by a consonant and occurs in a few Tamil words only.

CONSONANTS

Tamil	Devanāgarī	Roman	Remarks	Tamil	Devanāgarī	Roman	Remarks
க	क	ka		ள	ल़	ḷa	
ங	ङ	ṅa		ற	ऱ	r̂a	Slightly whirring sound of ra.
ச	च	cha		ன	न	na	Never used as an initial letter of a word.
ஞ	ञ	ña		ழ	ड़	ẓha	
ட	ट	ṭa		ஜ	ज	ja	
ண	ण	ṇa		ஷ	ष	ṣha	
த	त	ta		ஸ	स	sa	
ந	न	na	Used as an initial letter of a word only but never otherwise except as anuswāra.	ஹ	ह	ha	
ப	प	pa		க்ஷ	क्ष	kṣha	
ம	म	ma		ற்ற	ट्र	ṭra	
ய	य	ya		ன்ற	ड्र	nḍra	
ர	र	ra		ஶ	श	sha	
ல	ल	la					
வ	व	va					

There are no Tamil letters representing the sounds of second, third and fourth letters of various groups of Devanāgarī consonants although these sounds are used in the Tamil language and the first letter of each group is used to represent them. In order to facilitate reverse transliteration it is recommended that diacritics —, ⌐, ⌐ should be added under the first letter to represent other sounds of the group.
For example

க = ख (kha), க = ग (ga), க = घ (gha), ட = ठ (ṭha), ட = ड (ḍa), ட = ढ (ḍha)

TRANSLITERATION OF URDŪ ALPHABET

INTRODUCTION

1. Urdū is a composite language derived mainly from Hindi. However, the letters of its alphabet have been borrowed from Arabic and Persian alphabets and some of these have been modified to accommodate phones peculiar to the Devanāgarī. It is written and read from right to left just like Arabic and Persian.

2. The eight letters ث ح ض ص ظ ط ع and ق are peculiar to Arabic words; the letter ژ is peculiar to Persian words only; the letters گ چ پ occur in both Persian and Hindi words; the letters ٹ ڈ ڑ and the ten aspirated letters i.e. کھ kha, گھ gha, etc. are the modified letters used in Hindi words alone; the letters خ ذ ز and غ are common to both Arabic and Persian words and the rest of the letters occur in words of all these languages.

3. The fourteen Arabic letters ت ث د ذ ر ز س ش ص ض ط ظ ل and ن are called Shamsī and the fourteen letters ا ب ج ح خ ع غ ف ق ک م و ہ and ي are called Qamarī.

4. Urdū has borrowed numerous Persian and Arabic words along with their original spelling. Whatever distinction there might have been in the phones represented by the letters in the several groups mentioned below, all letters of a group are pronounced exactly alike in Urdū.

ا and ع when used in conjunction with vowels.

ت and ط = त (ta)

س ش and ص = स (sa)

ح ہ and ھ = ह (ha)

ز ذ ض and ظ = ज़ (za)

ي and ے = य (ya)

Although previously I had attempted to differentiate the Devanāgarī and Roman transliteration of these letters by using diacritics to enable reverse transliteration, I am now of the opinion that it is not worthwhile to do so because (a) all the letters in a group are pronounced exactly the same way (b) multiplicity of diacritics results in undue labour in composing and printing. It will be easier to take the help of a good dictionary for reverse transliteration.

5. The letters of the Urdū alphabet are shown in the following tables in their detached form. When grouped into words most of them assume different forms according as they are initial, medial or final. Reference should be made to a book of grammar to study these forms.

CONSONANTS

Urdū	Name of letter	Devanāgarī	Roman	Remarks
ا	Alif			Of itself it is a very weak aspirate. Normally used as a support for vowels.
ب	Be	ब	ba	
پ	Pe	प	pa	
ت	Te	त	ta	
ٹ	Ṭe	ट	ṭa	
ث	Se	स	sa	
ج	Jim	ज	ja	
چ	Che	च	cha	
ح	He	ह	ha	
خ	Ḵhe	ख़	ḵha	
د	Dāl	द	da	
ڈ	Ḍāl	ड	ḍa	
ذ	Zāl	ज़	za	
ر	Re	र	ra	
ڑ	Ṛe	ड़	ṛa	
ز	Ze	ज़	za	
ژ	Ẓe	य़	ẓa	Pronounced like z in azure.
س	Sīn	स	sa	
ش	Shīn	श	sha	
ص	Sād	स	sa	
ض	Zād	ज़	za	

CONSONANTS

Urdū	Name of letter	Devanāgarī	Roman	Remarks
ط	Toe	त	ta	
ظ	Zoe	ज़	za	
ع	ʻAin	ʻअ	ʻa	In Arabic it has a strong guttural sound, its place of utterance being in the lower muscles of the throat. In Urdū it is seldom pronounced in this way. It serves the same purpose as ا (Alif) in conjunction with vowels.
غ	Ghain	ग़	gha	
ف	Fe	फ़	fa	
ق	Qāf	क़	qa	Deep guttural ka.
ک	Kāf	क	ka	
گ	Gāf	ग	ga	
ل	Lām	ल	la	
م	Mīm	म	ma	
ن	Nūn	न	na	
و	Vāv	व	va	
			wa	When ء is imperceptible.
ہ	He	ह	ha. ha when final & preceded by a short vowel	
ھ	He	ह	ha	Used in compound-aspirate consonants like بھ (Bha) only.
ی	Ye (short)	य	ya	Always has the sound yī when final. Dots are generally omitted.
ے	Ye (long)	य	ya	Always has the sound of e or ye when final and without a zabar; with a zabar the sound is ai. Dots are generally omitted.

CONJUNCT CONSONANTS

The letter ھ (ha) conjoins with some other consonants to form the aspirated letters equivalent to those of the devanāgarī alphabet as under :

ک	+ ھ	=	کھ	= ख	kha
گ	+ ھ	=	گھ	= घ	gha
چ	+ ھ	=	چھ	= छ	chha
ج	+ ھ	=	جھ	= झ	jha
ٹ	+ ھ	=	ٹھ	= ठ	ṭha
ڈ	+ ھ	=	ڈھ	= ढ	ḍha
ت	+ ھ	=	تھ	= थ	tha
د	+ ھ	=	دھ	= ध	dha
پ	+ ھ	=	پھ	= फ	pha
ب	+ ھ	=	بھ	= भ	bha

Notes :—(*i*) The letters ی and ے also serve as vowels when conjoined to some other vowels.

(*ii*) ن (na) when nasal is termed as غُنّہ (ghunnaḥ) and is pronounced the same way as the consonant ँ or anuswāra of devanāgarī. If at the end of a word the dot is omitted from the letter and if medial it carries the sukūn (◌ْ) sign. It is never used in the ghunnaḥ form when an initial letter.

(*iii*) (*a*) ہ has the sound of devanāgarī ह but at the end of most words, when preceded by a short vowel it is sounded as visarga (ḥ) i.e., an imperceptible ह. Usual practice is to omit it in romanisation. In geographical names, however, it is recommended that it should be rendered as ḥ and not omitted.

(*b*) ۂ with two dots above it i.e., ۃ , is sounded like ta in words derived from Arabic. But this form is seldom used in names.

(*iv*) In a few words of Persian origin like خُوش, خُود the sound of the letter و (va) preceded by خ (kha) is imperceptible. In such cases و may be transliterated as wa .

Basic vowels

Urdū has only three basic vowels. Unlike Devanāgarī and Roman vowels these are never used by themselves but are always conjoined to consonants.

Urdū	Name	Devanāgarī	Roman	Remarks
ـَ	Zabar or fathah	अ	a	It is written above the consonant after which it is sounded. When initial, alif is used as its support i.e., اَب =ab.
ـِ	Zer or Kasrah	इ	i	It is written beneath the consonant after which it is sounded. When initial, alif is used as its support i.e., اِب =ib.
ـُ	Pesh or Zammah	उ	u	It is written above the consonant after which it is sounded. When initial, alif is used as its support i.e., اُب =ub.

Note :— ع serves the same purpose as ا in some words.

Other vowels and diphthongs

There are no independent letters to represent long vowels and diphthongs. These are formed in conjunction with consonants as explained under :—

Devanāgarī	Roman	Urdū	Remarks
आ	ā	Initial آ. Medial and final ا or ع preceded by a consonant with a zabar	The sign of prolongation ـٓ, madd, is placed above alif when initial. Alif used medially or at the end of a word has the sound of ā Examples : آم =Ām, بار =Bār.
ई	ī	ي preceded by a consonant with a zer	If initial, alif is used with zer as اِینٹ = Īnt.
ऊ	ū	و preceded by a consonant with a pesh	If initial, alif is used with pesh as اُونٹ =Ūnt.
ए	e	ے preceded by alif when initial or any other consonants when medial or final.	Examples : ایک = Ek, پیٹ = Pet.
ऐ	ai	ے preceded by alif with a zabar when initial or any other consonant and zabar when medial or final.	Examples : اَیسا = Aisa, کَیف = Kaif.
ओ	o	و preceded by alif or ain when initial or any other consonant when medial or final.	Examples : اوم = Om, بول = Bol.
औ	au	و preceded by alif or ain with a zabar if initial or any other consonant with zabar if medial or final.	Examples : اَور = Aur, قَوم = Qaum.
	ʻau	When ع is used instead of alif.	

Note :— ع preceded by a consonant with a zabar also has the same sound as ā and will be denoted as ʻā to differentiate it to enable reverse transliteration. **Example** : مَعمُول = M ʻāmūl.

Name of the sign	Sign	Explanation with examples
Jazm or sukūn	◌ْ	This sign is used above a consonant when it is not followed by a vowel. It is equivalent to the hal sign of devanāgarī. Example : مَسْجِد = Masjid. The principle enunciated for rendering the final 'a' in devanāgarī will also apply to the final letter followed by 'a' for names written in Urdū. Although jazm is not normally written over the final consonant of a word, it is recommended that in the case of geographical names it be written to enable correct romanisation. It should, however, be noted that in Urdū, with very few exceptions, the last letter if a consonant is always inert.
Mauqūf	No sign	In the case of two or more conjunct consonants only the first is marked with a jazm and the following letters are called mauqūf and carry no orthographic signs.
Tashdīd	◌ّ	The sign is used above a consonant and has the effect of doubling it. Example: کُتّا = kuttā, which should be pronounced without the intervention of a vowel between t's, both the t's pronounced distinctly. The first consonant ends the preceding syllable, and the second begins the following as kut-tā.

Name of sign	Sign	Explanation with examples
Tanwīn	ً = न् = n̤	The marks of the short vowels i.e., zabar, zer and pesh, the last one very rare, are doubled and pronounced with the addition of the sound n. Examples: فَوْرًا = Faūraṇ, قُدْرَتًا = Qudrataṇ. It should be rendered as न् in Devanāgarī and n̤ in roman to enable reverse transliteration. Very rare in Urdū.
Hamzaḥ	ء	The beginning of a syllable excluding the initial in a word is indicated by the insertion of the sign ء between the two vowels a little above the body of the word. This will be represented by the sign of hyphen, both in Devanāgarī and Roman. It appears with و, ا and ي or ے Examples: جُرأت = Jur-at, pronounced distinctly as jur....at not jurat. جاؤں = jā-ūñ پائے = Pā-e ہوئی = Hū-ī. Hamzaḥ may be likened to a hyphen in English as in the word co-ordinate.
Wasl		The mark wasl, meaning 'union' occurs only in words derived from Arabic. When any Arabic word begins with a Shamsī letter and is preceded by ال (al) the letter ل is not pronounced and the first letter of the word is read as doubled e.g.- اَلتَدبیر = At-tadbīr, اَلشَمس = Ash-shams and so on and when this ال (al) is preceded by any other letter, the sounds of ا and ل (a & l) would not be pronounced, e.g.- والتَدبیر = Wat-tadbīr. Unlike these when any Arabic word begins with a Qamarī letter, the ل (l) is pronounced and the initial letter of that word is not doubled e.g.- اَلقَمَر = Al-qamar and if ال (al) is preceded by some other letter, the sound of ا (alif) is dropped e.g.- بُوَالہَوس = Bul-hawas; بِالکُل = Bil-kul.

TRANSLITERATION OF KĀSHMĪRĪ ALPHABET

Although old Kāshmīrī literature was written in the Shāradā script which is very much akin to the devanāgarī, all the same peculiar to Kāshmīrī, nowadays Kāshmīrī is written in Urdū or devanāgarī script by all except a few litterateurs. Kāshmīrī pronunciation, however, is characteristic to the region. For example a Kāshmīrī will pronounce the initial u as wu or wō and initial i as yi. Similarly there are nuances of Kāshmīrī vowel sounds, which, if attempted to be rendered by Urdū or devanāgarī alphabet, will make the system unnecessarily cumbersome. For example the vowel sound 'a' has three variations, i.e., almost inaudible, short and long.

Therefore, for all practical purposes of romanisation of Kāshmīrī geographical names devanāgarī or Urdū spelling should be accepted.

TRANSLITERATION OF KHMER WRITING*

Report presented by the Working Group on a Single Romanization System

Draft romanization system of the board on geographic names/permanent committee on geographial names for Khmer (Cambodian)

The Board on Geographic Names/Permanent Committee on Geographical Names 1972 system for the romanization of Khmer writing, consisting of a romanization table and notes, is based on the modified Service Géographique Khmère (SGK) 1959 system. It differs from the latter in the following respects:

(*a*) The characters ឫ ឬ ឭ ឮ are romanized [rœ̆ rœ lœ̆ lœ], respectively (see "Independent characters" in the romanization table);

(*b*) The graphic cluster ហ្ហ is romanized [hv] (see note 3);

(*c*) The 'foot' ្ឌ is romanized [d] or [t] (see note 3);

(*d*) The graphic combinations ឥ្ឥ and ឧ្ឧ are romanized [eă] when followed by [k ng h], elsewhere [oă] (see "Vocalic nuclei" in the romanization table, and note 7);

(*e*) The independent character ឱ្ឱ is romanized either [ŏ] or [ŭ] (see the romanization table and note 11);

(*f*) The addition of diacritical marks and numerals to the romanization table;

(*g*) The addition of the notes, which are essential to application of the system.

Khmer writing, like English, is read from left to right. The small raised numbers ($x^{1,2}$) refer the user to particular notes. While most Khmer toponyms consist of Khmer lexical entries, word division is not ordinarily indicated, and Khmer diacritical marks are often omitted.

The following reference sources may be helpful in romanization:

J. Guesdon, *Dictionnaire cambodgien-français* (Paris, Les Petits-Fils de Plon et Nourrit, 1930);

S. Tandart, *Dictionnaire cambodgien-français* (Phnom Penh, Imp. A. Portail, 1935);

Institut Bouddhique, *Dictionnaire cambodgien* (Phnom Penh, 1951) (entirely in Khmer).

* The original text of this report was contained in document E/CONF.61/L.5/Add.18.

Romanization table

Consonants				*Independent characters*		*Vocalic nuclei*								
						normal			*shortened*					
â-series		*ô-series*					*â-series*	*ô-series*		*â-series*	*ô-series*		*â-series*	*ô-series*
ក្ក	k	ក្ត	k			$x^{1,2}$	â	ô	××	á	ó			
ខ្ខ	kh	ឃ	kh			×ា	a	éa	×ា	ă	eă/oă	××	ă	eă/oă
		ង្ង	ng	ឥ	ĕ	×ិ	ĕ	ĭ						
ច្ច	ch	ជ្ជ	ch	ឱ្ឱ	ei	×ី	ei	i						
ឆ្ឆ	chh	ឈ	chh			×ើ	œ̆							
		ញ	nh			×ឿ	œ							
ដ្ឌ	d	ឌ្ឌ	d	ឌ្ឌ	ŏ ŭ	×ុ	ŏ	ŭ						
ឋ្ឋ	th	ឍ	th			×ូ	o	u						
ឌ្ឌ	th	ណ	th			×ួ	uŏ							
ណ្ណ	n	ឌ្ឌ	n			×ើ	aeu	eu						
ត្ត	t	ឌ្ឌ	t			×ឿ	œă							
ប	b/p[5]					×ឿ	ie							
		ព្ព				×ៃ								
ផ្ផ	ph	ភ	ph	ឯ	ê	×ៃ	ê							
		ម	m	ឲ	ai	×ៃ	ai	ey						
		យ	y	ឱ	aô	×ោ	aô	oŭ						
		ន	r	ឱ	au	×ៅ	au	ou						
ឡ	l	ល	l	ឱ	âu									
		វ	v	ឫ	rœ									
ស	s			ឬ	rœ									
ហ	h			ឭ	lœ									
ឮ	"			ឮ	lœ									

Vocalic nuclei with anusvara or visarga		
	â-series	*ô-series*
×ុ	om	ŭm
×ំ	âm	um
×ាំ	ăm	ŏâm
×ះ	ăh	eăh
×ុះ	ŏh	ŭh
×ៃ	éh	
×ោះ	aôh	ŏăh
×ាំ	ăng	eăng

Diacritical marks

×ី	×ុ
×ូ	×ុ
×ុ	×ុ
×ូ	×ុ

Numerals

០	១	២	៣	៤	៥	៦	៧	៨	៩
0	1	2	3	4	5	6	7	8	9

Notes

1. The letter x represents any Khmer consonant character of consonant character plus "foot" (see note 4).
[ ] = graphic(ally), when enclosing Roman letters.
[C] = any Roman consonant letter.
[V] = any Roman vowel letter.
→ = is (are) romanized.

2. The Roman vowel letters in the *â*-series columns follow a romanized syllable initial x of that series: ក → [kâ]; ក្រ → [kra]. The Roman vowel letters in the *ô*-series columns follow a romanized syllable initial x of that series: គ → [kô]; គ្រ → [kréa]. The eight vocalic nuclei which are not differentiated as to series may follow a romanized syllable initial x of either series: កែ → [kê]; កែ → [kê]; ក្រែ → [krê].

A Khmer x in sullable-final position, not accompanied by a vowel marker or by ◌, is generally romanized without a vowel following: ក្ក → [kâk]; អង្ក → ['ângk]. (Exception: ពង្រ → [pôngrô], also written ពង្រ [pôngrôr] and ពង្រ [pôngrôh].)

3. The Khmer diacritical mark ◌ or "written above x of the *â*-series (except ម and ញ: see note 5) changes it to the *ô*-series: ហ្ហ → [héang]. The diacritical mark ◌ written above x of the *ô*-series changes it to the *â*-series: ញ្ញ → [nhâng]. When either of these marks would conflict with another superscribed symbol, either, or ◌ may be written in its stead: ហ្ហ → [hi]; ដ្ឋ → [dâmrei]. (These marks are frequently omitted in Khmer writing, particularly in words of Indic provenance.)

4. The second consonant of a Khmer graphic cluster is generally written below the base consonant in the special form called a "foot": ឆ្ឆ → [khnâng]. In the consonant columns of the Romanization Table, the small character directly beneath each Khmer consonant character is the "foot" of that character. The following "feet" have been omitted from the table in the interest of clarity:

"Foot" Character	*Romanization*
ឃ (ឃ)	[kh]
ឆ (ឆ)	[chh]
ញ (ញ)	[nh]
ន (ញ)	[nh]
ឆ (ឆ)	[b]
ឆ (ឆ)	[y]
ឆ (ឆ)	[r]
ឆ (ឆ)	[s]

There is no "foot" for the character ណ [th] or ឋ [1].

The "feet" ន and ន usually represent the characters ដ and ឌ respectively, rather than ត and ទ: ក្ត → [kdei]; ក្ត → [kânthéay] (but ក្ត → [kântráb]). (In cases of doubt a native Khmer speaker or a reliable reference work should be consulted.)

A "foot" determines the series of the following vocalic nucleus unless it is a nasal (ង ញ ណ ន ម; [ng nh n n m]) or យ, រ, ល, វ, or ស [y, r, l, v, s], when the base consonant determines the vocalic series: ឆ្ឆ → [khpông]; ឆ្ឆ → [l'â]; ឆ្ឆ → [thmâ]; ឆ្ឆ → [svay].

Syllable-final យ and ឆ sometimes appear as "feet": ឆ្ឆ or ឆ្ឆ → [svay]; ឆ្ឆ or ឆ្ឆ → [teăng]. This practice appears to be optional, and such irregular Khmer spellings are not reflected as such in romanization.

5. The combination ប plus ◌ is written ញ [ba], a graphic device which prevents confusion with ហ [hâ]. The characters ម and ញ with the superscribed diacritical mark ◌ are romanized [p] in the *â*-series: ប៉ង → [pâng]; ញ៉ត្ត → [patau]. The diacritical mark, or ◌ is substituted where a conflict with another superscribed symbol would occur: ឆ្ឆ → [pei]. The characters ម and ញ when accompanied by a "foot" are also romanized [p] in the *â*-series, although the Khmer diacritical mark is ordinarily omitted: ឆ្ឆ → [plêng]; ឆ្ឆ → [p'â]; ឆ្ឆ → [prăb].

6. The *â*-series consonant អ is romanized ['': ក្ត → [k'êk]; ឆ្ឆ → [châng'iĕt]; ឆ្ឆ → [rô'ĕl]; ឆ្ឆ → ['vei]; ឆ្ឆ → ['ang]. In word-initial position before a vowel, ['] may be omitted: ឆ្ឆ → [ang].

7. The Khmer diacritical mark ◌ appears only in the combinations ◌ (ឆ → [bát]; ឆ្ឆ → [khpós]) and ◌. The symbol ◌ appears only in the combination ◌. In the *â*-series both ◌ and ◌ are romanized [ă]: ឆ and ឆ both → [chăk]. In the *ô*-series both ◌ and ◌ are romanized [eă] when followed by [k ng h], elsewhere [oă]: ឆ → [rôpeăk]; ឆ → [moăt]; ឆ → [veăngk]; ឆ → [phoăpv].

8. The combination ◌ is romanized [rC]: ឆ → [thôrm]. The combination ◌ is romanized as [rC] preceded by a shortened vocalic nucleus: ឆ → [koărr].

9. The symbol ◌ in syllable-initial position is ignored in romanization: ឆ → [sâ]; ឆ → [sâsâs]. In syllable-final position ◌ indicates that x is vowelled, i.e. followed by [â] in the â-series, by [ô] in the ô-series: ឆ → [tâmnâ]; ឆ → [pômô].

10. The symbol ◌ (which appears above characters and/or vowel markers which are not vocalized) is ignored in romanization: ឆ → [bŏny]; ឆ → [poŭthĭ]; ឆ → [phumĭ].

11. The independent character ឆ is romanized either [ŏ] or [ŭ]. A native Khmer speaker or a reliable reference work should be consulted where doubt arises.

TRANSLITERATION OF THE AMHARIC ALPHABET*

REPORT PRESENTED BY THE WORKING GROUP ON A SINGLE ROMANIZATION SYSTEM

DESCRIPTION OF THE AMHARIC ALPHABET AND ITS PECULIARITIES

The Amharic alphabet is used for writing Amharic,[1] the national language of Ethiopia, which belongs to the Semitic group of languages.

The Amharic alphabet is a special form of the Ethiopian script, adapted to the peculiarities of the Amharic language. The Ethiopian script is one of the Semitic scripts, and in fact the most sophisticated one, as it indicates the vowels.

The Amharic script is read from left to right. It represents that special form of alphabet which is called a syllabary. It has 33 basic symbols, each symbol having seven different forms, usually called "orders", according to the vowel with which the basic symbol is combined. As each graphic symbol — as a rule — represents a consonant together with a vowel, the vocalic element cannot be detached from the consonantal element. Only the symbols of the sixth order can also represent the consonant alone without any vowel.

The following table, by W. Leslau,[2] shows the Amharic alphabet and a phonetic transcription of its symbols.

* The original text of this report, prepared by J. Breu, Chairman of the Working Group on a Single Romanization System, was contained in document E/CONF.61/L.5/Add.7.

[1] I. Guido, *Grammatica elementare della lingua amarica*, 3rd ed. (Rome, 1952).

[2] W. Leslau, *Amharic Textbook* (Wiesbaden, 1967).

Table 1. The Amharic alphabet according to the traditional order

ä		*u*		*i*		*a*		*e*		*ə*		*o*	
ሀ	ha	ሁ	hu	ሂ	hi	ሃ	ha	ሄ	he	ህ	hə, h	ሆ	ho
ለ	lä	ሉ	lu	ሊ	li	ላ	la	ሌ	le	ል	lə	ሎ	lo
ሐ	ha	ሑ	hu	ሒ	hi	ሓ	ha	ሔ	he	ሕ	hə	ሖ	ho
መ	mä	ሙ	mu	ሚ	mi	ማ	ma	ሜ	me	ም	mə	ሞ	mo
ሠ	sä	ሡ	su	ሢ	si	ሣ	sa	ሤ	se	ሥ	sə	ሦ	so
ረ	rä	ሩ	ru	ሪ	ri	ራ	ra	ሬ	re	ር	rə	ሮ	ro
ሰ	sä	ሱ	su	ሲ	si	ሳ	sa	ሴ	se	ስ	sə	ሶ	so
ሸ	šä	ሹ	šu	ሺ	ši	ሻ	ša	ሼ	še	ሽ	šə	ሾ	šo
ቀ	qä	ቁ	qu	ቂ	qi	ቃ	qa	ቄ	qe	ቅ	qə	ቆ	qo
በ	bä	ቡ	bu	ቢ	bi	ባ	ba	ቤ	be	ብ	bə	ቦ	bo
ተ	tä	ቱ	tu	ቲ	ti	ታ	ta	ቴ	te	ት	tə	ቶ	to
ቸ	čä	ቹ	ču	ቺ	či	ቻ	ča	ቼ	če	ች	čə	ቾ	čo
ኀ	ha	ኁ	hu	ኂ	hi	ኃ	ha	ኄ	he	ኅ	hə	ኆ	ho
ነ	nä	ኑ	nu	ኒ	ni	ና	na	ኔ	ne	ን	nə	ኖ	no
ኘ	ñä	ኙ	ñu	ኚ	ñi	ኛ	ña	ኜ	ñe	ኝ	ñə	ኞ	ño
አ	a	ኡ	u	ኢ	i	ኣ	a	ኤ	e	እ	ə	ኦ	o
ከ	kä	ኩ	ku	ኪ	ki	ካ	ka	ኬ	ke	ክ	kə	ኮ	ko
ኸ	hä	ኹ	hu	ኺ	hi	ኻ	ha	ኼ	he	ኽ	hə	ኾ	ho
ወ	wä	ዉ	wu	ዊ	wi	ዋ	wa	ዌ	we	ው	wə	ዎ	wo
ዐ	a	ዑ	u	ዒ	i	ዓ	a	ዔ	e	ዕ	ə	ዖ	o
ዘ	zä	ዙ	zu	ዚ	zi	ዛ	za	ዜ	ze	ዝ	zə	ዞ	zo
ዠ	žä	ዡ	žu	ዢ	ži	ዣ	ža	ዤ	žc	ዥ	žə	ዦ	žo
የ	yä	ዩ	yu	ዪ	yi	ያ	ya	ዬ	ye	ይ	yə	ዮ	yo
ደ	dä	ዱ	du	ዲ	di	ዳ	da	ዴ	de	ድ	də	ዶ	do
ጀ	ǧä	ጁ	ǧu	ጂ	ǧi	ጃ	ǧa	ጄ	ǧe	ጅ	ǧə	ጆ	ǧo
ገ	gä	ጉ	gu	ጊ	gi	ጋ	ga	ጌ	ge	ግ	gə	ጎ	go
ጠ	ṭä	ጡ	ṭu	ጢ	ṭi	ጣ	ṭa	ጤ	ṭe	ጥ	ṭə	ጦ	ṭo
ጨ	čä	ጩ	ču	ጪ	či	ጫ	ča	ጬ	če	ጭ	čə	ጮ	čo
ጰ	pä	ጱ	pu	ጲ	pi	ጳ	pa	ጴ	pe	ጵ	pə	ጶ	po
ጸ	ṣä	ጹ	ṣu	ጺ	ṣi	ጻ	ṣa	ጼ	ṣe	ጽ	ṣə	ጾ	ṣo
ፀ	ṣä	ፁ	ṣu	ፂ	ṣi	ፃ	ṣa	ፄ	ṣe	ፅ	ṣə	ፆ	ṣo
ፈ	fä	ፉ	fu	ፊ	fi	ፋ	fa	ፌ	fe	ፍ	fə	ፎ	fo
ፐ	pä	ፑ	pu	ፒ	pi	ፓ	pa	ፔ	pe	ፕ	pə	ፖ	po
						Labiovelars							
		ቈ	$q^wä$	ቊ	q^wi	ቋ	q^wa	ቌ	q^we	ቍ	$q^wə$		
		ኈ	$h^wä$	ኊ	h^wi	ኋ	h^wa	ኌ	h^we	ኍ	$h^wə$		
		ኰ	$k^wä$	ኲ	k^wi	ኳ	k^wa	ኴ	k^we	ኵ	$k^wə$		
		ጐ	$g^wä$	ጒ	g^wi	ጓ	g^wa	ጔ	g^we	ጕ	$g^wə$		

The wa-symbol. All the consonants can be followed by *-wa* or pronounced rounded with the vowel *a*. This pronunciation is represented by ◡ added to the top or by ⌐ added to the bottom of the underlying character written in the first or in the fourth order. The characters are ሏ lwa, ሟ (or ሗ) mwa, ሯ (or ሯ) rwa, ሧ swa, ሷ šwa, ቧ bwa, ቷ twa, ቿ čwa, ኋ nwa, ኗ ňwa, ዟ zwa, ዧ žwa, ዷ dwa, ጇ ǧwa, ጧ ṭwa, ጯ čwa, ጷ ṣwa, ፏ (or ፗ, ፟ፏ) fwa.

General problems in the romanization of the Amharic alphabet

The Amharic language has 27 consonants and 7 vowels. From the discrepancy between the 27 consonants and the 33 basic symbols it follows that certain pairs or groups of symbols are pronounced identically. Romanization can now either simply follow pronunciation or try to represent homophonous Amharic characters by different Roman letters or (mostly) combinations of Roman letters. The main difficulty arises with the sixth order, the symbols of which are pronounced in some cases as consonants only, in others as consonants plus the vowel of the order. All existing romanization systems allow for this alternative: it would be too strange not to indicate a vowel actually spoken or to insert a vowel letter where no vowel is pronounced.

Comparison and evaluation of important existing romanization systems

The following romanization systems for the Amharic alphabet, listed in order of their first publication, are of importance.

The Board on Geographic Names/Permanent Committee on Geographical Names system of 1967.[3] This is a revision of the system adopted in 1949 and published by the United States Board on Geographic Names in 1951. Abbreviation: BGN.

The romanization used by the Mapping and Geography Department of the Ministry of Land Reform and Administration of the Imperial Ethiopian Government. It was first published in 1958. The current version is that of the second revised edition of August 1962.[4] Abbreviation: MGD.

The romanization system elaborated by S. Wright, published in 1964, and recommended by him for use in the *Journal of Ethiopian Studies*.[5] Abbreviation: WR.

The romanization system of the Library of Congress, as presented in the draft of July 1970.[6] It will be officially accepted by the Library of Congress in the near future. Abbreviaton: LC.

A comparative table of BGN, WR and LC has been distributed to the members of the Working Group on a Single Romanization System and to the Cartography Section of the United Nations. MGD is reproduced below. For the purpose of this report, the tables of W. Leslau and of MGD are sufficient. In view of the complexity of the Amharic alphabet, it is not possible to show a full comparative table in the format of this report.

[3] The Geographer, Office of Strategic and Functional Research, *et al.*, *Romanization Guide*, revised ed. ([Washington, D.C.] 1967).

[4] Imperial Ethiopian Mapping & Geography Institute, *Amharic-to-English Transliteration System*, 2nd revised ed. ([Addis Ababa], 1962).

[5] S. Wright, "The transliteration of Amharic", *Journal of Ethiopian Studies* (Addis Ababa), vol. 2 (1964), pp. 1-10.

[6] Library of Congress, "Romanization of Amharic alphabet", draft [Washington, D.C., 1970].

Table 2. Amharic-to-English transliteration system of the Imperial Ethiopian Mapping and Geography Institute

1st form	*2nd form*	*3rd form*	*4th form*	*5th form*	*6th form**	*7th form*
ሀ ha†	ሁ hu	ሂ hi	ሃ ha	ሄ he	ህ hi	ሆ ho
ለ Le	ሉ lu	ሊ li	ላ la	ሌ le	ል li	ሎ lo
ሐ ha†	ሑ hu	ሒ hi	ሓ ha	ሔ he	ሕ hi	ሖ ho
መ me	ሙ mu	ሚ mi	ማ ma	ሜ me	ም mi	ሞ mo
ሠ se	ሡ su	ሢ si	ሣ sa	ሤ se	ሥ si	ሦ so
ረ re	ሩ ru	ሪ ri	ራ ra	ሬ re	ር ri	ሮ ro
ሰ se	ሱ su	ሲ si	ሳ sa	ሴ se	ስ si	ሶ so
ሸ she	ሹ shu	ሺ shi	ሻ sha	ሼ she	ሽ shi	ሾ sho
ቀ k'e	ቁ k'u	ቂ k'i	ቃ k'a	ቄ k'e	ቅ k'i	ቆ k'o
በ be	ቡ bu	ቢ bi	ባ ba	ቤ be	ብ bi	ቦ bo
ተ te	ቱ tu	ቲ ti	ታ ta	ቴ te	ት ti	ቶ to
ቸ che	ቹ chu	ቺ chi	ቻ cha	ቼ che	ች chi	ቾ cho
ኀ ha†	ኁ hu	ኂ hi	ኃ ha	ኄ he	ኅ hi	ኆ ho
ነ ne	ኑ nu	ኒ ni	ና na	ኔ ne	ን ni	ኖ no
ኘ nye	ኙ nyu	ኚ nyi	ኛ nya	ኜ nye	ኝ nyi	ኞ nyo
አ a†	ኡ u	ኢ i	ኣ a	ኤ e	እ i	ኦ o
ከ ke	ኩ ku	ኪ ki	ካ ka	ኬ ke	ክ ki	ኮ ko
ኸ he	ኹ hu	ኺ hi	ኻ ha	ኼ he	ኽ hi	ኾ ho
ወ we	ዉ wu	ዊ wi	ዋ wa	ዌ we	ው wi	ዎ wo
ዐ a†	ዑ u	ዒ i	ዓ a	ዔ e	ዕ i	ዖ o
ዘ ze	ዙ zu	ዚ zi	ዛ za	ዜ ze	ዝ zi	ዞ zo
ዠ zhe	ዡ zhu	ዢ zhi	ዣ zha	ዤ zhe	ዥ zhi	ዦ zho

* The vowel of the sixth form (i) is eliminated in spelling except when the English pronunciation requires it (so not "Menigisiti" but "Mengist").

† Sounds identical to fourth-form sound.

commended for international cartographic use, MGD will be the right choice. If one attaches more importance to reversibility, LC or BGN (documentation variant) are to be recommended. Linguistics and documentation — even within English-speaking countries — will prefer LC, as it follows in its choice of special Roman letters a well-established scientific tradition, and as it can use shorter combinations of Roman letters in representing Amharic characters by making ampler use of diacritical signs.

TRANSLITERATION OF BULGARIAN WRITING*

REPORT PRESENTED BY THE WORKING GROUP ON A SINGLE ROMANIZATION SYSTEM

The Bulgarian alphabet is a relatively simple form of the Cyrillic alphabet and can be transliterated satisfactorily on a letter-for-letter basis.

The comparative table below sets out the four systems in current use for the transliteration of Bulgarian geographical names.

The Bulgarian Academy of Sciences system is used on the 1:2,500,000 Map of the World and in the 1:1,250,000 Soviet World Atlas.

The International Organization for Standardization system of 1968 is used in its optional variant form in the *Duden Wörterbuch geographischer Namen* and in the atlas of the Touring Club Italiano.

The Universal Postal Union French system appears to be used only in international lists of post-offices and telegraph offices.

The Board on Geographic Names/Permanent Committee on Geographical Names system has been widely used for the last twenty years. Complete map cover of Bulgaria using the system is available at 1:1,000,000 and 1:500,000; Board on Geographic Names Gazetteer No. 44 lists every inhabited place in Bulgaria and covers physical features down to a scale of about 1:400,000. All major atlases published in the United Kingdom use this system, though United States atlas practice is not consistent.

Among less well-known systems in cartographic use perhaps the most interesting is that in Bertelsmann's Atlas: it is more or less identical with the Bulgarian Academy system but substitutes ŭ for â.

Whether a system for international use can be definitively adopted by the Second United Nations Conference in London will depend on the resolution of current disagreements on criteria. If the view prevails that the romanization of geographical names is a specialized facet of documentation, then the ISO system would be a strong candidate (though the existence of variant ISO options might make for further disagreement). If the view prevails that "donor" systems should as far as possible be accepted by all "receivers", then the Bulgarian Academy system will no doubt be proposed. If the view prevails that the availability of romanized mapping at the largest scale should be the determining factor, then the BGN/PCGN system would be the natural candidate. If the trilingual approach (providing for a system corresponding to each of the three Roman-alphabet languages of the United Nations) is adopted, BGN/PCGN would no doubt be proposed for the English component; whether the somewhat eccentric UPU system would be considered suitable by the French-speaking group is somewhat less certain; and it would remain to be decided whether there exists a generally acceptable Spanish system.

Two other factors have to be taken into consideration:

Reversibility — BGN/PCGN would have to provide for a dot or hyphen between t and s to distinguish тс from ц, and rather more complex additions would be needed for the UPU system;

Automation — diacritic would have to be reduced to a minimum.

* The original text of this paper was contained in document E/CONF.61/L.5/Add.10.

Table 1. Comparative table of transliteration systems for Bulgarian

(Where columns are blank all systems are identical with the system of the Bulgarian Academy of Sciences)

Bulgarian	*BAS*[a]	*ISO*[b]	*BGN/PCGN*[c]	*UPU*[d]
а	'a			
б	b			
в	v			
г	g			
д	d			
е	ę			
ж	z	ž	zh	j
з	z			
и	i			
й	j	j	y	i

ፈ	ye	ፉ	yu	ፊ	yi	ፋ	ya	ፌ	ye	ፍ	yi	ፎ	yo
ደ	de	ዱ	du	ዲ	di	ዳ	da	ዴ	de	ድ	di	ዶ	do
ጀ	je	ጁ	ju	ጂ	ji	ጃ	ja	ጄ	je	ጅ	ji	ጆ	jo
ገ	ge	ጉ	gu	ጊ	gi	ጋ	ga	ጌ	ge	ግ	gi	ጎ	go
ጠ	t'e	ጡ	t'u	ጢ	t'i	ጣ	t'a	ጤ	t'e	ጥ	t'i	ጦ	
ጨ	ch'e	ጩ	ch'u	ጪ	ch'i	ጫ	ch'a	ጬ	ch'e	ጭ	ch'i	ጮ	ch'o
ጰ	p'e	ጱ	p'u	ጲ	p'i	ጳ	p'a	ጴ	p'e	ጵ	p'i	ጶ	p'o
ጸ	ts'e	ጹ	ts'u	ጺ	ts'i	ጻ	ts'a	ጼ	ts'e	ጽ	ts'i	ጾ	ts'o
ፀ	ts'e	ፁ	ts'u	ፂ	ts'i	ፃ	ts'a	ፄ	ts'e	ፅ	ts'i	ፆ	ts'o
ፈ	fe	ፉ	fu	ፊ	fi	ፋ	fa	ፌ	fe	ፍ	fi	ፎ	fo
ፐ	pe	ፑ	pu	ፒ	pi	ፓ	pa	ፔ	pe	ፕ	pi	ፖ	po

Diphthongs

ኰ	kwe	ኲ	kwi	ኳ	kwa	ኴ	kwe	ኵ	kwi
ጐ	gwe	ጒ	gwi	ጓ	gwa	ጔ	gwe	ጕ	gwi
ቈ	k'we	ቊ	k'wi	ቋ	k'wa	ቌ	k'we	ቍ	k'wi
ኈ	hwe	ኊ	hwi	ኋ	hwa	ኌ	hwe	ኍ	kwi

Pronunciation Guide

Vowels

1st form: e as in English "met"
2nd form: u like ou in English "you"
3rd form: i as in English "marine"
4th form: a as in English "father"
5th form: e like ay in English "may"
6th form: i as in English "sin"
7th form: o as in English "oh"

Consonants

g as in English "good"
j as in English "John"
ny like ñ in Spanish "señor"
zh like s in English "measure"
Letters followed by an apostrophe (') require an explosive enunciation.

BGN has two variants, one for documentation work and the other for more general purposes. The documentation variant of BGN, and LC (which uses a large number of diacritical signs), are strictly reversible, but neither of them can be employed for romanizing Amharic texts by anyone not conversant with the language as — just as with all the other systems — the symbols of the sixth order must be romanized in two different ways according to their pronunciation.

WR provides for two variants, one for documentation purposes and the other for general use. Even the stricter variant is not reversible, as some pairs of Amharic characters are, for phonetic reasons, represented by a single Roman letter-combination.

MGD represents homophonous Amharic letters by the same Roman letters or letter-combinations. It is a phonetic transcription not allowing for reversibility. For documentation purposes BGN (documentation variant) and LC are valuable although neither of them is a transliteration in the strict sense. They differ in their choice of the Roman letters, BGN following the style of English transcriptions, LC following international linguistic usage. Thus BGN needs more Roman letters than LC but fewer diacritical signs. For example, "shu" corresponds to "šu", "chu" to "ču", "nyu" to "ñu" and "zhu" to "žu". WR is in this respect on the same lines as LC, whereas MGD follows English usage.

Practical proposals for acceptance by the Second United Nations Conference on the Standardization of Geographical Names

The First United Nations Conference on the Standardization of Geographical Names, held at Geneva in 1967, recognizing the need to adopt a single system for the transliteration of Amharic into the Roman alphabet, recommended that the "Amharic-to-English transliteration system" to be adopted by the Ethiopian national geographical names authority be considered by the proposed United Nations Permanent Committee of Experts on Geographical Names for acceptance as a standard international system for the writing of Ethiopian geographical names in the Roman alphabet.

The present situation is that the Mapping and Geography Department of the Ethiopian Government Ministry of Land Reform and Administration, which functions as the national geographic names authority, uses MGD on its official maps; and that MGD therefore can be considered as having official status. This situation is documented by an official letter received by the present writer from the Imperial Ethiopian Government, Ministry of Land Reform and Administration (ref. No. 3/L 32/63), dated July 26, 1971.

If one adopts the principle that romanizations officially accepted by the donor country itself ought to be re-

Table 1. (*continued*)

Bulgarian	*BAS*[a]	*ISO*[b]	*BGN/PCGN*[c]	*UPU*[d]
к	k			
л	l			
м	m			
н	n			
о	o			
п	p			
р	r			
с	s	s	s	s, ss (between vowels)
т	t			
у	u	u	u	ou
х	h		hkh	h
ц	c	c	ts	tz
ч	č	ch	tch	
ш	š	š	sh	ch
щ	št	šč (št)	sht	cht
ъ	â	" (ă)	ŭ	a
ь	j	'	'	i
ю	ju	ju	yu	u
я	ja	ja	ya	ia

[a] Bulgarian Academy of Sciences system.

[b] International Organization for Standardization system, contained in Recommendation R 9, 2nd ed., (September 1968). Bracketed forms are optional variants.

[c] BGN/PCGN system, devised by the United States Board on Geographic Names, published by it in May 1949, and accepted by the United Kingdom Permanent Committee on Geographical Names for British offical use in September 1952.

[d] French-based system used by the Universal Postal Union and the International Telecommunications Union.

Table 2. The system of the United States Board on Geographic Names/Permanent Committee on Geographical Names for the transliteration of Bulgarian geographical names

Bulgarian	*Transliteration*	*Bulgarian*	*Transliteration*
А а	a	П п	p
Б б	b	Р р	r
В в	v	С с	s
Г г	g	Т т	t
Д д	d	У у	u
Е е	e	Ф ф	f
Ж ж	zh	Х х	kh
З з	z	Ц ц	ts
И и	i	Ч ч	ch
Й й	y	Ш ш	sh
К к	k	Щ щ	sht
Л л	l	Ъ ъ	ŭ
М м	m	Ь ь	' (apostrophe)
Н н	n	Ю ю	yu
О о	o	Я я	ya

In transliteration from sources written in the orthography which was official before February 1945:

Word-final **ъ** should be omitted in transliteration;

The obsolete letter **ѫ**, now replaced by **ъ**, should be transliterated by ŭ; and

The obsolete letter **ѣ**, replaced in February 1945 by **е** or **я** according to the local pronunciation, should be transliterated by ye, if sources written in the new orthography are not available (names transliterated with ye representing **ѣ** should be corrected to agree with the new Bulgarian spellings as they become available).

TRANSLITERATION OF THE ARABIC ALPHABET

AMENDMENTS TO THE BEIRUT SYSTEM (1971) MADE IN ACCORDANCE WITH RESOLUTION 8 OF THE SECOND UNITED NATIONS CONFERENCE ON THE STANDARDIZATION OF GEOGRAPHICAL NAMES*

Table 1. Transliteration of Arabic consonants

Arabic letter	*Name of letter*	*Beirut transliteration system*	*Recommended amendment*	*Example*	
ء	hamzah	-----	omit (initial)	Abū Kamāl	أبوكمال
ء		-----	' (medial)	Bi'r	بئر
ء		-----	' (final)	Ṣan'ā'	صنعاء
أ	alif	a	omit	Inshāṣ	إنشاص
ب	bā	b		Banhā	بنها
ت	tā	t		Tadmur	تدمر
ث	thā	th	th	Tharthār	ثرثار
ج	jīm	j		Jabal	جبل
ح	ḥā	h	ḥ	Ḥimṣ	حمص
خ	khā	kh	kh	Khaybar	خيبر
د	dāl	d		Dammām	دمام
ذ	dhāl	dh	dh	Dhahbān	ذهبان
ر	rā	r		Rafah	رفح
ز	zāy	z		Zabīd	زبيد
س	sīn	s		Sīnā'	سيناء
ش	shīn	sh	sh	Shibīn	شبين
ص	ṣād	s	ṣ	Ṣafad	صفد
ض	ḍād	d	ḍ	Dab'ah	ضبعه
ط	ṭā	t	ṭ	Tanṭā	طنطا
ظ	ẓā	zh	ẓ	Ẓahrān	ظهران
ع	'ayn	'		'Akkā	عكا
غ	ghayn	gh	gh	Ghadīr	غدير
ف	fā	f		Fālūjah	فالوجله
ق	qāf	q		Qaṭar	قطر
ك	kāf	k		Kūt	كوت
ل	lām	l		Lībyā	ليبيا
م	mīm	m		Miṣr	مصر
ن	nūn	n		Najd	نجد
ه	hā	h		Hīt	هيت
و	wāw	w		Wahrān	وهران
ى	yā	y		Yaman	يمن

* See *Volume I. Report of the Conference* (United Nations publication, Sales No. E.74.I.2).

Table 2. Transliteration of Arabic vowels, diphthongs and dacritical marks

Arabic letter	*Name of letter*	*Beirut transliteration system*	*Recommended amendment*	*Example*	
◌َ	fatḥah	--------	a	al-Baṣrah	البصره
◌ِ	kasrah	--------	i	ar-Riyāḍ	الرياض
◌ُ	ḍammah ṭawīlah	--------	u	al-Burj	البرج
◌ُ	ḍamah qaṣīrah	--------	o	'Omān	عمان
◌ْ	sukūn	--------	omit	Aḍḥá	اضحى
آ	alif fatḥah	--------	ā	Bāb	باب
أ	alif maddah	--------	ā	Qur'ān	قرآن
ى	alif maqṣūrah	--------	á	Marsá Matrūk	مرسى مطروح
ي	yā kasrah	--------	ī	al-Madīna'h	المدينة
◌ً	tanwīn fatḥah	--------	a^{n}	Bāba^{n}	باباً
◌ٍ	tanwīn kasrah	--------	i^{n}	Bābi^{n}	باب
◌ٌ	tanwīn ḍammah	--------	u^{n}	Bābu^{n}	باب
◌ّ	shaddah	--------	doubling	Abu Rommānah	أبورمانه
ال (شمسية)	al (shamsiyah)	doubling		ash-shāriqah	الشارقة
ال (قمرية)	al (qamariyah)	al		al-wādī	الوادي

STANDARDIZATION OF GEOGRAPHICAL TERMINOLOGY AND TRANSCRIPTION OF GEOGRAPHICAL TERMS AND NAMES

Report presented by Yugoslavia*

In cartography transcription means the process of transposing geographical terms and names from one language into the writing system of the map-user.

Five methods of transcription may be distinguished: orthographic, phonetic, traditional, the translation method and the transliteration method.

The orthographic method consists in writing geographical terms and names in the same way as they are written in the original language.

The phonetic method is the method of writing terms as they are pronounced in the original foreign language.

The traditional method generally means the use of traditional terms, employed in a few better-known population centres, which have become familiar in a foreign language and are distinct from the terms of the original language. This method is commonest in literature.

The translation method is the method of writing geographical terms as they are expressed after translation from the foreign language into that of the map-user.

The transliteration method consists in assigning to one graphic symbol a corresponding graphic symbol in another writing system, without taking the pronunciation of the individual words into account.

We have cited these definitions of transcription methods, which are well known, because we consider them simpler and more specific than those recommended by the First United Nations Conference on the Standardization of Geographical Names, held at Geneva in 1967.

It is a well-known fact that there are two official alphabets in Yugoslavia, the Roman and the Cyrillic; this creates an initial difficulty in the presentation of all kinds of written information, whether plans, maps, atlases or any other publication. In addition, Yugoslavia, which is a country made up of several republics, applies the principle of the right of each nation and national minority to use its own language and alphabet for all writings. It may be concluded therefore that, as far as the standardization of geographical terms is concerned, Yugoslavia, although a relatively small country, provides an example which is worthy of study by experts and scholars throughout the world.

In order to standardize geographical names and terms — names of localities, rivers, orographic features and areas within the borders of Yugoslavia — in maps, atlases, and all vocational and scientific documentation (with the exception of literature, in which the traditional method of writing geographical terms predominates), the following methods are generally used:

Whether the Roman or the Cyrillic alphabet is used, all geographical terms are given the same spelling and the same pronunciation as those adopted by the nation inhabiting the region in question;

If the Roman alphabet is used, all geographical terms or names from other countries are written and pronounced as spelt and pronounced in the national language of the area concerned;

If the Cyrillic alphabet is used, all geographical terms or names from other countries are written phonetically as pronounced in the language of the nation concerned;

Geographical terms and names written in other graphic symbols (from languages of the USSR, Chinese, Arabic etc.) are transcribed into the Roman or Cyrillic alphabet according to their pronunciation in the language of the nation concerned.

Consequently, we would like to propose, for the transcription of the geographical terms of nations which do not use the Roman alphabet, that the latter should be used with the same letters and pronunciation as are used in transcriptions into Serbo-Croat,[1] supplemented, if necessary, by combinations of letters for sounds which do not occur in Serbo-Croat. If this is accepted, the principal rule of Serbo-Croat should be adhered to, which is to write as one speaks: this means that the pronunciation of the letters of the Roman and Cyrillic alphabets is strictly phonetic, i.e. each letter is always pronounced in the same way. In applying this rule, it would be neccessary to adopt, to indicate the pronunciation of the Roman letters of Serbo-Croat, a well-known international system of transcription, such as that of the International Phonetic Association (IPA).

It should be noted that the letters of Roman alphabet are used this way in all central European nations. It should also be remembered that the Roman letters of Serbo-Croat have been used for the romanization of Russian Cyrillic. Such a romanization system is presented in the USSR State rules for transliteration from the Cyrillic to the Roman alphabet, published in 1957.

To sum up, the method of transcription which uses the Roman letters of Serbo-Croat could be used for the transliteration of geographical terms written in different graphic symbols, and their pronunciation would be phonetic. Geographical terms written in the Roman alphabet would be written and pronounced as they are written and pronounced in the language of the nation concerned.

The three tables below illustrate the phonetic transcription of the Roman letters of Serbo-Croat.

* The original text of this report, submitted in French, was contained in document E/CONF.61/L.7.

[1] The expressions "Serbo-Croat" and "Croato-Serbin" have exactly the same meaning.

Table 1. Phonetic pronunciation of the Roman letters of Serbo-Croat

Roman letters of Serbo-Croat	*Phonetic pronunciation in symbols of the International Phonetic Association (IPA)*
A a	a
B b	b
C c	ʦ*
Č č	ʧ

Table 1 (*continued*)

Roman letters of Serbo-Croat	*Phonetic pronunciation in symbols of the International Phonetic Association (IPA)*
Dž dž	dʒ
Đ đ	dj*
E e	e
F f	f
G g	g
H h	h
I i	i
J j	j
K k	k
L l	l
Lj lj	lj*
M m	m
N n	n
Nj nj	ɲ
O o	o
P p	p
R r	r
S s	s
Š š	s
T t	t
U u	u
V v	v
Z z	z
Ž ž	ʒ

* Approximate pronunciation.

Table 2. Equivalence between the Cyrillic letters of Russian and the Roman letters used in Serbo-Croat

Cyrillic letters used in Russian		*Corresponding letters in Serbo-Croat*
а		a
б		b
в		v
г		g
д		d
е	(following a consonant)	e
е	(initially, and following ъ and ь)	je
ё	(following consonants other than ж, ч, ш, щ)	'o
ё	(initially, and following ъ and ь)	jo
ё	(following ж, ч, ш, щ)	o
э		e
ж		ž
з		z
и		i
и	(following ь)	ji
й		j
к		k
л		l
м		m
н		n
о		o
п		p
р		r
с		s
т		t
у		u
ф		f
х		h
ц		c
ч		č
ш		š
щ		šć

Table 2 (*continued*)

Cyrillic letters used in Russian		*Corresponding letters in Serbo-Croat*
ъ	(not pronounced)	
ы		i
ь	(finally and before consonants)	'
ь	(not pronounced before a vowel)	(omitted)
ю	(following a consonant)	'u
ю	(initially, and following ъ and ь)	ju
я	(following a consonant)	'a
я	(initially, and following ъ and ь)	ja

Table 3. Equivalence between the Roman letters and diphthongs of Serbo-Croat and those of English

Roman letters of Serbo-Croat	*Corresponding letters of English*
	Roman letters
a	u Sunderland (sandeled) a Darwin (davin)
b	b Boston (bosten)
c	
ć, č	ch China (čajne)
d	d Danube (denjub)
dž	j Japan (džepen), soldier (souldže) g Germany (džemini), Belgium (beldžem)
đ	
e	a America (emerike) e Belgium (beldžem) ea Heart (hert)
f	f France (frans)
g	g Gambia (gembie)
h	h Harvard (haved)
i	i Gil (gil), e England (inglend) ea east (ist),
j	y Yugoslavia (jugouslavie)
k	k Kent (kent), c Canada (kenede) qu Quebec (kuibek)
l	l London (landen)
lj	lj Lure (ljue)
m	m Madrid (medrid)
n	n Nile (nail)
nj	nj New York (nju-jok)
o	a Baltic (boltik) au Saul (sol) o Oxford (oksfed)
p	p Paris (peris)
r	r Rome, (roum)
s	s Sumatra (sumatre) c Ceylon (silon) c Cyprus (saipres) c Cicero (siserou)
š	sh Shannon (šenen) ss Russia (rase)
t	t Tahiti (tahiti)
u	u Sudan (suden) o Boleyn (bulin) oo Hoover (huve)
z	z Zanzibarr (zenziba) s Silesia (sailizie)
ž	g Bruges (bruž)
	Diphthongs
ai	i island (ailend)
au	o town (taun)
ei	a Belgrade (belgreid)
ju	u Budapest (bjudepest)
ou	o Dover (douve)

Table 3 (*continued*)

Roman letters of Serbo-Croat	*Corresponding letters of English*
ž	g Bruges (bruž)
	Diphthongs
ai	i islend (ailend)
au	o town (taun)
ei	a Belgrade (belgreid)
ju	u Budapest (bjudcpest)
ou	o Dover (douve)

These three tables show that the sounds of Russian and those of English can be written phonetically using the Roman letters of Serbo-Croat. It will be for linguists to establish a more exact relationship between the different languages and writing systems.

In the transcription we propose, the orthographic, phonetic and transliteration methods of transcription are used in combination. At first glance, it might seem that the amalgamation of these three methods of transcription is its major defect. However, it is certain that such a complex problem as that of standardizing geographical names in different languages and writing systems cannot be solved simply and by means of a single rule without becoming unacceptable to a large number of people.

We consider that this system is particularly suitable for application where written forms of geographical terms do not yet exist. This is especially true of several African and Asian languages, the geographical terms of which must be catalogued according to their pronunciation by recording them on tape.

It should also be remembered that all nations are beginning to give some thought to simplifying the writing of words in their own languages.

WRITING SYSTEMS*

Report presented by Austria, the Federal Republic of Germany, the Netherlands and Switzerland

THE TRANSFER OF NAMES FROM ONE WRITING SYSTEM INTO ANOTHER

Wherever a given romanization system has been officially introduced and is employed in practice by a country for a language that is spoken on its territory and uses a non-Roman alphabet, that same romanization system, irrespective of its scientific qualities, should be recommended for international use.

If preparatory work aiming at devising such a romanization system is being carried on in a country, no resolution on that matter should be passed until the preparatory work has yielded practical results.

If, or while, no official system of the kind described above for the romanization of languages using non-Roman alphabets exists and no preparatory work for one is observable, it is recommended that a system of romanization that has proved workable in international use, especially in linguistics, libraries and documentation, be adopted. If more than one such romanization system exists for a language, preference should be given to a system which enables reconversion to be performed with a maximum of exactitude and simplicity.

Among the possible instances of conversion from one writing system into another, only conversion from non-Roman alphabets and from ideographic scripts into Roman script falls within the scope of the international standardization of geographical names.

THE WRITING OF NAMES FROM UNWRITTEN LANGUAGES

For practical reasons the question of writing names from unwritten languages should be dealt with under item 9 of the agenda ("National standardization"), since the establishment of written forms of names from unwritten languages is a task for the national administration and is of no immediate interest for international standardization until such names have passed from the unwritten language into the official language of the country. International standardization is not to be expected to face the problem of taking over any names directly from unwritten languages, it being safe to presume that no unwritten language has the status of an official national language.

* The original text of this report was contained in document E/CONF.61/L.21.

THE ROMANIZATON OF CHINESE*

Report presented by the joint regional conference of the East Central and South-East Europe and the Union of Soviet Socialist Republics linguistic/geographic divisions

The regional conference of the East Central and South-East Europe and the Union of Soviet Socialist Republics linguistic/geographic divisions suggested that the Conference adopt the so-called Pinyin system ("Hanyu pinyin"), the official system of romanization in the People's Republic of China, as the international system for the romanization of Chinese geographical names. In support of the proposal, the following points are mentioned:

The Pinyin system is an officially approved romanization system in China. While there is no example of the

* The original text of this report was contained in document E/CONF.61/L.28.

domestic use of this system on maps, it is widely used for other purposes, such as education and telecommunication, and in such publications as journals and dictionaries.[1] A earlier form of this system (there are a few differences, but it can easily be converted into the Pinyin system) was published as index headings in a Chinese atlas;[2] this index contains about 15,000 geographical names. The system will have even wider application "in view of the current attempt to promote a single national language".[3]

The Pinyin system has been used in several countries, in the following atlases and map series: *Grosser Bertelsmann Weltatlas* (Gütersloh, 1961); *Politikai Világtérkép* (Budapest, 1961); *Bertelsmann Atlas Internatonal* (Gütersloh, 1963); *Map of China* (Budapest and Stockholm, 1967); *The World Atlas* (Moscow, 1967); *The International Atlas* (Chicago, 1969); *Gran Atlas Aguilar* (Madrid, 1969); *World Map 1:2,500,000:* sheet 58, *Ulan Bator* (Warsaw, 1969).

The Pinyin system is based on the modern Peking dialect, and it is easy to convert any other system into this one, provided it is based on the same dialect: for example, the Wade-Giles, the Zhuyin zimu or Chuyin tzŭmu, or the Russian Osanin romanization.

The syllables of geographical names in the Pinyin romanization system are written together: there are no hyphens. In some cases an apostrophe should be used to divide syllables which could be interpreted in two different ways (for example, "Xi'an").

There are only three digraphs in this system, as against nine in the Wade-Giles, and the use of the apostrophe to show aspiration is also eliminated. The letter ü is used less frequently than in the Wade-Giles system.

The Pinyin System permits the showing of tones, although this is of little importance in geographical names except in the names of the provinces Shǎnxi (Shensi) and Shānxi (Shansi).

It should be mentioned that some modifications to the Wade-Giles system have been made in the romanization of the geographical names shown in the Board on Geographic Names Gazetteer[4] and on the sheets of the International Map of the World on the Millionth Scale. These modifications give rise to ambiguity in some cases: for example, the two different phonemes [e] and [uo] of the modern Peking dialect are both converted to "o". Elsewhere this system differs from the modern Peking dialect, thus creating confusion in (among others) the case of the characters meaning "harbour" and "rivulet".

Finally, reference should be made to a comment by H. D. Talbot on the map review by P. J. M. Geelan,[5] to the effect that the Pinyin system offers the first opportunity, when speaking Chinese, of reading a name on a map and being able to be confident that one's pronunciation will be correct and that the name will be understood.[6] According to another opinion, "Pinyin is perhaps the simplest conversion system".[7]

Based on the above arguments, the regional conference of linguistic/geographic groups 7 and 8 suggests the following recommendation:

The Conference,

Recognizing the Pinyin system ("Hanyu pinyin") as currently being official in China for the transcription of Chinese characters into the Roman alphabet,

Noting that, while this system is linguistically accurate, it is also the simplest and therefore the most suitable for the romanization of geographical names,

Recommends the adoption of the Pinyin system ("Hanyu pinyin") as the international system for the romanization of Chinese geographical names.

Annex I

COMPARATIVE TABLE OF ROMANIZATION SYSTEMS FOR CHINESE

Pinyin	*Wade-Giles*	*Pinyin*	*Wade-Giles*
a	a	chan	ch'an
ai	ai	chang	ch'ang
an	an	chao	ch'ao
ang	ang	che	ch'ê
ao	ao	chen	ch'ên
ba	pa	cheng	ch'êng
bai	pai	chi	ch'ih
ban	pan	chong	ch'ung
bang	pang	chou	ch'ou
bao	pao	chu	ch'u
bei	pei	chua	ch'ua
ben	pên	chuai	ch'uai
beng	pêng	chuan	ch'uan
bi	pi	chuang	ch'uang
bian	pien	chui	ch'ui
biao	piao	chun	ch'un
bie	pie	chuo	ch'o
bin	pin	ci	tz'ŭ
bing	ping	cong	ts'ung
bo	po	cou	ts'ou
bu	pu	cu	ts'u
ca	ts'a	cuan	ts'uan
cai	ts'ai	cui	ts'ui
can	ts'an	cun	ts'un
cang	ts'ang	cuo	ts'o
cao	ts'ao	da	ta
ce	ts'ê	dai	tai
cei	(ts'ei)	dan	tan
cen	ts'ên	dang	tang
ceng	ts'êng	dao	tao
cha	ch'a	de	tê
chai	ch'ai	dei	tei

[1] *Hanzi Pinyin Jianzi* (Shanghai, 1958), *Chinesisch-Deutsches Wörterbuch* (Beijing, 1959) and others.

[2] *Zhonghua Renmin Gongheguo Dituji* (Shanghai, 1957).

[3] I. L. Legeza, *Guide to Transliterated Chinese in the Modern Peking Dialect* (Leiden, 1968).

[4] United States Board on Geographic Names, *China*, Gazetteer No. 22 (Washington, 1956).

[5] "Map of China, review", *The Geographical Journal* (London), vol. 135, part 1, 1969.

[6] H. D. Talbot, "Chinese place names", *The Geographical Journal* (London), vol. 135, part 4, 1969.

[7] "British Standards Institution strives to convert Chinese", *The Times* (London), 13 November 1967.

Pinyin	Wade-Giles
den	(tên)
deng	têng
di	ti
dian	tien
diao	tiao
die	tieh
ding	ting
diu	tiu
dong	tung
dou	tou
du	tu
duan	tuan
dui	tui
dun	tun
duo	to
ê	ê/o
en	ên
er/r	êrh
fa	fa
fan	fan
fang	fang
fei	fei
fen	fên
feng	fêng
fo	fo
fou	fou
fu	fu
ga	ka
gai	kai
gan	kan
gang	kang
gao	kao
ge	kê/ko
gei	kei
gen	kên
geng	kêng
gong	kung
gou	kou
gu	ku
gua	kua
guai	kuai
guan	kuan
guang	kuang
gui	kuei
gun	kun
guo	kuo
ha	ha
hai	hai
han	han
hang	hang
hao	hao
he	hê/ho
hei	hei
hen	hên
heng	hêng
hong	hung
hou	hou
hu	hu
hua	hua
huai	huai
huan	huan
huang	huang
hui	hui
hun	hun
huo	huo
ji	chi
jia	chia
jian	chien
jiang	chiang
jiao	chiao
jie	chieh
jin	chin
jing	ching
jiong	chiung
jiu	chiu
ju	chü
juan	chüan
jue	chüeh
jun	chün
ka	k'a
kai	k'ai
kan	k'an
kang	k'ang
kao	k'ao
ke	k'ê/k'o
kei	k'ei
ken	k'ên
keng	k'êng
kong	k'ung
kou	k'ou
ku	k'u
kua	k'ua
kuai	k'uai
kuan	k'uan
kuang	k'uang
kui	k'uei
kun	k'un
kuo	k'uo
la	la
lai	lai
lan	lan
lang	lang
lao	lao
le	lê
lei	lêi
leng	lêng
li	li
lia	lia
lian	lien
liang	liang
liao	liao
lie	lieh
lin	lin
ling	ling
liu	liu
long	lung
lou	lou
lu	lu
luan	luan
lüe	lüeh
lun	lun
luo	lo
lü	lü
lüan	lüan
lün	lün
ma	ma
mai	mai
man	man
mang	mang
mao	mao
mei	mei
men	mên
meng	mêng
mi	mi
mian	mien
miao	miao
mie	mieh
min	min
ming	ming
miu	miu
mo	mo
mou	mou
mu	mu
na	na
nai	nai
nan	nan
nang	nang
nao	nao
nei	nei
nen	nên
neng	nêng
ni	ni
nian	nien
niang	niang
niao	niao
nie	nieh
nin	nin
ning	ning
niu	niu
nong	nung
nou	nou
nu	nu
nuan	nuan
nüe	nüeh
nun	nun
nuo	nuo
nü	nü
ou	ou
pa	p'a
pai	p'ai
pan	p'an
pang	p'ang
pao	p'ao
pei	p'ei
pen	p'ên
peng	p'êng
pi	p'i
pian	p'ien
piao	p'iao
pie	p'ieh
pin	p'in
ping	p'ing
po	p'o
pou	p'ou
pu	p'u
qi	ch'i
qia	ch'ia
qian	ch'ien
qiang	ch'iang
qiao	ch'iao
qie	ch'ieh
qin	ch'in
qing	ch'ing
qiong	ch'iung
qiu	ch'iu
qu	ch'ü
quan	ch'üan
que	ch'üeh
qun	ch'ün
ran	jan
rang	jang
rao	jao
re	jê
ren	jên
reng	jêng
ri	jih
rong	jung
rou	jou
ru	ju
rua	(jua)
ruan	juan
rui	jui
run	jun
ruo	jo
sa	sa
sai	sai
san	san
sang	sang
sao	sao
se	sê
sei	(sei)
sen	sên
seng	sêng
sha	sha
shai	shai
shan	shan
shang	shang
shao	shao
she	shê
shei	(shei)
shen	shên
sheng	shêng
shi	shih
shou	shou
shu	shu
shua	shua
shuai	shuai
shuan	shuan
shuang	shuang
shui	shui
shun	shun
shuo	shuo
si	ssŭ
song	sung
sou	sou
su	su
suan	suan
sui	sui
sun	sun
suo	so
ta	t'a
tai	t'ai
tan	t'an
tang	t'ang
tao	t'ao
te	t'ê
tei	(t'ei)
teng	t'êng
ti	t'i
tian	t'ien
tiao	t'iao
tie	t'ieh
ting	t'ing
tong	t'ung
tou	t'ou
tu	t'u
tuan	t'uan
tui	t'ui

Pinyin	*Wade-Giles*	*Pinyin*	*Wade-Giles*
tun	t'un	yun	yün
tuo	t'o	za	tsa
wa	wa	zai	tsai
wai	wai	zan	tsan
wen	wan	zang	tsang
wang	wang	zao	tsao
wei	wei	ze	tsê
wen	wên	zei	tsei
weng	wêng	zen	tsên
wo	wo	zeng	tsêng
wu	wu	zha	cha
xi	hsi	zhai	chai
xia	hsia	zhan	chan
xian	hsien	zhang	chang
xiang	hsiang	zhao	chao
xiao	hsiao	zhe	chê
xie	hsieh	zhen	chên
xin	hsin	zheng	chêng
xing	hsing	zhi	chih
xiong	hsiung	zhong	chung
xiu	hsiu	zhou	chou
xu	hsü	zhu	chu
xuan	hsüan	zhua	chua
xue	hsüeh	zhuai	chuai
xun	hsün	zhuan	chuan
ya	ya	zhuang	chuang
yan	yen	zhui	chui
yang	yang	zhun	chun
yao	yao	zhuo	cho
ye	yeh	zi	tzŭ
yi	i/yi	zong	tsung
yin	yin	zou	tsou
ying	ying	zu	tsu
yong	yung	zuan	tsuan
you	yu	zui	tsui
yu	yü	zun	tsun
yuan	yüan	zuo	tso
yue	yüeh		

Annex II

SPELLING OF GEOGRAPHICAL NAMES IN THE PINYIN SYSTEM

The syllables of geographical names in the Pinyin system are generally written together, with the first letter capitalized. This also applies to names containing a generic of one syllable. Generics consisting of two or more syllables are considered as separate words within the geographical names, and have a lower-case initial, except when they occur in names of countries or major administrative units, where the separate generics are also capitalized. Thus we have Shanghai, Xinhailian, Huhehaote, Huanghe, Jiaolianhe, Liaodongwan, Qiongzhou haixia, Qinling shanmai; Zhonghua Renmin Gongheguo, Neimenggu Zizhiqu.

An apostrophe should be used between syllables in the following cases:

Where two adjacent syllables of the Pinyin system could be read as a monosyllable, e.g. *qi'ao* (two syllables) but *qiao* (one syllable), *xi'an* and *xian*, *li'ao* and *liao*;

Where the letters *n* or *g* are not finals but could have been interpreted as such, e.g. Jin'gecun (because "Jingecun" could be Jing-e-cun), Jian'gai ("Jiangai" could be Jiang-ai), Lia'nan ("Lianan" could be Lian-an).

There is no need to use an apostrophe where the letters form no existing combination with the following letter in the Peking dialect: thus we write Laian (not "Lai'an", as there is no *ian* syllable), Songmuao (not "Songmu'ao", as there is no *muao* syllable). An apostrophe is also needless where the letters n or ng are indeed syllable-finals: thus we write Donganzhan (= Dong-an-zhan), Xinan (= Xin-an), Zhenan (= Zhen-an).

The tone-marks of the Pinyin system should not be used except when they make possible a distinction between apparent homonyms (which only look like homonyms in consequence of the omission of the tone-marks), e.g. Shānxi and Shǎnxi.

CANADIAN POLICY IN THE STANDARDIZATION OF RECENTLY COLLECTED ESKIMO TOPONYMS ACCORDING TO THE LEFEBVRE-GAGNÉ ORTHOGRAPHY*

Report presented by Canada

The Eskimo population of Canada is growing rapidly. Approximately 16,000 Eskimos live scattered over the Canadian arctic regions. They are mostly concentrated in the Northwest Territories but can also be found in northern Quebec (3,200), Labrador (1,250) and the northern part of the province of Manitoba (365).

In the last few years the education of Eskimos has become extremely important. Everything relating to their culture, including especially their language and geographical nomenclature, is regarded as part of the national heritage and a public asset.

This paper describes the phonological system of the Eskimo language and its official orthography. The writing system reflects the structure of the Eskimo language and uses the unified orthography recently adopted by the Canadian Ministry of Indian Affairs and Northern Development and the Geographical Board of the province of Quebec. It is an interdialectal orthography which, unlike the syllabic script, is readily understood by the Eskimos.

The Eskimo language, at least as it is spoken in the eastern Canadian Arctic, has a phonological system consisting of 18 basic sounds—15 consonants and 3 vowels. Both consonants and vowels can be short or long (geminate). The distinction between short and long phonemes is extremely important, and can be responsible for differences of meaning both in lexical items and in grammatical forms. For example, the difference in meaning between /kiina(q)/ "face" and /kina/ "who?" is based on a difference of vowel-length; and the difference in meaning between /ikiq/ "passage between the two shores of a bay" and /ikkiq/ "gum" is based on the distinction between a single consonant and a double (geminate) consonant.

* The original text of this report, prepared by J. Poirier, Secretary of the Quebec Geographical Board, was contained in document E/CONF.61/L.34.

It is important to point out that the Eskimo language, especially in the eastern Canadian Arctic, is passing through a stage in its development which is marked by increased gemination. This trend, which for some time has been spreading from east to west, has been singled out by experts as a characteristic of the modern Eskimo language. W. Thalbitzer, the Danish eskimologist, made this observation as early as 1928 at the Twenty-Third International Congress of Americanists.

The standardized interdialectal orthography takes this development into account, and recognizes only a rather limited number of consonant-clusters consisting of two different elements. This leaves a large number of geminates, but only where they are essential, i.e. where they result from the assimilation of one consonant to another within clusters. This system, which is soundly based and logical, differs from the earlier more whimsical transcriptions which varied according to how travellers heard them.

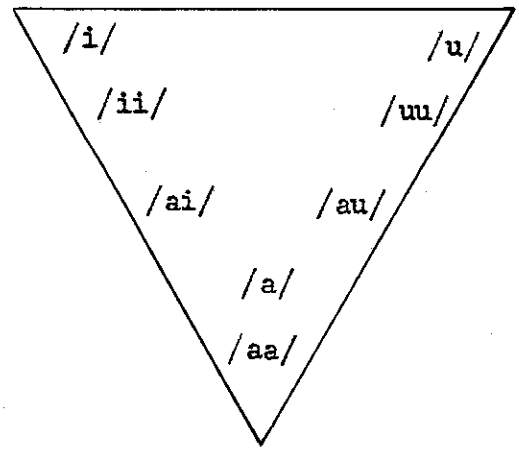
To form some idea of the arbitrariness of the old-style "phonetic" transcriptions, one has only to compare the various ways in which identical words were written depending on the transcriber, the region and the year. It is essential to avoid referring to the same thing by different names. Variants like "Taserk", "Tessik", "Tassik", "Tasiq", all meaning "lake", should not be tolerated. The Eskimos would appreciate it. A cursory examination of the map of New Quebec easily provides examples of such annoying and avoidable inconsistencies.

The tables below briefly summarize, in tabular form, the sounds of Eskimo and how they are written.

Consonants

	Bilabial		*Dental-alveolar*		*Palatal*		*Velar*		*Uvular ("guttural")*	
	voiceless	*voiced*	*voiceless*	*voiced*	*voiceless*	*voiced*	*voiceless*	*voiced*	*voiceless*	*voiced*
Stops	/p/		/t/				/k/		/q/	
	/pp/		/tt/				/kk/		/rq/	
Nasals		/m/		/n/				/ng/		/rng/
		/mm/		/nn/				/nng/		
Fricatives		/v/	/s/			/j/		/g/		/r/
		/vv/	/ss/			/jj/		/gg/		/rr/
Laterals				/l/						
			(fricative)	/ll/						

Vowels. In Eskimo, there are only three vowels, which may be simple, geminate or complex ("diphthongs"):



As the table shows, there are two degrees of opening:
(*i*) Open: /a/
(*ii*) Closed: /i/, /u/
and three points of articulation:
(*i*) Front: /i/
(*ii*) Back: /u/
(*iii*) Central /a/.

It would be tedious and it would not serve our purpose to illustrate all the single letters, digraphs and trigraphs which in the past have been used to represent the basic sounds of Eskimo. Heretofore there has been no system which consistently represented the same phoneme by an invariant symbol or letter. Today we have a system of graphemes which very faithfully and simply represents the pronunciation and the inherent structure of the language. This is the standardized orthography adopted by the Ministry of Indian Affairs and Northern Development: with its 18 letters (including the digraph ll representing the lateral fricative), it can clearly reflect the phonological and grammatical structure of the language both for the transcription of oral texts and for the recording of place names.

The following are a few examples of the unintelligible combinations and fanciful graphic representations used for certain phonemes which are among the most common or most important in the language.

The lateral fricative. The combinations "bl", "dl", "pl", "gl", "kl", "sl", "shl", "hl" have been used for /ll/. There are several reasons for this proliferation of symbols containing the letter l, viz., dialectal variation, the faulty hearing of investigators and incomplete assimilations. This phoneme, which is represented as a digraph, serves to distinguish such pairs of words as /alaq/ "sole" and /allaq/ "book".

Other consonants. "kr", "k", "ch", "c", etc. have been used for initial /q-/: /qimmiq/ "dog"; "rkr", "rgr", "gg", etc. for medial /-rq-/: /tarqituq/ "he hides"; "rk", "c", "k", etc. for final /-q/: /inusiq/ "life". The velar /k/ must not be confused with the uvular /q/ since the distinction is meaningful: /kimmik/ "heel" but /qimmiq/ "dog"

Vowels. The phoneme /a/ is frequently written as "e" before s or l and as "o" before k. /i/ also appears as "e" when it is lowered. /u/ appears as "o" before /k/ and in the open position, i.e. before a consonant; the same effect is produced by a following /q/.

We would hope that our brief survey of the confusing variety of graphic representations of the 18 phonemes

has demonstrated the need to represent the toponymic and other elements of the Eskimo language by an invariant system based on an accepted phonemic chart. We believe that we have succeeded in fulfilling that need.

Let us now take a look at the consonant-clusters (mostly digraphs) which are permissible in the standardized system.

Geminates: /pp/, /tt/, /kk/, /mm/, /nn/, /nng/, /vv/, /ss/, /jj/, /gg/, /rr/, /ll/.

Non-geminates. /rp/, /rt/, /rq/, /rm/, /rn/, /rv/, /rs/, /j/, /rl/ represent the phoneme /-q-/ (in the stem or elsewhere) in the environment of a following consonant: assimilation does not occur. To these clusters should be added the two nasal phonemes /ng/ (velar) and /rng/ (uvular or "guttural").

Assimilation operates regressively, i.e. from the second consonant to the first. For example, the underlying cluster kp is assimilated to /pp/, the underlying cluster pt is assimilated to /tt/ and so on When working with a transcription from field notes, the first procedure is to derive the underlying forms from the assimilations according to this rule. This procedure works except in the case of /r/ in the environment of other phonemes (/r/ or /q/).

The simplified Lefebvre-Gagné orthography adopted by Canada is used for transcribing recently collected Eskimo toponyms. With its 18 letters (including the digraph ll representing the lateral fricative), the system clearly reflects the phonological and grammatical structure of the language both in the transcription of oral texts and in the recording of place names.

ROMANIZATION OF CYRILLIC SCRIPT*

Report presented by Austria

The First International Meeting of the Transcription Commission of the International Committee of Slavists was held in Vienna at the seat of the Institute of Slavic Philology of the University of Vienna from 6 to 8 April 1972.

The following participants attended: official representatives of the committees of slavists of Austria (J. Hamm), Finland (M. Widnäs), France (E. Decaux), the German Democratic Republic (H. Zikmund), the United Kingdom of Great Britain and Northern Ireland (R. F. L. Bancroft), Hungary (L. Hadrovics), Italy (A. Cantarini), Norway (A. Gallis), Poland (M. Szymczak) and the United States (G. Hüttl-Worth); the national committee of Austria (O. Back, J. Breu, G. Neweklowsky); and unofficial rapporteurs for Yugoslavia and Czechoslovakia. The minutes were taken by R. Preinerstorfer (Vienna). It was noted with regret that the committees of slavists of some countries which play an important role in the study of Slavic languages were not able to send representatives to the meeting.

The representatives of the following countries asked to be excused: Belgium, Bulgaria, Denmark, the Federal Republic of Germany, Romania, Sweden, Switzerland, the USSR and Yugoslavia.

Special contributions were submitted in writing by C. Backvis (Belgium), J. S. G. Simmons (United Kingdom of Great Britain and Northern Ireland), B. Collinder (Sweden) and G. Jacobsson (Sweden).

The Meeting provided a valuable opportunity for an exchange of experiences and opinions concerning practical and theoretical questions in the transcription of Slavic languages. These were also the subject of a number of reports and papers delivered by the participants.

Reports were delivered on transcription practices in the various countries by O. Back, J. Breu, E. Decaux, A. Gallis, M. Widnäs and H. Zikmund.

The following papers were presented.

Otto Back: "Differences in transcription between languages with Roman and Cyrillic alphabets, and related problems".

Josef Breu: "The present state of the endeavours to create generally recognized systems for the transcription of Cyrillic alphabets".

Etienne Decaux: "Généralités sur la transcription et la translitération"; and "Le rapprochement des alphabets des aveugles slaves".

Arne Gallis: "Theory and practice of the transcription of Russian proper names in the media in Norway (translations, newspapers etc.)".

Maria Widnäs: "The Vowels a, o and y in Russian Transcription".

Hans Zikmund: "The present state of the work involved in the elaboration of guidelines for the uniform German transcription of Cyrillic Russian proper names in the German Democratic Republic"; and "The names of the territorial administrative units of the Soviet Union".

The paper on the Braille systems and their Slavic transcription by E. Decaux was received with great interest and approval. On the first day the chair was taken by J. Hamm and A. Gallis, on the second day by L. Hadrovics and E. Decaux and on the third day by M. Szymczak.

As a result of the discussions, and on the basis of various proposals and counter-proposals, the following resolutions were adopted.

A. *On the transliteration system according to the International Organization for Standardization recommendation R 9-1968*. The transliteration of the Russian letter ъ should be reviewed and, if possible, altered so that ъ is rendered by a single sign (by ′ or ') rather than by a double apostrophe (see ISO R 9-1968, p. 5, item 27).

* The original text of this report, prepared by J. Hamm, Chairman of the Transcription Commission of the International Committee of Slavists, was contained in document E/CONF.61/L.43.

The reason for this recommendation is that in linguistics the apostrophe generally indicates the palatalization of the preceding consonant (see item 29, where ' is correctly used for ъ). The Russian ъ , however, is merely a separation symbol which may, without prejudice to intelligibility, be rendered by the straight vertical sign which is found on all typewriters. Thus: объявление would become "ob'javlenie" and not "ob"javlenie", and in Macedonian we would have "'rǵa" and not ""rǵa".

All the other Cyrillic-Latin letter equivalents which the International Organization for Standardization recommendation R 9 of September 1968 (including the modifications on p. 8) lists for the Slavic Cyrillic alphabets are accepted without reservation.

B. *On the Soviet transliteration system according to GOST 16876-71.* The Latin transcription for the Russian alphabet laid down in GOST 16876-71 of 6 April 1971 and effective in the USSR from 1 January 1972[1] is believed to have contributed greatly—within the given technical possibilities—towards facilitating international telecommunications. Its value is further enhanced by annotation 2, p. 2, which is also accepted in its entirety without any reservations.

The possibility, envisaged in item 2, p. 1, of using the International Organization for Standardization transliteration for libraries is considered a further advantage. It is suggested that this transliteration be used in international cartography as well.

The Commission will be able to consider more comprehensive recommendations in connexion with the Soviet standard only after sufficient experience has been gathered on the practical implementation of the provisions of the standard both inside and outside the USSR.

C. *On the Polish transliteration system according to PN-70/N-01201.* It is appreciated that the Polish Slavists have worked out, and submitted to the Transcription Commission of the International Committee of Slavists, Standard PN-70/N-01201, a comprehensive system for the transliteration of Slavic languages with Cyrillic scripts into the Roman alphabet.

Fundamentally this system is in compliance with the International Organization for Standardization recommendation R 9-1968. However, the following remarks seem indicated:

It would be preferable to render Cyrillic x by h according to table 1, item 22) rather than by ch (according to variant ISO R 9, p. 5, footnote 3);

As far as the rendering of ъ is concerned a modification in accordance with resolution A would be desirable;

It would be necessary to discuss the question of whether variants should be provided, in compliance with ISO R 9, table 2, footnote 1, for those cases in which the linguistic peculiarities of Ukrainian should be taken into account (e.g.: for и, Roman y rather than Roman i; for Cyrillic i, Roman i rather than Roman i).

D. *On transcription for other than scientific purposes (journalism, literature).* Rules for the transcription of words, especially of names, from Cyrillic-script languages into Roman-script languages in literary and journalistic contexts fall fully within the competence of the national bodies responsible for orthographic questions in the Roman-script language concerned.

Names taken over from one Slavic language into another Slavic language should not be changed too much to fit the linguistic system of the second language, and any modifications that are necessary should be phonetically consistent.

E. *On transcription in reference books on a national level.* It is recommended to the transcription commissions of the various countries to include in the national orthographic reference books tables for the transliteration of the Russian alphabet in accordance with ISO R 9-1968 and GOST 16876-71, and to adopt this transliteration for telecommunications.

The results so far obtained of the efforts made in various countries (such as Norway) to standardize and improve the rendering of Cyrillic proper names are appreciated. Linguistic research institutions in the various countries are called upon to carry on and intensify such efforts. In this connexion particular attention should be paid to the correct (though nationally slightly modified) pronunciation of the transliterated names, above all in the mass media.

F. *On the rendering of proper names from the Soviet Union.* The Committee of Slavists of the USSR is requested to examine to what extent research and publication activities in the USSR and its Union republics can be intensified so as to make possible the correct and unambiguous written and oral transference of proper names of all types into languages spoken outside the USSR (e.g. by the publication of pronunciation and spelling dictionaries for proper names, and of lists of territorial administrative units and of proper names of all types—with indication of correct stress and use of the letter ё, indication of original forms in the case of non-Russian proper names, and reference to the morphological structure of extended or derived forms of proper names).

G. *On the sequence of letters.* From the point of view of the librarian as well as for other practical reasons it would be desirable to devise a uniform, systematically arranged alphabet for all Slavic languages.

At present, in a Roman-script language ch is found between cg and ci, whereas in other languages it is treated as a separate letter following after h; within the Cyrillic-script area, Russians and Ukrainians write щ whereas White Russians use ш ч; in Macedonian к follows Т, г follows д.

[1] While the communiqué was being drafted J. Breu informed the chairman of the Transcription Commission of the International Committee of Slavists of the contents of a letter sent to him on 7 April 1972 by the Kartograficheskii Naukno-informatsionnii Tsentr, Moscow, and signed by A. Komkov, Head of the Department of Geographical Names. The paragraph pertinent to the meeting reads as follows. "In your circular ... you wrote that Soviet standard GOST 16876-71 had been published. You probably do not know that its coming into force has been postponed, since this document, as it appeared, had not been agreed upon with some of the organizations concerned. I have the honor to inform you officially that it was scheduled to be remade by July 1973."

It seems that for the time being the most practical approach would be to concentrate on achieving uniformity between the Roman-script languages.

The Commission will continue the work taken up at the Institute of Slavic Philology of the University of Vienna and carry on its efforts to compile and publish a bibliography on the problems of the transcription of Slavic languages in co-operation with the committees of Slavists of the individual countries as well as with other interested institutions.

On 6 April the Mayor of the City of Vienna gave a lunch at the Rathauskeller in honour of the Commission. On 7 April the foreign participants were guests of the Commission at Grinzing.

On Saturday evening the chairman, M. Szymczak, thanked all the participants for their co-operation and expressed his gratitude to the hosts.

The Transcription Commission of the International Committee of Slavists will, on the occasion of the Seventh International Congress of Slavists in Warsaw (22 to 28 August 1973), hold an administrative meeting in which a report on previous activities will be given, and the date, place and main topic of the next international scientific meeting of the Commission will be fixed.

STANDARDIZATION OF GEOGRAPHICAL NAMES IN JAPAN,* PART 2[1]

Report presented by Japan

Systems of spelling used in romanization. At present there are two systems usually used in romanizing Japanese geographical names, namely the "Kunreisiki" system and the modified Hepburnian system.

The "Kunreisiki" is a system the Government established by the cabinet instructions of 21 September 1937. It was worked out by modifying a part of the "Nihonsiki", which had been devised by Japanese scholars and followed the nature of the Japanese language. The modified Hepburnian is a system worked out by modifying a part of the Hepburnian system, which the American missionary J. C. Hepburn devised when he compiled a Japanese-English dictionary early in the Meiji era.

Present status of standardization. It was for the purpose of standardizing the system of romanizing the Japanese language that the Government established the Kunreisiki, but subsequently a variety of systems came into popular use again, causing confusion. This led the Government to issue the cabinet notification of 9 December 1954, reproduced as an annex to this report, which included a table showing the Kunreisiki and a table showing the modifed Hepburnian and other systems, and the cabinet instructions appended, as a further step for promoting standardization.

The principal areas of use of the Kunreisiki and the modified Hepburnian system are these:

The International Map of the World on the Millionth Scale (produced by the Geographical Survey Institute, Ministry of Construction)—Kunreisiki;

Marine charts (produced by the Hydrography Department, Maritime Safety Agency)—Kunreisiki;

International aerial navigation charts (produced by the Hydrography Department, Maritime Safety Agency)—modified Hepburnian;

United Nations population statistics (reported by the Statistics Bureau through the Administrative Management Agency)—modified Hepburnian;

The Universal Postal Union list of post-offices (reported by the Postal Bureau, Ministry of Posts and Telecommunications)—modified Hepburnian;

Aerial navigation information (issued by the Civil Aviation Bureau, Ministry of Transport)—modified Hepburnian;

The weather report (Meteorological Agency)—modified Hepburnian;

Elementary school education (Agency for Cultural Affairs)—Kunreisiki.

Annex

CABINET NOTIFICATION NO. 1 OF 1954 (TRANSLATION)

The system of transcribing Japanese into the Latin alphabet is hereby fixed as given below.

Sigeru YOSIDA
Prime Minister

9 December 1954

SYSTEM OF TRANSCRIBING JAPANESE INTO THE LATIN ALPHABET

Introduction

1. The spelling system given in table 1 shall generally be followed in transcribing Japanese into the Latin alphabet.

2. Only in cases where it is difficult for the present to change the spelling internationally or traditionally established may the spelling system given in table 2 be followed.

3. In both of the cases described in the preceding two paragraphs, the rules given in the postscript shall apply.

* The original text of this report was contained in document E/CONF.61/L.45.

[1] Part 1 of this report (document E/CONF.61/L.44) is reproduced under item 9.

Table 1

a	i	u	e	o			
ka	ki	ku	ke	ko	kya	kyu	kyo
sa	si	su	se	so	sya	syu	syo
ta	ti	tu	te	to	tya	tyu	tyo
na	ni	nu	ne	no	nya	nyu	nyo
ha	hi	hu	he	ho	hya	hyu	hyo
ma	mi	mu	me	mo	mya	myu	myo
ya	(i)	yu	(e)	yo			
ra	ri	ru	re	ro	rya	ryu	ryo
wa	(i)	(u)	(e)	(o)			
ga	gi	gu	ge	go	gya	gyu	gyo
za	zi	zu	ze	zo	zya	zyu	zyo
da	(zi)	(zu)	de	do	(zya)	(zyu)	(zyo)
ba	bi	bu	be	bo	bya	byu	byo
pa	pi	pu	pe	po	pya	pyu	pyo

Translator's note. This is the Kana table transcribed into the Roman alphabet according to the Kunreisiki system. The sound units in parentheses have already been shown in a previous line.

Table 2

sha		shi		shu tsu		sho			
cha		chi		chu fu		cho			
ja		ji		ju		jo			
di	du		dya		dyu	dyo			
kwa									
gwa									
						wo			

Translator's note. This is part of the Kana table transcribed according to the modified Hepburnian and other systems. In this part the spellings differ from those given in table 1. Elsewhere they are the same as those given in table 1.

A Japanese consonant, except syllabic n, is always followed by a vowel or "y" [j][a] plus a vowel.

Any of the Japanese sound units (except those pronounced a, i, u, e, o or n) will be a combination either of a consonant and a vowel or of a consonant followed by "y" [j] and a vowel.

The Kana table contains all the Kana sounds (sound units expressed in signs peculiar to the Japanese language). In the Kana table, the Kana are arranged in such a way that all the Kana elements containing the same vowel are arranged in a vertical column and the five Kana elements containing the same or similar consonants are put in a horizontal line. Japanese words and sentences can always be written in a combination of the 70 or so Kana in the table, although in usual practice Chinese characters are mixed with them. Table 1, the Kunreisiki system, shows a very regular arrangement: for instance, the letter that denotes the consonant of the sound units of the third line is invariably "s". The Kunreisiki system is superior to the modified Hepburnian and other systems in simplicity and regularity from the viewpoint of writing. As far as reading is concerned, however, it is somewhat misleading. As a matter of fact, the s in the syllable represented by "si" in the Kunreisiki should be pronounced [ʃ] (the "sh" of English "ship") and not [s] (as in English "see").

A transcription of the Kana table in international phonetic symbols is given on page 182.

[a] Symbols in square brackets are international phonetic symbols, given in Daniel Jones, *English Pronouncing Dictionary*.

Strictly speaking, some of the transcriptions given—especially those marked*—are not exact. However, they will suffice for general purposes.

Postscript

In addition to the prescriptions given in the tables above, the rules given in the following paragraphs shall be followed:

1. The n-sound (including sound [m] before sound [p], [b] or [m]) is invariably transcribed "n":
   Denpô (not Dempo)
   Tanba (not Tamba)
   Gunma (not Gumma)

2. When an n is pronounced separately from a vowel, or a y plus a vowel, following the n, an apostrophe is added after the n:
   Shin'osaka
   San'in
   San'yo

3. An assimilated sound is expressed by the first consonant of the syllable that follows it:
   Yokkaichi
   Sapporo

4. A long vowel is expressed by adding ^ above the vowel concerned:
   Akô
   Kôbe
   Tenryû

a	i	u	e	o			
ka	ki	ku	ke	ko	kja	kju	kjo
sa	ʃi	su	se	so	ʃa	ʃu	ʃo
ta	tʃi	tsu	te	to	tʃa	tʃu	tʃo
na	ni*	nu	ne	no	nja	nju	njo
ha	hi*	hu*	he	ho	hja	hju	hjo
ma	mi	mu	me	mo	mja	mju	mjo
ja	i	ju	je	jo			
ra	ri	ru	re	ro	rja	rju	rjo
wa	i	u	e	o			
ga	gi	gu	ge	go	gja	gju	gjo
za	(d)ʒi	(d)zu	ze	zo	dʒa	dʒu	dʒo
da	(d)ʒi	(d)zu	de	do			
ba	bi	bu	be	bo	bja	bju	bjo
pa	pi	pu	pe	po	pja	pju	pjo

When the vowel concerned or the whole word is written in capitals, the system of repeating the vowel may be used instead of the first method:

Oosaka *or* OOSAKA

5. Whatever system is convenient to the writer may be used for expressing a special sound (e.g. in a foreign word).

6. A capital letter shall be used for the first letter of the first word in a sentence and for the first letter of a proper noun:

Tôkyô

Kore wa mati desu.

Capital letters may also be used for the first letters of nouns other than proper nouns:

Tizu (map)

Sinsetu (kindness)

(The Examples were added by the translator.)

CABINET INSTRUCTIONS NO. 1

To: the ministries and other government agencies

Instructions concerning the systems of writing Japanese in the Latin alphabet

With respect to the systems of writing Japanese in the Latin alphabet, cabinet instructions No. 3 dated 21 September 1937 were issued for the purpose of unifying the various systems. There were indications that the system recommended by the Government would become increasingly popular. Subsequently, however, several systems came to be used again. This caused various inconveniences in the disposition of business in government offices and the like and in the social life of people as well as in the fields of education and science. We believe that the unification of the various systems into a single system will add greatly to improving the efficiency of clerical work and educational activities and promoting the progress of science.

Therefore, the Government has adopted the recommendation of the Advisory Commission for Research in the Japanese Language and published the system of transcribing Japanese into the Latin alphabet by means of cabinet notification No. 1. It is desired that all the government offices employ this system in transcribing Japanese into the Latin alphabet and that they recommend employment of this system to the circles concerned in an effort to attain the object of the establishment of the system.

Cabinet instructions No. 3 dated 21 September 1937 are hereby abolished.

Sigeru YOSIDA
Prime Minister

9 December 1954

ROMANIZATION SYSTEMS FOR RUSSIAN PLACE NAMES*

Report presented by the Union of Soviet Socialist Republics

The conversion of names from one writing system into another is a complicated national and international problem. In the USSR the national aspect is seen in the transfer of foreign-language names (using various scripts) to the languages of the peoples of the USSR, primarily to Russian (using Cyrillic script). Practical transcription is the principal method of transferring names and our main efforts have been directed to the elaboration of special rules for it.

The international aspect of the problem, which is no less important, consists of the opposite task, that of transferring Russian place names from Russian script to forms suitable for languages using non-Cyrillic scripts, including the Roman alphabet. Such forms should provide a single romanization of Russian place names for all languages using the Roman alphabet, if it is really intended to serve the interests of wide international communication.

The elaboration of a single romanization system for Russian geographical names is now in progress but encounters great difficulties.

The first difficulty arises because geographical names cannot be separated from other kinds of proper names: personal names, names and addresses of organizations, enterprises and firms, names of ships and airports etc. Different systems, lacking any co-ordination between each other, for romanizing the Russian alphabet have long been in use in the different spheres of human activity related to international communication, such as cartography, bibliography, postal and telegraph communication, and sea, air and railway transport. Several

* The original text of this report, prepared by A. M. Komkov, Head of the Department of Geographical Names, Central Research Institute of Geodesy, Aerial Surveying and Cartography, Moscow, and member of the United Nations Group of Experts on Geographical Names, was contained in document E/CONF.61/L.75.

of them have international status within their field of application. The introduction of a single romanization system will inevitably entail changes away from the systems in current use and this involves the interests of many institutions.

The second difficulty is caused by some idiosyncrasies of the Russian graphic symbols and Russian orthography. The modern Russian language has 39 phonemes, which are represented by 33 letters. Some of them—е, ё, ю, я—represent two different sounds depending on their position in the word; and while a single Roman-letter equivalent for each of these will inevitably distort the reading of some Russian place names, an attempt to preserve the correct pronunciation will complicate the system and violate the principle of unambiguousness.

The large quantity of variants of the Roman alphabet gives rise to the third difficulty. As is known, there is no single alphabet for all the modern languages using Roman script, of which there are more than 70. They each employ different sets of characters (numbering anything from 26 to 38) and diacritical marks, and in many cases assign different phonetic values to the same character.

Different approaches to the problem and attempts to overcome these difficulties have given rise to a large number of different systems for the transliteration of the Russian alphabet.

At present several dozens of romanized forms of Russian place names are in use in the USSR and foreign countries. Many authors have been engaged in a comparative study of these systems—among them L. V. Shcherba,[1] A. A. Reformatskiy,[2] R.S. Gilyarevskiy,[3] Josef Breu[4] and J.T. Shau.[5]

The systems in most widespread use can be divided into two groups. The first is relatively not large and includes conventional systems. Such systems are not directly related to the orthography of any particular language which uses the Roman alphabet. Examples are the USSR Academy of Sciences system, the system of the International Organization for Standardization and the system adopted in the USSR for writing international telegrams.

The second group is much more numerous and includes national transliterations. These systems are based on the graphic symbols, orthography and traditions of each individual language using the Roman alphabet—English, French, Spanish, German or any other. The national transliteration systems in many countries are actually national systems of practical transcription.

The similarity and differences between some of the most widely used romanizations of the Russian alphabet are shown in annex I.[6] As can be seen from the table, of the 33 Russian letters 13 have the same Roman equivalents in all the romanization systems. Eight other letters have the same equivalents in most of the systems. But the representation of the Russian sibilants (ж, ш, ч, щ), palatalized vowels (е, ё, ю, я) and some other letters (й, х, ц, ь) varies widely. Annex II demonstrates how the differences between these systems affect the representation in the Roman alphabet of Russian place names. For example, Ельня may become "Jel'n'a", "El'nja", "Elnia", "Yel'nya" or "Jelnja"; Щукино may be "Ščukino", "Scukino", "Shchukino", "Chtchoukino" or "Schtschukino".

The differences in the spelling of place names between the different transliteration systems used in maps and other documents are sometimes so considerable that they may hinder and even make impossible the identification of features.

To determine which of the existing romanizations can be recommended for international use (or taken as a basis for the elaboration of a system which could be), it is necessary to evaluate their advantages and disadvantages. There are some basic requirements that should serve as criteria for such an assessment. They are neutrality, universality, unambiguousness and reversibility.

Since transliteration is intended to promote international communication it should be equally acceptable to all countries using the Roman alphabet. Hence the necessity for a system which would be neutral between all national variants of that alphabet.

By "universality" is meant that it must be possible for the system to be utilized in all spheres of international communication—not only for geographical names, but for any Russian words.

The requirements of unambiguousness and reversibility need no explanation.

It is of great importance to take into consideration the spread and currency of any transliteration system in established practice. It should be borne in mind that a single romanization system for the Russian alphabet recommended for international use will have to be chosen in the context of the existence and long-standing usage of traditional competing systems.

All other things being equal, preference should be given to the romanization systems that are most economical, that display graphic simplicity, and in which the phonetic value of individual Roman letters is the most common and widespread (i.e. which are not designed to take account of the orthographic peculiarities of individual languages).

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[1] L.V. Shcherba, "Transliteratsiya latinskimi bukvami russkikh familiy i geograficheskikh nazvaniy", *Izvestiya AN SSSR, Otdel literatury i yazyka*, 1940. No. 3, pp. 118-126.

[2] A.A. Reformatskiy, "Transliteratsiya russkikh tekstov latinskimi bukvami", *Voprosy yasykoznaniya*, 1960, No. 5, pp. 96-103.

[3] R.S. Gilyarevskiy, "Ob opisanii perevodov sovetskikh knig na inostrannye yasyki (metod transliteratsii)", *Sovetskaya bibliografiya*, 1955, No. 39, pp. 25-34.

[4] Josef Breu, "Die Transkription in der Kartographie", *Mitteilungen der Österreichischen Geographischen Gesellschaft*, vol. 3 (1969), Nos. 2/3, pp. 235-239.

[5] J.T. Shau, *The Transliteration of Modern Russian for English-Language Publications* (Madison and Milwaukee, University of Wisconsin, 1967).

[6] The table contains romanization systems used for writing Russian place and personal names in publications intended for wide audiences. The romanization systems applied in Russian texts in special linguistic works (Russian and Slavic philology) are not dealt with in this report.

The USSR Academy of Sciences romanization system[7] was first developed in 1901 by a special commission set up by the Academy of Sciences. Afterwards some outstanding Russian linguists—A. A. Shakhmatov, L. V. Shcherba, A. A. Reformatskiy and others—contributed to its improvement. The system was approved by the Language and Literature Division of the USSR Academy of Sciences in 1956 and is now in use.

This system is based on the uniformity of the sound-to-symbol relationship in Slavic languages. It is based on the existing traditions in the Slavic languages of representing certain Cyrillic-alphabet characters by means of Roman characters with diacritical marks. For this purpose, those Roman equivalents of Cyrillic letters are chosen whose phonetic value is common to all Slavic languages rather than peculiar to any one of them. The Academy of Sciences system is, therefore, neutral between all individual languages that use the Roman alphabet, including Slavic ones.

A distinctive feature of the Academy transliteration system is that it has elements of transcription. By furnishing different equivalents of the Russian e, ё, ю and я depending on their position in the word, the system provides for the correct reading of Russian place names in their romanized form. This is, no doubt, an advantage of the system, but at the same time it violates its unambiguousness. The practical requirements for retransliteration are in most cases met.

The Academy transliteration has mainly been used in cartography. In all Soviet maps and atlases, and in many foreign ones intended for international use, the USSR place names have been romanized in conformity with this system. For example: the Map of the World on the scale 1:2,500,000; the *World Atlas* (Moscow, GUGK, 1967); *Grand Atlas International Sequoia* (Paris and Brussels, 1962); *Encyclopaedia Britannica; Atlas International* (Novara, Istituto Geografico De Agostini, 1965); *Deutscher Generalatlas* (Stuttgart, 1967-1968). The Academy romanization system has thus been recognized and is being utilized in the cartographic works of a number of countries.

The International Organization for Standardization transliteration.[8] The system for the transliteration of Slavic Cyrillic characters to be used in international bibliographic work and documentation was drawn up from 1947 to 1953 and adopted as the ISO recommendation in 1954. In 1958 a second, revised edition of the Organization's recommendation R 9 was issued. It contains co-ordinated systems for the transliteration of six Slavic languages using the Cyrillic alphabet: Russian, White Russian, Ukrainian, Bulgarian, Serbian and Macedonian.

The ISO transliteration systems are very close to that of the USSR Academy of Sciences. They are all based on the relationships between sound and letter that are normal in the Slavic languages, and use the graphic symbols with diacritics that are traditional for them.[9]

The difference between these systems lies mainly in the representation of palatalized vowels. The ISO system does not take into consideration their position in the word, and this to some extent distorts the pronunciation of some names. However, it provides for less ambiguity and better reversibility than the USSR Academy of Sciences system. Nevertheless, these criteria are not completely achieved in this system either.

The ISO romanization is in widespread international use in bibliographic work and documentation. It has been accepted by many scientific libraries and other centres of information and documentation, both in the USSR and in other countries, for the rendering of personal names, geographical names and other words which occur in informative bibliographic publications.

It is interesting to note that in 1969 the ISO Technical Committee, in ISO/TC 46, "Documentation", worked out a single system for the transliteration of 57 non-Slavic languages spoken by the peoples of the USSR and written in Cyrillic script, on the same basis, in principle, as recommendation R 9.

The transliteration system of "Telegraph Rules", 1969.[10] According to the rules adopted in the USSR, telegrams sent abroad may be written in Russian or any other language adopted in the USSR, but must be spelt in Roman characters. A simplified transliteration system, that takes no account of the phonetic value of the letters in Slavic languages using the Roman alphabet, has been recommended for the purpose. This system has to employ Roman characters without diacritical marks as equivalents of the Russian ones, for the stock of letters available in international telegraphy lacks such marks.

This system incorporates some simplifications because the special conditions of telegraphy necessitate a certain economy. Thus, the difference between и and й is disregarded, ь and ъ are omitted, and ч, ш and щ are represented by the digraphs ch, sh and sc. Moreover, each Roman letter used in a digraph can also be used separately as the equivalent of another Russian letter; some confusions may therefore occur when the original Russian text of such a telegram is reconstructed.

Since this system does not meet the requirements of unambiguousness and reversibility, and its usage is restricted to international telegraphy, it is not practical to apply it in other kinds of international communication. No country can accept the special "cable language" as a norm for literary language.

National transliteration systems. Each country using the Roman alphabet has its own national system for rendering Russian personal and geographical names. These systems provide for more or less exact readings

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[7] *Pravila mezhdunarodnoy transliteratsii russkikh imen sobstvennykh latinskimi bukvami*, Institut yazykoznaniya AN SSSR, 1951-1956 (offprint, Moscow, 1957).

[8] International Organization for Standardization Recommendation R 9, International system for the transliteration of Slavic Cyrillic characters, 2nd ed. (printed in Switzerland, September 1968).

[9] The second edition of the ISO recommendation R 9 has footnotes to the effect that "in countries where tradition favours it" the following substitutions are permitted: English digraphs kh, ts, ch, sh, zh for Slavic characters h, c, č, š, ž, and English letter-group shch for Slavic digraph šč.

[10] *Telegrafnye pravila*, part I, annex 3, "Napisaniye russkovo alfavita latinskimi bukvami" (Moscow, 1969).

of the romanized Russian names, for they are based on the alphabet and the spelling rules of the receiver language. The well-known Board on Geographic Names/ Permanent Committee on Geographical Names system of 1947[11] is an example.

Countries speaking French, Spanish, German or any other language using the Roman alphabet have romanization systems of their own. These systems are actually systems of practical transcription, but in most publications they are referred to as transliterations.

Some such systems have won recognition in particular spheres of international activity. For example, the French language and, correspondingly, the French transliteration system are used for lettering the names of ships and their points of origin. However, the application of national transliteration systems is, as a rule, limited to a national framework. The point is that the same Russian letter is represented by different characters in different national systems, and the choice of character depends on the orthography and phonetics of the receiver language. For example, the Russian ш will be "sh" in English, "ch" in French, "sch" in German, "sci" in Italian, "sj" in Norwegian, "sz" in Polish, "s" in Hungarian and so forth. For the same reason the same Roman letter-group will be read differently by different peoples. For example, the name "Chop" will be read as /tʃop/ by the English, /hop/ by the Germans, /ʃop/ by the French. Such confusions in reading the names of the same features are unavoidable when a national transliteration system is applied beyond its language-area.

Therefore, and since each country possesses its own system, one can hardly expect a national romanization system for the Russian alphabet to be acceptable in other countries.

A comparative study of the different systems for the romanization of Russian proper names that are in current use shows that none of them completely meet the main criteria listed earlier. At the same time those systems are in wide use and have been strictly followed in the different fields of their practical application.

When seeking a single romanization system suitable for universal international use, national systems should be eliminated at the very beginning, regardless of their advantages. The recommendation of any national transliteration system as the sole one for international use is absolutely unacceptable, for, quite apart from the above-mentioned linguistic disadvantages, this would mean the recognition of the priority of one language and discrimination against the others.

The application of national transliteration systems beyond the corresponding language-area is, in our opinion, admissible in two cases only:

When a specific international agreement exists providing for the usage of a certain language in a given field of international collaboration—for example, in sea navigation; and

When publications (such as maps, reference-books and guides) are addressed to the reader of a definite language.[12]

The foregoing considerations lead us to conclude that: a single system for the romanization of Russian place names to be recommended for international use should be selected from among the existing conventional systems of transliteration that conform to the demands of neutrality between the languages written in the Roman alphabet that are most widely used.

In addition to the conventional systems of transliteration that are now in use (see annex II), some other systems of the kind have been proposed but have not been employed in practice. They include V.A. Uspenskiy's system described in his article "On the problem of romanization of Russian texts"[13] and that of R. O. Yakobson described in his article "on the latinization of international telegrams written in Russian"[14] (see annex III). Both systems are strictly unambiguous and completely reversible. However, they depart from established tradition in the representation of a number of letters (for example, that of Russian х as "q" or "x", and of Russian щ as "x̌", "xh" or "hh") and this leads one to expect that these systems will not replace those now in use.

Without attempting to predict the final results of the research that is now being carried out, we can express some preliminary suggestions.

The most practicable decision would be a compromise between the two closest and most widespread systems, those of the USSR Academy of Sciences and of the International Organization for Standardization.

To draw these two systems still nearer one might propose, first, changes in the representation of certain individual letters in the USSR Academy system (e.g. the transliteration of ё as "ë" or "jë" and of х as "h", and the indication of ъ by means of an apostrophe in all positions); and, secondly, the substitution of the Academy system's equivalents of the palatilized vowels е, ю and я for those of the ISO system. Such a *rapprochement* between the two systems would make the adoption of a single co-ordinated system for the romanizaton of Russian words in cartographic and bibliographic publications intended for international use a reality. This will be a considerable advance in the field.

The paucity or lack of diacritical marks in the keyboards of typing and transmitting devices in different countries and organizations at present hampers the introduction of a single transliteration system for all the spheres of its application, including international telegraphy.

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[11] *Transliteration System for Russian: Romanization Guide*, revised and enlarged ed. (1967), pp. 62-63.

[12] In such cases the unsuitability of any national system for international use is particularly obvious. It is not difficult to imagine the perplexity of a reader when in an English version of a guide to the USSR he finds place names transliterated according to the French or German system. The same feeling will arise when readers encounter Russian place names transliterated according to the English system in a French or German context.

[13] V.A. Uspenskiy, "K probleme transliteratsii russkikh tekstov latinskimi bukvami", *Sbornik Nauchno-tekhnicheskaya informatsiya*, series 2, No. 7 (Moscow, 1967), pp. 12-19.

[14] R.O. Yakobson, "O latinizatsii mezhdunarodnykh telegramm na russkom yazyke", *Voprosy yazykoznaniya*, No. 1 (1965), pp. 111-113.

Until suitable letter-typing devices are installed a temporary solution can be recommended, viz., the elaboration of two parallel systems—a principal and alternative one—that will allow for the substitution, if necessary, of digraphs (preferably ones not related to national orthographies) for characters with diacritics.

In conclusion it should be mentioned that the investigation and elaboration of a single standard system for the romanization of Russian words is now in full swing. This work was supposed to be completed in 1971, but after a wide discussion of the draft State standard "Transliteration of Russian words into Latin characters" prepared in 1971 it became apparent that it needed some improvement. It will be ready in its final form by the middle of 1973.

Our next step will be the elaboration of romanization systems for other national languages of the USSR which use the Cyrillic and other non-Roman alphabets.

Annex I

SYSTEMS FOR THE ROMANIZATION OF THE RUSSIAN ALPHABET

	Conventional systems			*National systems*				
Russian alphabet	*USSR Academy of Sciences 1951-1956*[a]	*ISO 1968*[b]	*Telegraph rules 1969*[b]	*English-American BGN/PCGN*[b]	*French*[a]	*Spanish*[a]	*German Democratic Republic*[b]	*German Federal Republic*[a]
а	a	a	a	a	a	a	a	
б	b	b	b	b	b	b	b	
в	v	v	v	v	v	v	w	
г	g	g	g	g	g gu(gh) – before e, и	g gu – before e, и	g	
д	d	d	d	d	d	d	d	
е	e – after cons. je – initially, after vowels, ъ and ь	e	e	e – after cons. ye – initially, after vowels, ъ and ь	ie(ye) – initially, after and ь ïe – after a, o, y e – elsewhere	e – after cons. ye(ie) – initially, after vowels, ъ and ь	e – after cons. je – initially, after vowels, ъ and ь	
ё	'o – after cons. except ч, ш, щ, ж o – after ч, ш, щ, ж jo – initially, after vowels, ъ and ь	ë	e	ë – after cons. yë – initially, after vowels, ъ and ь	e	io – when the diaeresis appears in the original e – elsewhere	jo o – after ш, ж, ч, щ, ц	o – after ф, ч, ш, щ
ж	ž	ž	j	zh	j	zh	sh/sch	
з	z	z	z	z	z	z	s	
и	i ji – after ъ	i	i	i	i	i	i ï – stressed, after vowel / i ji – after ъ and ь / ji – after ь	
й	j	j	i	y	ï i sometimes omitted finally	i sometimes omitted finally	i j – initially/i omitted after и and ы	
к	k	k	k	k	k	k	k x – in kc	
л	l	l	l	l	l	l	l	
м	m	m	m	m	m	m	m	
н	n	n	n	n	n	n	n	
о	o	o	o	o	o	o	o	
п	p	p	p	p	p	p	p	
р	r	r	r	r	r	r	r	
с	s	s	s	s	s ss – between vowels	s	s ss – between vowels x – in kc	
т	t	t	t	t	t	t	t	
у	u	u	u	u	ou	u	u	
ф	f	f	f	f	f	f	f	
х	ch	h	h	kh	kh	j	ch	
ц	c	c	c	ts	ts	ts	z	
ч	č	č	ch	ch	tch	ch	tsch	
ш	š	š	sh	sh	ch	sh	sch	
щ	šč	šč	sc	shch	chtch	sch	stsch/schtsch	
ъ	omitted	"	omitted	"	omitted	omitted	omitted	

Russian alphabet	Conventional systems: USSR Academy of Sciences 1951-1956[a]	Conventional systems: ISO 1968[b]	Conventional systems: Telegraph rules 1969[b]	National systems: English-American	National systems: French[a]	National systems: Spanish[a]	National systems: German Democratic Republic[b]	National systems: German Federal Republic[a]
ы	y	y	y	y	y	i		y
ь	' – finally and before cons. omitted before vowels	'	omitted	'	omitted	omitted	omitted / j – before o	omitted elsewhere
э	e	e	e	e	e	e		e
ю	'u – after cons. ju – initially, after vowels, ъ and ь	ju	iu	yu	iou	iu yu – initially		ju
я	'a – after cons. ja – initially, after vowels, ъ and ь	ja	ia	ya	ia ïa – after vowels	ia ya – initially		ja

[a] A system which lacks official status but is widely used.
[b] A system which has official status in a particular field of application.

Annex II

EXAMPLES OF RUSSIAN PLACE NAMES AS THEY APPEAR IN DIFFERENT ROMANIZATION SYSTEMS

Russian letters	Russian place names	Conventional systems: USSR Academy of Sciences 1951-56	Conventional systems: ISO 1968	Conventional systems: Telegraph rules 1969	National systems: English-American BGN/PCGN	National systems: French	National systems: Spanish	National systems: German Democratic Republic	National systems: German Federal Republic
е	Беляево	Bel'ajevo	Beljaevo	Beliaevo	Belyayevo	Beliaevo	Beliayevo	Beljajewo	
	Ельня	Jel'n'a	El'nja	Elnia	Yel'nya	Ielnia	Yelnia	Jelnja	
	Запорожье	Zaporožje	Zaporož'e	Zaporoje	Zaporozh'ye	Zaporojie	Zaporozhié	Saporoshe/Saporosche	
ё	Орёл	Or'ol	Orël	Orel	Orël	Orel	Oriol	Orjol	
	Щёлково	Ščolkovo	Ščëlkovo	Scelkovo	Shchëlkovo	Chtchelkovo	Schiolkovo	Stscholkowo/Schtschol-kowo	
	Могцлёв	Mogil'ov	Mogilev	Mogilev	Mogilev	Moghilev	Moguilev	Mogilew	
	Ёлкино	Jolkino	Ëlkino	Elkino	Yëlkino	Elkino	Iolkino	Jolkino	
ж	Жуково	Žukovo	Žukovo	Jukovo	Zhukovo	Joukovo	Zhukovo	Shukowo/Schukowo	
й	Измайлово	Izmajlovo	Izmajlovo	Izmailovo	Izmaylovo	Izmaïlovo	Izmailovo	Ismailowo	
	Горький	Gor'kij	Gor'kij	Gorkii	Gor'kiy	Gorki	Gorki	Gorki	
х	Ховрино	Chovrino	Hovrino	Hovrino	Khovrino	Khovrino	Jovrino	Chowrino	
ц	Царицыно	Caricyno	Caricyno	Caricyno	Tsaritsyno	Tsaritsyno	Tsaritsino	Zarizyno	
ч	Чоп	Čop	Čop	Chop	Chop	Tchop	Chop	Tschop	
ш	Шушенское	Šušenskoje	Šušenskoe	Shushenskoe	Shushenskoye	Chouchens-koïe	Shushenskoye	Schuschenskoje	
щ	Щукино	Ščukino	Ščukino	Scukino	Shchukino	Chtchoukino	Schukino	Stschukino/Schtschukino	
в	Ульяновск	Uljanovsk	Ul'janovsk	Ulianovsk	Ul'yanovsk	Oulianovsk	Ulisnovsk	Uljanowsk	
	Львов	L'vov	L'vov	Lvov	L'vov	Lvov	Lvov	Lwow	
	Рязань	R'azan'	Rjazan'	Riazan	Ryazan'	Riazan	Riazan	Rjasan	
ю	Юхнов	Juchnov	Juhnov	Juhnov	Yukhnov	Ioukhnov	Yujnov	Juchnow	
	Тюмень	T'umen'	Tjumen'	Tiumen	Tyumen'	Tioumen	Tiumen	Tjumen	
я	Брянск	Br'ansk	Brjansk	Briansk	Bryansk	Briansk	Briansk	Brjansk	
	Ялта	Jalta	Jalta	Ialta	Yalta	Ialta	Yalta	Jalta	
	Шуя	Šuja	Šuja	Shuia	Shuya	Chouïa	Shuia	Schuja	

Annex III

A COMPARISON OF THE TRANSLITERATIONS PROPOSED BY V. A. USPENSKI AND R. O. JAKOBSON

Russian alphabet	*Uspenski's system*		*Jakobson's system*	
	with diacritical marks	*with digraphs*	*for semiautomatic telegraph*	*for automatic telegraph*
а	a	a	a	a
б	b	b	b	b
в	v	v	v	v
г	g	g	g	g
д	d	d	d	d
е	e	e	e	e
ё	ë	jo		ho
ж	ž	zh	zh	hz
з	z	z	z	z
и	i	i	i	i
й	i	jh/j	j	j
к	k	k	k	k
л	l	l	l	l
м	m	m	m	m
н	n	n	n	n
о	o	o	o	o
п	p	p	p	p
р	r	r	r	r
с	s	s	s	s
т	t	t	t	t
у	u	u	u	u
ф	f	f	f	f
х	q	kh	x	x
ц	c	c	c	c
ч	č	ch	ch	hc
ш	š	sh	sh	hs
щ	x̌	xh	hh	hh
ъ	j̆	j'	w	w
ы	y	y	y	y
ь	'	'	j	q
э	ě	eh	eh	he
ю	ü	ju	ju	hu
я	ä	ja	ja	ha

A SYSTEM OF TRANSLITERATION AND TRANSCRIPTION OF BULGARIAN GEOGRAPHICAL NAMES INTO ROMAN LETTERS*

Report presented by Bulgaria

In the last few years, in view of the intensification of international contacts, especially in cultural and sports exchanges and tourism, the need for setting up means of communication has become ever more urgent. The task of the transliteration system described here is to familiarize foreigners in the most adequate way with Bulgarian geographical nomenclature.

Of late, to serve the needs of tourism, many and different cartographic aids and handbooks have been published in the orthographies of the various nations which use the Roman alphabet. These publications have, nevertheless, a limited use, and they can only be aimed at tourists from the country in which that particular form of the Roman alphabet is used. Among the structural and alphabetic features of the different languages there is much in common, but there are also substantial differences which impede the transformation of a written text from one system into another. It is obvious that a single standardized system using Roman characters is a necessity for the writing of Bulgarian geographical names, because of these differences between the different national forms of the Roman alphabet, which are due to many historical and cultural factors. To overcome these differences, a universal system must be found whose peculiarities could easily be understood in the legends of cartographic publications.

The first theoretical study of the problem of the transcription of Bulgarian names into the Roman alphabet was an article by S. Romanov entitled "Latin trans-

* The original text of this report, prepared by M. S. Mladenov, of the Council of Orthography and Transcription of Geographical Names at the Central Administration of Geodesy and Cartography, was contaned in document E/CONF.61/L.79.

cription of Bulgarian names" (*Bulgarski Progled*, vol. 1 (1930), No. 3, pp. 421-424). He put forward a very trim and exact system, which was consistent, without any internal contradictions. We can only regret that the system elaborated by him was not approved, because its approval would have created the prerequisites for the establishment of a Bulgarian national tradition in this important field of literary practice.

Somewhat later, L. Andreichin focused his attention on the theoretical principles of transcribing Bulgarian names into Roman characters in his article entitled "On certain questions in connexion with the Latin transcription of Bulgarian names" (*Bulgarski Ezik*, vol. 5 (1955), No. 3, pp. 246-249), and in his article "Latin transcription of Bulgarian names" (in *Na Ezikov Post* (Sofia, 1961), pp. 236-239).

It should be pointed out that L. Andreichin categorically emphasized that it was a question of rendering in Roman characters the Bulgarian written (alphabetic) form of the words, and not of their written and phonetic adaptation to foreign language patterns. "... Our transcription in this case cannot be anything else but transliteration", he wrote in his article in *Bulgarski Ezik* (p. 247). It is therefore to a certain extent inaccurate to speak of a transcription of Bulgarian geographical names into Roman characters, because in fact what we are concerned with is a transliteration, i.e. an exact letter-by-letter rendering of a text in one system of writing through the medium of another system of writing. (See A. Ahmanov, *Dictionary of Linguistic Terms* (Moscow, 1966), p. 476, where the following definition of "transliteration" is given: "Rendering of a text written with the aid of one alphabetic system by means of another alphabetic system".) Practice fully bears out this definition, because with this method it is not the phonetic sound image of the words that is rendered, but only their written, alphabetic image. In transcription, it is not so much the written image of the name that is reproduced as its pronunciation. This is of particular importance for languages in which the orthographic system is not phonetic but is based on etymology and morphological considerations. But in fact no orthographic system can be built entirely on the phonetic principle, and in the Bulgarian orthographic system, although it is basically phonetic, there are a number of spellings based on the morphological principle. Thus, for instance, Dimitrovgr*ad*, Kroumovgr*ad* and Beglez*h* are pronounced Dimitrovgr*at*, Kroumovgr*at* and Beles*h*.

At the moment several systems for transliterating the Bulgarian system of writing into Roman characters are in use in our country:

The system of the Bulgarian Academy of Sciences (BAS), elaborated by the Bulgarian Language Institute and published by the Standardization Committee as standard No. BSS-1956-56;

The system of the International Organization for Standardization, described in "Système international pour translitération des caractères cyrilliques", 1st ed. (1955).

The system of the Bulgarian Posts and Telegraphs. This system is the most popular one and has the widest mass application.

The system of the Bulgarian State Railways (BSR) and Navigation.

Between the first three systems there are more common features than differences, and that is why the table below shows only the differences.

Letter	*System of BAS*	*ISO system*	*System of Posts*
ж	ž	ž	j
й	j	–	–
х	h	h	h, kh
ц	c	c	ts
ч	č	č	tch
ш	š	š	ch
щ	št	št	cht
ъ	â	ă	a
ы	–	y	y
ь	j	’	–
ѣ	–	ě	–
ю	ju	ju	iu
я	ja	ja	ia
дз	dz	–	–
дж	dž	–	–

It can be seen that the systems of the BAS and the ISO are very much alike. The system of the Posts differs substantially from them, and has obviously been influenced by the spelling conventions of French (thus ш becomes "ch", ч becomes "tch", etc.).

The three systems each show a different rendering of the Bulgarian letter ъ: "â" (BAS system), "ă" (ISO system), and "a" (system of the Posts).

In the system elaborated here, the rule has been adopted to represent the Bulgarian letter ъ by the letter ă. This is indeed a deviation from our practice so far, but in this way only one diacritical sign (the haček) needs to be introduced, and a uniform system is in fact established: č, š, ž, ě, ă. Particular modifications of the basic sounds thus find a similar graphic representation, and —what is most important—a uniformity of diacritical signs is achieved.

In the International Organization for Standardization system the Roman characters representing the letters ы and ѣ (y and ě respectively) are required for the transliteration of old texts in which those letters are used. It is also necessary, as a matter of fact, to provide a sign for the letter х, which was used in the Bulgarian alphabet until 1945. Since this Bulgarian letter had a sound value coinciding with that of the letter ъ, it is suggested that it should be rendered by the letter ă. The letter ѣ should be rendered according to the rules of the literary language: in some cases by the combination ja, like the letter я (so for instance Бѣла becomes "Bjala") and in other cases by e, like the letter e (for instance Бѣли Искър becomes Beli Iskăr).

The BAS and ISO systems provide in almost every case for the representation of each Bulgarian letter by a single Roman one, and only in the rendering of the letters

щ, ю and я are two letters used. Here the devisers of the transliteration systems were guided by the fact that these Cyrillic letters each represent a combination of two sounds: щ is a letter standing for the sound sh + t (corresponding to the Roman št); я is a letter which after a vowel has the sound value of the combination йа (corresponding to the Latin ja) and after a consonant designates palatalizaton of the consonant followed by the sound a, i.e. ьа (corresponding to the Latin ja); ю, similarly, has after a vowel the sound value of the combination йу (corresponding to the Latin ju) and after a consonant designates palatalization of the consonant followed by the sound y, i.e. ьу (corresponding to the Latin ju).

The ISO system provides the sign ' for rendering the Bulgarian ь, while the BAS system here specifies j, i.e. the same as for the letter й.

Finally, it should be noted that Bulgarian orthography contains two instances of the representation of one sound by two letters: the combinations дз and дж. In representing them by means of Latin characters, pure transliteration is applied (unlike the cases of щ, ю and я in which a certain concession is made to the transcripton principle).

As has already been mentioned, one more system has for a long time been in use in Bulgaria (although only for a particular purpose and for a limited number of objects)—the system used by the Bulgarian State Railways (BSR) for representing Bulgarian geographical names in Roman letters. This system is quite rational and is very similar to the BAS system. It is used for the signboards of railway stations and ports, and it has also been used recently for the traffic signs of the highway network in the country and the names of towns and villages on the main arteries.

The system of the State Railways is distinguished by the following characteristic transliterations:

Bulgarian letters	ж и й х ц ч ш щ ъ ь ю я
Roman letters	ž i j h tz č š št ă j ju ja

As can easily be seen, the best feature of the BSR system is the fact that each letter of the Bulgarian alphabet corresponds to only one Roman letter. Only the letter ц is represented by a digraph. For the letter щ there is also a digraph—št—but this representation corresponds to the sound content of the Bulgarian letter. It is interesting to note the rendering of the letter ъ by ă. The diacritical sign ˇ (haček) over the letter naturally places this letter among the other letters with such signs —č (for ч), š (for ш) and ž (for ж).

If we make a comparison between the different national romanization systems and the Bulgarian system for rendering Bulgarian names in Roman characters, we shall establish that the latter stands close to Czech usage. Its characteristic feature is the almost complete lack of digraphs. The system of the Bulgarian Academy of Sciences is, in fact, oriented towards a Roman orthography of the Slav type (the Czech), which can also be seen in the system used for transliterating the Russian Cyrillic alphabet into Roman characters.

All this testifies to the fact that the main principles of the system of rendering Bulgarian names in the Roman alphabet are correct and contain no contradictory elements.

It can now successfully be used as a universal means of revealing the Bulgarian geographical nomenclature in Roman characters, thus making it accessible to all who use the Latin alphabet.

The Bulgarian system of representing Bulgarian geographical names, which has been approved by the Council of Orthography and Transcription of Geographical Names, reads as follows:

1. А а a	12. Л л l	23. Ц ц c
2. Б б b	13. М м m	24. Ч ч č
3. В в v	14. Н н n	25. Ш ш š
4. Г г g	15. О о o	26. Щ щ št
5. Д д d	16. П п p	27. Ъ ъ ă
6. Е е e	17. Р р r	28. Ь ь j
7. Ж ж ž	18. С с s	29. Ю ю ju
8. З з z	19. Т т t	30. Я я ja
9. И и i	20. У у u	31. Ы ы y
10. Й й j	21. Ф ф f	32. Ѣ ѣ ja or e
11. К к k	22. Х х h	33. Ж ж ă

We think that, as presented here, it will be able successfully to meet the needs of the present stage of the country's development.

TRANSCRIPTION OF THE CYRILLIC ALPHABET INTO ROMAN CHARACTERS*

Report presented by Czechoslovakia

In Czechoslovakia the transliteration of the Cyrillic (Russian) alphabet had been a great concern of the Transliteration Commission of the Slavonic Institute as early as in 1939.

A draft for transliteration, published in *Slavia*, No. 7 (1939), pp. 317-320, was accepted and put into practice in the publications of Czech scientific institutions and in scientific journals as well as in specialized libraries. The draft was published anew in the same journal in 1951 (pp. 158-161) and approved by the Commission on Terminology in 1953, rules for transliteration from some other languages having been included.

The basic principles of both the original and the later drafts were the following: the system should provide a transliteration, reversible so that a precise transcription back could be made, rendering each character of the Russian alphabet by means of one Roman letter, and achieving this with the characters of the Slavonic Roman alphabet. At the same tme, the Commission took into full account any system of romanizaton that was either generally established in a language, as was the case in Serbian, or officially acknowledged, as in the case of the proposal of the Academy of Sciences of the

* The original text of this report was contained in document E/CONF.61/L.82.

USSR. It was necessary to introduce certain differences in the transcription of individual languages, to take account of the different sound values of some characters and the extent to which a degree of romanization was already established. Attention was also paid to the fundamental relationship between the graphical and sound systems in a language, so that the value of the graphical system in indicating meaningful distinctions would not be lost.

This transliteration, the so-called "scientific transcription", is to meet the needs of scientific publications and specialized libraries even today; while for the needs of the current press, general publications, newspapers and popular scientific journals and publications the Transliteration Commission has devised a simplified transcription, called "current transcription", which forms a supplement of orthographical principles to the *Pravidla českého pravopisu* (Prague, 1969).

This current transcription lays down how to write foreign words and names in continuous Czech texts. At the same time, the transcription is designed to indicate the standard pronunciation in Czech as far as is permitted by the sounds of the Czech language.

Analogous principles are also set down for the transcription of the Russian characters into Slovak.

Scientific transcription systems have been worked out for Russian, Ukrainian, White Russian, Bulgarian, Serbian, Macedonian, Moldavian, Mongolian, Tadzhiki, Kazakh, Uzbek, Azerbaijani, Turkmenian and Kirghiz characters; current transcription systems exist for Russian, Ukrainian, White Russian, Bulgarian, Macedonian and Serbian.

On the basis of the recommendations of the Prague Conference on the Standardization of Geographical Terminology held from 4 to 6 October 1971, the Czech suggestion was, in January 1972, put at the disposal of Soviet and Bulgarian specialists, who were entrusted with the elaboration of a unified official system of transcription of georaphical names from the Cyrillic alphabet into Roman characters.

VIEWPOINT

The Czechoslovak delegation fully supports the view that it is highly necessary to devise a unified system for the transcription of all Cyrillic alphabets into Roman characters, and that the formation and standardization of such a system are fully within the competence of the terminological or cartographic authorities of the states and countries concerned. The decisions of these authorities should be fully respected, as they will fundamentally contribute to the standardization of geographical terms taken from languages using the Cyrillic alphabet.

The Czechoslovak delegation fully supports the Soviet and Bulgarian suggestion, considering it eminently recommendable for further implementaton.

THE PINYIN SYSTEM: A SYSTEM FOR THE TRANSCRIPTION OF CHINESE CHARACTERS INTO ROMAN LETTERS*

Report presented by Czechoslovakia

In 1958, the People's Republic of China adopted a system known as "Pinyin" for the transcription of the Chinese language into Roman characters.

There are no Chinese examples of the use of this system in mapping practice: China has not so far compiled any maps with Roman lettering. The Pinyin system is, however, used in journalism, transport, bibliography etc.

In the last few years, the Pinyin system has been applied in a number of foreign maps. These include the *Grosser Bertelsmann Weltatlas* (Gütersloh, 1961), the *Politischer Weltatlas* (Budapest, 1961), the *Map of China* (Budapest and Stockholm, 1967), *The International Atlas* (Chicago, 1969), the *Gran Atlas Aguilar* (Madrid, 1969), and the *World Map 1:2,500,000* (Sofia, Prague, Leipzig, Budapest, Warsaw, Bucharest and Moscow, 1962-1972).

The Pinyin system is based on the modern Pekingese dialect. The precise phonetics of this dialect had been thoroughly investigated by sinologists, and embodied in 1918 in the Zhuyin zimu (Chu-yin-tzu-mu) transcription, which, though related to the Chinese characters, was a system using letters; and, later on (Shanghai, 1937), in the Cihai dictionary (Tz'u-hai). The Wade-Giles system, too, is based on the same transcription. Therefore all Chinese words can be easily transcribed into the Pinyin system from any dictionaries in which they are rendered in the Zhuyin-zimu or Wade-Giles systems.

There is also a special transcription dictionary, *Hanzi Pinyin Jianzi* (Shanghai, Xin Zhishi Chubanshe, 1958), which contains more than 6,000 characters transcribed according to the Pinyin system. If we compare these characters with those found in the Chinese atlas (Shanghai, Zhonghua Renmin Gogheguo Dituji, 1957), comprising about 16,000 names, we can find that only about 3 per cent of the names cannot be transcribed. The transcription of the Chinese language in the Pinyin system cannot therefore be more difficult than that of other languages using non-Roman letters.

VIEWPOINT

In view of the undeniable advantages of the Pinyin system, as expressed by H. D. Talbot of Hong Kong as well as of the fact that every country has a right to decide about the way its names are treated abroad, the

* The original text of this report was contained in document E/CONF.61/L.90.

Czechoslovak delegation is fully in favour of the acceptance of the suggestion of the Hungarian delegation concerning the use of the Pinyin system for the transcription of Chinese geographical names, even though Chinese names have up to now been given here in the transcription system laid down by Czech sinologists in 1952.

The Czechoslovak delegation considers the suggestion fully recommendable for further implementation.

ROMANIZATION GUIDE 1972*

Report presented by the United States of America

* The original text of this paper, prepared by the Geographer, Office of the Geographer, Directorate for Functional Research, Bureau of Intelligence and Research, United States Department of State and United States Board on Geographic Names, was contained in document E/CONF.61/L.92, and distributed to the participants. Copies of the 1972 edition of the Romanization Guide are available on request from the United States Board on Geographic Names, Washington, D.C., U.S.A.

PRINCIPLES OF ROMANIZATION*

Report presented by Hungary

The First United Nations Conference on the Standardization of Geographical Names already showed that the most extensive discussion was on the question of romanization. The Chairman of Commission III at that conference expressed views on the so-called receiver principle, according to which the receivers (in this case countries using the Roman alphabet) should determine the system adopted for international standardization. However, a considerable opposition could already then be seen, as shown by the memorandum submitted by nine countries (published as Working Paper 5 of the 1970 meeting of the Group of Experts) which stated that "... a final decision on romanization for international use should be based on international agreement, and that, of course, includes participation and final consent and acceptance by the users of the donor system as well". This shows clearly that the receiver principle is unacceptable.

Of the resolutions of the First United Nations Conference, Nos. 13 and 14 dealt with the romanization systems for Iranian and Thai geographical names. Both resolutions approved a system for international use which was suggested by the countries concerned, i.e. by the donor. This shows the practical significance of the donor principle.

Our country agrees, therefore, to the principles expressed by J. Breu in his Circular No. 1 of 23 June 1970:

"If a country using a non-Roman alphabet has officially introduced a transcription of this alphabet and uses it practically, especially on maps, we ought to recommend this transcription for international cartographic use.

"If a country uses officially different transliterations for different applications, we should recommend that transcription which is officially used in cartography, or—if no transcription is used in cartography—which is linguistically the better one.

"If in the country concerned no official transcription has been introduced, we ought to recommend the transcription of the International Organization of Standardization (ISO) as being that of the competent international committee.

"If there does not exist an ISO transcription either, we ought to recommend that transcription which is used internationally by linguists."

At the same time we are of the opinion that the principles quoted above and agreed to should be supplemented by another item after the first paragraph, as follows:

"If there is more than one transcription system in a country, or none at all, then the Group of Experts, or the Cartographic Section of the Department of Economic and Social Affairs, or the regional group concerned, should seek to make contact with the official organizations responsible or supposed to be responsible for transcription matters, in order to urge on them the selection or creation of such a system. All procedures expressed in the next paragraphs could only be followed if such a contact proved impossible to establish, or there were no prospect of the creation of a transcription system."

* The original text of this report was contained in document E/CONF.61/L.97.

ROMANIZATION OF GEOGRAPHICAL NAMES FOR INTERNATIONAL USE*

Report presented by the United States of America

Anticipating progress and eventual success in national programmes, the Geneva Conference of 1967 looked ahead to the much more formidable problem of rendering names from languages using non-Roman scripts into Roman script. The goal of a single romanization system for romanizing each non-Roman writing system was agreed upon as a matter to be studied between the 1967 conference and the present meeting. Much work has been done by the Group of Experts, and the recent Arab conference at Beirut offers an example of regional progress.

With regard to the acceptance of Roman script systems prepared by donor nations, the following assumptions appear to be incontrovertible.

1. A particular system may not be "agreeable" to all speakers of a given language, even though it may be scientifically equal to the requirement of rendering the non-Roman script into the Roman script of the receiver language.

2. The conviction of the donor nation of the scientific rationality of a system it devises is no guarantee of its suitability or acceptability to a receiver nation.

3. The preparation of such systems is the proper concern of the scientific linguist; however, a system designed for scientific linguists without considering other people's needs will not meet the needs of the world community if it is significantly at variance with the orthographic traditions of the projected users.

4. One cannot reasonably expect millions of citizens in receiver nations to learn overnight unfamiliar phonetic values of letters and diacritical marks, however systematic and logical they may appear to be in linguistic practice or the determinations of international standardization groups. This problem comes to the fore when one proposes to base romanization systems on the sound values of letters inherent in certain European languages. The use of "j" for the sound of the English consonantal "y" for instance and of "c" for the "ts" sound would evoke incorrect responses from speakers of English, French and Spanish. The use of "š" and "č" rather than the digraphs "sh" and "ch" similarly obfuscates meaning and pronunciation to the English speaker, and at the same time introduces an unfamiliar diacritical mark which complicates the handling of names by computers or even by typewriters.

But some orthographic conventions will naturally be more easily assimilable than others. It seems indisputable, for example, that the great majority of the world's literate population will already be familiar with English, French or Spanish orthography and will find this easier to understand than Croat orthography. Objection to the use of English-based systems on the ground of its admitted orthographic inconsistencies is not persuasive. Where the systems of the Board on Geographic Names/ Permanent Committee on Geographical Names are based upon the sound values of English consonants and Italian vowels, speakers of European languages should have little difficulty.

5. A system designed for library use or scientific documentation may have commendable qualities of precision, reversibility, unambiguousness etc., but still may not adequately satisfy the needs of world-wide communication in the field of toponymy.

6. Consideration of new systems must be tempered by a nation's investment in existing systems in the form of library holdings and maps, and the invisible holdings of names in the mental storage of its people.

7. If a romanization system is to be as useful as possible to the outside world in facilitating communication, it should be designed on the basis of the most widely spoken and dispersed of the world's languages.

Of the five offical languages of the United Nations, those written in Roman script are English, French and Spanish. Clearly, romanization systems for international use should conform to the spelling conventions of one of these.

It will not be disputed that of these three languages English is the most used as a vehicle of international communication, and that along with French it has the widest distribution over the earth. English is the mother tongue of about 300 million people and a principal auxiliary language in countries whose total population exceeds 1,000 million. It is taught as a foreign language in the great majority of nations of the world, and is the primary foreign language taught in many nations—for example, China and the USSR.

English is the main world language of economic and social contact, the universal language of aviation, shipping, and sports, and the medium of expression used in about 60 per cent of the world's radio programmes and 70 per cent of the world's mail.

Far more mapping throughout the world, particularly at medium and large scales, has been done using English-based systems of transcription and transliteration than with systems based on any other language. Much of this has been done in consultation with the national mapping authorities of other countries in order to find mutually acceptable romanization systems. It is highly desirable that future international map-making should be compatible with the great body of existing cartography and library holdings and that it should avoid the upheaval caused by the introduction of radically different systems.

The case for general acceptance of systems based on English is made even stronger by the wide use of names romanized in accordance with these systems and their availability in a well-received world gazetteer series available free to governmental, educational, scientific, and commercial bodies throughout the world. The hundreds of recipients of Board on Geographic Names gazetteers form a list that is noteworthy not only in the wide area of its distribution but, perhaps more significantly, in the

* The original text of this report was contained in document E/CONF.61/L.106.

wide variety of scholarly disciplines to which its members belong.

In keeping with the spirit of co-operation in dealing with the problems of geographical names, the United States continues to press for the free exchange of ideas and for gradual adjustment of national positions. Like all other nations it must act not only within certain linguistic constraints, but also with due regard to investment in already existing mapping programmes and scientific writings, and with concern for cultural sensitivities. At the same time it endeavours to understand and consider the comparable problems of other nations and linguistic groups, and with them continually to re-examine positions in the light of new understandings in striving for the ideal of the broadest international co-operation and communication.

TRANSCRIPTION OF THE MONGOLIAN CYRILLIC ALPHABET ON THE 1:2,500,000 WORLD MAP*

Report presented by Hungary

Cyrillic letter	*Roman letter*	*Example*	*Transcription*
А а	A a	Алтанбулаг	Altanbulag
Б б	B b	Баруун Урт	Baruun Urt
В в	V v	Увс нуур	Uvs nuur
Г г	G g	Говь	Gov'
Д д	D d	Дөрөө нуур	Döröö nuur
Е е	Je je e	Ерөө гол	Jeröö gol
Ё ё	Jo jo	Ноён	Nojon
Ж ж	Dž dž	Жаргалант	Džargalant
З з	Dz dz	Зуунгар	Dzüüngar
И и	I i	Иртыш	Irtyš
Й й	J j	Хэнтий	Chentij
К к	K k	[a]	
Л л	L l	Лун	Lun
М м	M m	Мөрөн	Mörön
Н н	N n	Налайх	Nalajch
О о	O o	Орхон	Orchon
Ө ө	Ö ö	Өлгий	Ölgij
П п	P p	Памир	Pamir
Р р	R r	Өрөг нуур	Örög nuur
С с	S s	Сэлэнгэ	Selenge
Т т	T t	Туул гол	Tuul gol
У у	U u	Улаанбаатар	Ulaanbaatar
Ү ү	Ü ü	Үүр гол	Üür gol
Ф ф	F f	[a]	
Х х	Ch ch	Хөх хот	Chöch chot
Ц ц	C c	Цэцэрлэг	Cecerleg
Ч ч	Č č	Чойбалсан	Čojbalsan
Ш ш	Š š	Шилийн гол	Šilijn gol
Щ щ	Šč šč	[b]	
Ъ ъ	—	[b]	
Ы ы	Y y	Шарын гол	Šaryn gol
Ь ь	'	Мөнх Сарьдаг уул	Mönch Sar'dag uul
Э э	E e	Эрээнцав	Ereencav
Ю ю	Ju ju	Югослави	Jugoslavi
Я я	Ja ja	Япон тэнгэс	Japon tenges

[a] Occurs in foreign names only.
[b] Scarcely occurs in geographical names.

* The original text of this report was contained in document E/CONF.61/L.108.

change in nomenclature.

In the case of traditional names with roots in classical or mediaeval nomenclature, the replacement of conventional names by local official names (and local official spelling) in foreign languages may create difficulties of spelling as well as of pronunciation. On the other hand, in the case of new states and new national languages, when new spellings are introduced for many names and new official names substituted for others, the use of the older traditional names may be misleading.

There are two distinct points of view in this matter—one national and one international. Although it may be desirable to have quite clear rules in this matter, it is our view that it would be difficult to formulate recommendations for the replacement or for the use of conventional names. It would probably be impossible to make complete lists of the conventional names which are in use in different languages at present. The conclusion must therefore be that the abolition of conventional names will have to be left to the future.

DEFINITION AND USAGE OF EXONYMS*

Report presented by Hungary

Though exonyms (conventional names), geographical names used by a language for the identification of features outside the area where this language is official, are generally incompatible with international standardization, in that they multiply a given geographical name, we must accept their existence as a necessary part of almost any language.

We feel it is useful, therefore, that this conference should deal with the question of the definition and usage of exonyms. At the same time means should be discussed by which the "harmful effect" of exonyms on international standardization may be diminished.

In the definition, we find it necessary to include as a decisive factor the boundary of the area in which the official language is spoken, which will in most cases coincide with an international boundary.

While the usage of exonyms is an internal matter for the national authorities in each language, it should be stated that exonyms must never be used in order to express territorial demands or in a way that would enable such a conclusion to be drawn. At the same time exonyms of settlements should be distinguished from those of all other features, as the latter kind are more stable and cause fewer complications.

As a means of diminishing the "harmful effect"—implicit in the co-existence of several variations of an original geographical name—lists should be prepared and published containing only those exonyms which reflect actual usage, and not the results of historical research. It is also advisable to include in these lists a classification of exonyms (into such categories as "suggested" and "acceptable") as compared to an indication of their various fields of application. Obsolete exonyms (clearly marked as "not suggested") may be included in an annex to such lists. All entries in the lists must refer to the geographical name in the original language.

* The orignal text of this paper was contained in document E/CONF.61/L.98.

AGENDA ITEM 13

International standardization and its field of application

INTERNATIONAL STANDARDIZATON AND ITS FIELD OF APPLICATION*

Report presented by Austria, the Federal Republic of Germany, the Netherlands and Switzerland

International standardization of geographical names is the definitive establishment of geographial names for such maps, charts and other publications as are intended for international use.

The writing of geographical names in maps or charts for internatonal use should comply with the following rules:

(*a*) In designating geographical-topographical entities under the sovereignty of a single nation, the nationally standardized names of the country concerned are used;

(*b*) In designating geographical-topographical entities extending over the territory of more than one nation or lying outside the sovereignty of nations, names determined by international understanding (see item 14 of the agenda) are used;

(*c*) The geographical names which are nationally standardized in a non-Roman alphabet or script are romanized in accordance with the principles laid down under item 11 of the agenda.

It is recommended that these rules should also be applied in those publications for international use in which geographical names do not appear in context, such as international time-tables for railways and airlines, the Universal Postal Union publication *Nomenclature internationale des Bureaux de poste*, and tables of internatonal statistics.

In publications meant for international use that mention geographical names in context (for example, encyclopaedias and scientific periodicals), these names may show the peculiarities of the spelling systems of the language used or of a transcription that is not internationally recognized. In that case, however, it is recommended that forms of the geographical names complying with the rules given above should be added in brackets.

* The original text of this paper was contained in document E/CONF.61/L.23.

INTERNATIONAL ASPECTS OF THE STANDARDIZATION OF GEOGRAPHICAL NAMES*

Report presented by the United States of America

At this conference there have already been discussions of the needs and objectives of the standardization of names, national name-standardizing authorities, field and office methodology, philology, linguistics and census names. The remaining topics are international aspects (including transfers between writing systems) and historical sources. On the agenda of this conference the topic of international considerations appropriately comes up after national activities have been explored.

For more than a decade now it has been agreed all over the world that a successful international programme must be based on international acceptance of nationally standardized names. It is the prerogative of each country to make official decisions on the names of geographical entities in areas within its jurisdiction, and to say how they shall be written at home. It may be recalled that the programme circulated in 1958 by the United Nations Secretary-General was explicit on that point, and that the Economic and Social Council of the United Nations convened the First Meeting of the Group of Experts in 1960 primarily to consider problems in the standardization of domestic names. The Group of Experts each drew upon his own and his colleagues' experience at home to discover together, and to state, the near-universality of the major problems in the standardization of geographical names. In doing this the Group provided by its own performance a convincing example of the value of international co-operation in working out approaches to these problems.

At the First United Nations Conference on Standardization of Geograpical Names, the agenda was therefore arranged to provide at the outset reports by each delegation on national activities and programmes, and on each nation's experience with the problems identified in the 1960 report of the Group of Experts. As in that 1960 meeting, these discussions established that much of the problem is indeed common to all countries, that at the same time each country has some unique or special problems, and that the positions of national standardization programmes cover the whole gamut from unstarted

* The original text of this paper, prepared by Meredith F. Burrill, Chairman of the United Nations Group of Experts on Geographical Names, was contained in document E/CONF.61/L.50.

to practically completed. Further, it was demonstrated that enthusiastic international co-operation in this field is possible before full agreement is reached on everything, as long as the people involved have confidence in and respect for one another. While the principles of international acceptance and national prerogative are basically simple, some complications are encountered in the course of their implementation and some limiting forces are brought out. Even if there are no legal checks on the powers of the national standardizing authority, the actions have to be acceptable to be really effective. No matter how authoritative, official name-standardizing actions are likely to be either quietly ignored or loudly repudiated if the public, or that part of the public concerned with the names or name at issue, feels that the actions are unjustified and autocratic. Regularizing and systematizing have real advantages, but the local people may not see those advantages readily without help when the process produces some forms not in local use. The imposition of changes by force that has been tried at various times and places has generally managed only to produce discrepancy between official names and local names. Fortunately, while human behaviour patterns in name-using are far from being fully understood, the evidence to date does suggest that people will accept name-changes that make sense to them. The time and patient effort that may be required to clarify the advantages for them, or even to readjust the actions to take account of special local problems, are more than justified. Popular veto is an effective check. In a way, geographical names belong to people.

However, the circle of people to whom the names may be said to belong is widening faster and faster. Millions of people now talk about or send something to or even go to places that their grandfathers either never heard of or considered so remote that the local name didn't really matter. These millions of people have a stake in names outside their own countries, and their acceptance is a further check on the prerogatives of national name-authorities. When the number of geographical names of concern is only a few hundred, one has little trouble remembering them and their proper written forms. An individual probably can manage a few thousands, but not millions and tens of millions, and in a dynamic world it requires international co-operation just to keep up with changes.

ADP (automatic data processing) will both make the problem bigger and help solve it. The storage of names in computers will make possible the use of standard names in unprecedented volume, the continuous maintenance of an up-to-date name bank, almost instantaneous withdrawals from the name bank by anyone anywhere who is or can be tied into the computer, and, eventually, automatic placing of the standard names on maps or their photocompilation in gazetteers or texts. This may significantly increase the number of names that the international acceptors ask the national standardizers to provide, but it could provide economies in manpower requirements to offset the additional costs.

It is already clear that, if the nationally standardized names are to be internationally accepted, the international acceptors may need from the national standardizers some help not ordinarily provided to domestic users. An example would be an indication of the proper grammatical form to use when names that are normally inflected in context are used in isolation. A number of such problems were referred to in the 1960 report of the Group of Experts, and practical problems will be dealt with by the new Group of Experts under the topic of information exchange.

The practical problems of the national standardizer in supplying such information have not yet been fully brought out, but they should not be insoluble. As far as possible they should be anticipated. Stated negatively, the international acceptors cannot accept until they have the information they need. Stated positively, the easier it is for the internatonal acceptors to assimilate the nationally standardized names, the faster and the more completely it will happen.

International acceptance of names standardized in the acceptor's general writing system—the roman alphabet, for instance—will still inevitably involve acceptance of written forms containing features foreign to the writing of the acceptor's language, such a diacritical marks, or modified, ligatured or other special letters. Since it is natural for one to reject as meaningless anything of which one does not know the meaning, some educational steps may be prerequisite to full popular support of innovations. It may also be helpful for national standardizers to distinguish between elements of the written forms if any, that may be dispensed with without inviting confusion, e.g. distinctions preserved in writing but no longer made in speech in Thai or Amharic.

The problems of the standardization of geographical names for which in the past hundred years it has been most difficult to agree on solutions have been those of transfer from one writing system to another, especially the transfer from other systems into Roman letters. There has not even been full agreement on the meaning of the terms used to refer to the transfer process. There has been wide use of the term "transliteration" to mean the matching of letters of a receiver alphabet with letters of a donor alphabet, and of "transcription" to mean the matching of letters or other characters of the receiver writing system with the sounds represented by the characters of the donor writing. The draft programme circulated by the United Nations in 1958 used the terms in that sense, but how fully they have been accepted in those connotations is not known. At least one country, commenting on the draft programme, appeared to be using the term "transcription" to mean copying a name from one piece of paper to another without change, while still others appeared to be equating it to any transfer involving change. The Group of Experts wisely took time at the beginning of its meeting in 1960 to explore suspected semantic pitfalls and to draw up a list of terms, including "transliteration" and "transcription", with the connotations in which it was agreed to use them during those meetings. This proved to be useful. The list was appended to the report simply to make the report itself more nearly unambiguous.

When the Group of Experts met in 1966 to help the

United Nations organize the Geneva conference, the list of terms and definitions was looked at again; and an attempt was made to improve the definitions, with special attention given to terms for the status of languages (e.g. "official language") and terms for transfers between writing systems. By this time the term "romanization" had come into use for all transfers into the Roman alphabet, but the distinction between procedures was still important and the distinguishing terms were examined. While the exercise did not produce any new definitions, it was highly instructive, for it forced a recognition that too many things were not wholly this nor wholly that. For example, the statuses of the different languages in those countries where several are spoken are so varied that the group was unable to devise new and better simple categories for purposes of the standardization of names. Nor is the differentiation between "transliteration" and "transcription" a simple question of whether one works from letters or sounds: letter-for-letter "transliteration" is of course very mindful of the sounds for which the letters are symbols.

For a letter-for-letter transliteration to accomplish a faithful transfer of sounds, or for a sound-for-sound transcription to be accomplished by a mere equating of symbols, it would be necessary for the donor and receiver languages to have precisely equivalent sound stocks, to record in their writing all the sound distinctions made in speech, and pesent one-to-one correspondence between sound and symbol, i.e. have only one symbol for a sound and one sound for a symbol. If those conditions were satisfied, then the letter-for-letter transfer would be in fact a transfer of sounds and the sound-for-sound transfer we call "transcription" would be in fact an equating of symbols. Since languages do not comply with those conditions fully, it is necessary in the transfer systems to adopt conventions, to make judgements, choices, compromises. In doing so advantage has been taken of the fact that, while the sound stocks of no two languages fully coincide, all languages do have many sounds that are used or approximated in other languages; of the fact that most languages do reveal in their writing their principal sound distinctons even though they do not reveal them all; and of the fact that most languages show at least considerable correspondence between sound and written symbol, even if none has fully one-to-one correspondence. Since languages differ greatly in the extent to which these statements apply, every combination of languages or writing systems involved in transfers presents at least some special problems. It is small wonder that it has been infinitely easier to devise systems for bilateral transfers than for multilateral ones.

Attitudes towards this problem are in one way complicated and in another way simplified by the fact that the written symbols not only stand for sounds but also, in combination, constitute names that stand for géographical entities, and are capable of recognition as such by the eye, irrespective of the sounds. One tends to defend the written forms of names to which one has become accustomed, and to hesitate over a system that produces something else. On the other hand, the importance of eye recognition was implicit in the internatonal consensus that the writing can be standardized if "mispronunciation" is accepted as indeed it must be.

The national standardizers could not make the pronunciation of geographical names precisely uniform within their jurisdiction even if they tried, and international acceptors could not reproduce the original pronunciations exactly even if provided with them in unambiguous writing, but both can make approximations. In a transcription type of transfer, someone has to supply the sounds if the usual writing does not. If the national standardizer does not do so, the international acceptor is on its own. It is obvious that some mispronunciation of names can be tolerated without failure of communication. We need to know more about the limits of tolerable variation and the governing factors in the process in all kinds of situations. We know we cannot reach perfection: we do not know yet how much or what kinds of imperfection we can stand at this stage. This is just one of a number of areas proposed for co-operative international study, for which we now have new international machinery.

At the meeting of the Organization of Central American States (ODECA) in San Salvador last February, Francis Gall reported on the United Nations Conference on the Standardization of Geographical Names held in Geneva in September 1967. Appended to his report were the resolutions adopted by that conference, including one on regional and subregional meetings that has been cited in the calling of this conference. The first two of the Geneva resolutions were addressed to the Economic and Social Council of the United Nations, which had convened the conference. The first resolution recommended the creation of a United Nations permanent committee on geographical names, consisting of experts, to provide for continuous co-ordination and liaison among nations to further the standardization of geographical names and to encourage the formation and work of regional groups. It also recommended that the composition of the group reflect linguistic/geographic distribution, that the United Nations furnish staff services, and that the members meet annually beginning in 1968 at the expense of their Governments.

Since the Council could not consider these resolutions until its meeting in the spring of 1968, the Conference set up an *ad hoc* group of experts to function in the interim, with membership like that proposed for the new Committee. That group met and elected as officers M.F. Burrill (United States) Chairman, A.M. Komkov (USSR) Vice-Chairman and F. Nédélec (France) rapporteur, with a representative of the United Nations Cartography Section, C.N. Christopher, to serve as co-ordinating secretary.

The second Geneva resolution requested the Economic and Social Council to convene a second conference three years later. These matters were put on the agenda for the meeting of the Council in May and were duly considered. The severe financial straits of the United Nations put both recommendations in jeopardy, but the success of the Geneva conference and the enthusiastic support of several of the member states of the

Council led to a compromise. The Council requested the *Ad Hoc* Group of Experts set up at Geneva to carry on the functions that had been recommended for the Permanent Committee, thus avoiding the creation of a new United Nations body, and requested the Secretary-General of the United Nations to consult with the Group of Experts on the holding of the next conference not earlier than 1971.

The machinery is now in being. The atmosphere for co-operation is cordial. The matter is in our hands. The first regional conference on the standardization of names in the Americas is now nearly concluded. We are on our way.

In a co-operative programme based on international acceptance of nationally standardized names, what happens in each country is important to all other countries. Each is both a national standardizer and an international acceptor and must help the others in each of those capacities. Each must have a genuine and continuing concern with the acceptance of standard names at all levels from the locality to the world.

INTERNATIONAL STANDARDIZATION OF GEOGRAPHICAL NAMES: THE 1967 CONFERENCE*

Report presented by the United States of America

The United Nations Conference on the Standardization of Geographical Names that was held in Geneva from 4 to 22 September 1967 differed in significant respects from all of the many previous meetings at which the subject had been considered.[1]

Discussion of the standardization of geographical names at international meetings goes back almost a century to the first congress in the series of which this is the twenty-first, the Congress of Geographic, Cosmographic and Commercial Sciences held at Amsterdam from 14 to 22 August 1871. The subject was discussed at subsequent International Geographical Congresses and has been taken up at many international meetings held under other auspices.

Four features, however, made the 1967 Conference new and significantly different. It was the first conference of world-wide scope devoted entirely to the subject. It was attended principally by professional name-standardizers, people technically competent in the subject and associated with official national name-standardizing bodies or with international organizations having a stake in the matter. It was deliberately designed to facilitate world-wide exchange of national experience with the problems of the standardization of geographical names, the identificaton of the extent and degree of consensus and of differences, the exploration of steps to extend the consensus further, and the development of international machinery for international co-operation in this sphere. Finally, the Conference was preceded by preparatory meetings, discussions and world-wide circulation of proposals for study and comment by Governments, followed by collation and circulation of the comments received.

There are great differences between a conference devoted to as specific subject and one at which that subject is only one of many. To begin with, the objectives are usually different. The single-subject conference usually aims at exploration in depth, the identification of a central problem and its ramifications, solutions applicable to specific problems, or something similar that involves principally group participation and group accomplishment during the meeting. The one with many subjects usually emphasizes reports on recent research by individuals, and to a lesser extent reports on activities by committees or groups. When the subject is one of many, it usually gets only a small fraction of the total time, either in formal sessions, or in the informal discussions in the corridors and lounges or at coffee-breaks and meals or in working-group sessions that hammer out proposals. The small amount of time it does get may be further split up in ways that make exploration in depth difficult if not impossible. The contributions are likely to be reports on research and thinking done long before the contributor came to the meeting, rather than group conclusions arising from joint examination of a problem at the meeting. The two kinds of meetings are likely to be structured quite differently. When meetings are structured to permit almost anyone to talk about almost anything, that is usually what happens. The people who go are largely self-selected and they talk on subjects of their choice. This produces a heterogeneous group with a wide variety of interests. Some people have been known to give papers simply so that they could be sent to the meetings. In contrast, the presentation of papers had little if anything to do with who attended the 1967 Conference. No one read any papers aloud. More than 80 papers and reports were distributed, studied and referred to, but these were not necessarily written by persons attending the Conference. Governments were asked particularly to send the people most closely concerned with the standardization of geographical names, and generally did so, but expertise was drawn upon wherever it was to be found. More than 80 per cent of those attending were professional and technical people, concerned in practical ways with the matters discussed, and were able to draw upon some experience in the field.

At the 1967 Conference attention was directed continuously at the subject for three weeks; ramifications were explored at length; arguments were presented and weighed, accepted or rebutted, revised and incorporated into new positions; alternatives were compared, and a consensus developed point by point. The deliberate

* The original text of this paper, prepared by Meredith F. Burrill, was contained in document E/CONF.61/L.54.

[1] The *Report of the Conference* was published in 1968 as volume 1 of *United Nations Conference on the Standardization of Geographical Names* (United Nations publication, Sales No. E.68.I.9).

structuring of the meetings to facilitate this contributed in no small measure to the successful outcome.

The Conference did not have to start at the very beginning in its consideration of the problems. A large amount of preparatory work had already been done. A Group of Experts on Geographical Names was convened in 1960 by the Secretary-General of the United Nations pursuant to resolution 715 A (XXVII) of the Economic and Social Council. The Group was asked "(i) to consider the technical problems of domestic standardization of geographical names, including the preparation of a statement of the general and regional problems involved, and to prepare draft recommendations for the procedures, principally linguistic, that might be followed in the standardization of their own names by individual countries; (ii) to report to the Council ... on the desirability of holding an international conference on this subject...". The report of the Group was circulated a few months later by the Secretary-General and was subsequently published in volume 7 of *World Cartography*. It was widely studied and commented upon before the 1967 Conference was called. A tentative agenda and a statement on the nature and scope of the proposed conference were also circulated. In 1966 the available members of the Group of Experts, with some additional help, assisted in the preparations for the Conference, incorporating all suggestions made by member states to the Secretary-General, and adapting procedures used at United Nations conferences to the objectives and probable composition of this one.[2] The antecedents of these developments between 1953 and 1962 were outlined in *World Cartography*, vol. 7, and will not be detailed here. Suffice it to say that in this period there was formulated and generally accepted a simple conceptual base for international co-operation in the standardization of geographical names. The question posed in 1871 was whether the Congress could lay down the adoption of a uniform orthography of proper names both on maps and in geographical treatises. The answer suggested then was that among Roman-alphabet countries all could and should write names as spelt in the country where the named entity was. However, long discussion failed to bring agreement on the difficult problems of a "phonetic system", and the question was referred to the next Congress. Pronunciation was then, and continued to be, the Gordian knot that repeated attempts failed to untie. The knot was finally cut by acknowledging that uniform pronunciation is not possible, but that accepting variation in pronunciation makes possible the acceptance of uniform writing within a given writing system. This in turn made feasible the international acceptance of nationally standardized written names.

When one starts from this simple conceptual base and goes about the business of national standardizing and international accepting, things rapidly become more complicated. It was the basic purpose of the Conference to illuminate these complications. The specific objectives of the Conference[3] were:

"(*a*) Removal of any remaining doubt that nationally standardized names are the proper basis for international standardization and that an international alphabet is not feasible;

"(*b*) Development of a greater willingness on the part of each country to take account, in its standardization programme, of the problems that other countries might encounter in receiving and assimilating those geographical names for their own use. This process would involve, on the part of the donor country, all the elements of the original scripts and other linguistic details necessary for proper conversion into other scripts;

"(*c*) Comparison of problems and programmes of various countries;

"(*d*) Identification of topics, areas and categories of names which currently merit further study, and formulation of principles relating to international standardization;

"(*e*) Formulation of principles applying to the transfer from one writing system to another;

"(*f*) Romanization from other writing systems for international standardization to be sought from the United Nations Roman-alphabet languages: English, French and Spanish;

"(*g*) Consideration to be given to the establishment of systems for internatonal standardization based on the Cyrillic alphabet and the Arabic alphabet;

"(*h*) Identification and discussion of categories of names of features extending beyond the sovereignty of a single country, e.g. oceans, rivers, mountains, undersea features etc., and examination of possibilities of standardization;

"(*i*) Development of machinery for international exchange of information;

"(*j*) Proposals for the establishment of a programme of regional conferences or working groups to operate after the Geneva Conference;

"(*k*) Promotion of the establishment of names standardization bodies in all countries."

These objectives were essentially achieved, and since final answers were not expected there was no feeling of frustration if they were not forthcoming on any particular question. Progress was registered on nearly every matter considered, and plans for making more progress were agreed upon.

Four committees were formed, one each to deal with national standardization, geographical terms, writing systems and international co-operation. Since the committees did not meet at the same time, all could participate in their discussions. Special working and drafting groups were formed by volunteers representing very well the range of opinions or viewpoints. Each committee developed a series of resolutions in its particular field of study. All actions taken by the Conference were unanimous. It is indicative of the enthusiastic spirit of co-operation generated at the Conference that the two resolutions considered most important related to the maintenance of the momentum that had been gained. The first resolution called for establishment of a United

[2] See annex III of the *Report of the Conference.*

[3] *Ibid.*, p. 21.

Nations permanent committee of geographical names experts "to provide for continuous co-ordination and liaison among nations to further the standardization of geographical names and to encourage the formation and work of regional groups...". An *ad hoc* group was set up to function in the interim. The second resolution recommended the convening of the second conference not later than 1970. These two resolutions duly came before the Economic and Social Council at its spring meeting in May 1968, and were approved in slightly altered form. The group of experts set up at Geneva was asked to continue to carry out the functions proposed, and the Secretary-General was asked to consult with the group with a view to holding the second conference in 1971.

The Group of Experts was set up to include "representatives" of major world linguistic/geographic groups, with the following 14 suggested:

Anglo-American
Latin American
United Kingdom–Australia–New Zealand
German-speaking and Dutch-speaking countries
Norden
Romance-language Europe
East central and south-eastern Europe
Union of Soviet Socialist Republics
Arabic group
South-West Asia other than Arabic
Indian group
South-East Asia
East Asia
Africa south of the Sahara

Other resolutions adopted by the Conference called for the exchange of information on automatic data processing; for the establishment of a names authority in every country; for the provision of a document centre at the United Nations and for exchange of publications; for the use of technical assistance; for the convening of regional conferences and discussions; for attempts by countries sharing geographical entities to agree on a single name and spelling; for active co-operation with international oceanographic organizations; for continuing attempts to arrive at agreement on romanization systems; for the retention of the accents and diacritical signs used in Roman-alphabet languages and for the provision of vowels and other diacritical marks in Arabic; for agreement on either one romanization system for Arabic or the dual use of French-based and English-based systems; for the use of the romanization systems proposed by Iran and Thailand to render names from Persian and Thai; for consideration by the Group of Experts of the adoption of the Wade-Giles system as the system for romanizing Chinese names and of the system to be adopted by Ethiopia for romanizing Amharic; for special attention to be given to unwritten names in Africa; and for continuing attention to semantic aspects of the latter.

Most of the problems on which a consensus was not reached were referred to the Group of Experts for further exploration.

The 1967 Conference demonstrated again the ability and readiness of the professional community to co-operate. In a paper on the Conference, a member of the Soviet delegation commented that, while one could not expect that such an important problem as the standardization of geographical names, full of contradictions and unexpected difficulties, could be solved by a single conference—that would require the efforts of all countries and a time-span of many decades—it was important to note that the participants could come to an understanding on certain principles, inform each other about the state of research and progress, establish contacts and plan future projects.[4]

While individual geographers have always played a leading part in the standardization of geographical names, much of the development in the last two decades has taken place outside the framework of regular organized geographical activity, for several reasons.

Geographical names are phenomena of language applied to phenomena of geography, and significant advances in understanding have followed active co-operation in teams by geographers and linguists. The required release of mental set was more easily accomplished by such teams than by single disciplines. As the author pointed out in his presidential address to the Associaton of American Geographers,[5] our systems of individual and collective behaviour in manipulating our mother tongue and in dealing with the structure of organized knowledge are largely subconscious. Resistance to modification in such systems and structures is a natural protection against chaos, but it produces a mental set that tends to inhibit the reception of new truth. The inhibition is reinforced when the concepts with which the new ones are incompatible are considered basic in the structure. It is further reinforced when the old ones are institutionalized in disciplinary credos. The release or yielding of mental set follows recognition of this, as sophistication in a given area of knowledge-plus-belief replaces naïveté, and release at one point makes release at other points easier. New doors and windows open.

The world of learning, of which geography is a part, cannot deal effectively with today's issues without using some new concepts. We shall need them even more to deal with tomorrow's massive new problems of world living and communicating. It could well be that geographers will find the experience of dealing with geographical names rewarding in unexpected ways.

What can a geographer usefully do at this stage in the matter of the standardization of geographical names? First, he should find out, if he does not know already, whether his country has an official name-standardizing body. If there is none, he can join with the United Nations Group of Experts in pressing for establishment of one, noting the pertinent recommendations of the 1967 Conference (resolution 4, "National standardization"). Where there is such an official agency, the geographer should establish contact with its officers and identify where

[4] E. M. Murzayev, "Stabilizatsia Geograficheskikh Nazvanii", *Bulletins of the Academy of Sciences of the USSR*, Geography Series, No. 4, (1968), pp. 124-128.

[5] *The Language of Geography*, vol. 58, No. 1 (March 1968), pp. 1-11.

geographers individually and as a group can fit into the agency's programme. If the geographer will also make his interest known to the Group of Experts, information can be brought to his attention from several sources. He can be advised, for example, of plans or proposals for regional conferences or discussions and how he may have a part in them. Suggested research activities for geographers include inquiry into the nature of named geographical entities and the various meanings of words used to designate those features, the investigation of human behaviour in name-giving and name-using in their own countries, and exchange and critical examination of the information resulting from such studies.

One cannot study named entities very long without encountering new concepts and having one's mental set jolted. The investigation of human behaviour will have to be one of the significant developments of the immediate future in geography, and techniques developed or tested in name research may have broad application. At the very least it will be interesting in itself.

THE 1:2,500,000 WORLD MAP AND ITS SIGNIFICANCE FOR THE INTERNATIONAL STANDARDIZATION OF GEOGRAPHICAL NAMES*

Report presented by Bulgaria

In many instances maps are the basic source for establishing geographical names, both with regard to their linguistic structure, exact graphical presentation and phonetic value, and with regard to the geographical location of the objects to which they refer.

There is a strong link and interdependence between toponymy and cartography. In many cases they help and supplement each other, which has of late led to the setting up of such distinct intermediary disciplines as cartographic toponymy and Toponymic Cartography.

It should be noted that every major cartographic work on the territory of a given country has marked a certain stage in the study of the toponymy of that territory. This important link between toponymy and cartography is the object of ever more frequent and more profound investigations on the part of linguists, cartographers and geographers.[1] Many of the problems of this reciprocal link are the object of articles in the periodical press on linguistics, cartography and geography. All this is an eloquent justification of the belief that a deeper interpenetration between the disciplines studying geographical names and cartography, as well as a wider application of the methods and achievements of the two groups of sciences, could be very useful.

The World Map on the Scale 1:2,500,000— a unique cartographical work

In examining the standardization of geographical names on a planetary scale, it is expedient to turn our attention to cartographic works which embrace the whole planet. In this respect the World Map[2] is unique for our times. The major reasons for its exceptionally great significance are these.

1. The map covers the whole territory of our planet both the dry land and the oceans.

2. The World Map is a comparatively detailed map, endeavouring to depict the whole planet with equal accuracy and completeness on a comparatively large scale (the map consists of 234 sheets).

3. In its content and its illustrative style, the World Map is a homogeneous cartographic work.

4. The World Map is nearing completion. More than 188 map sheets—80.5 per cent of the map—have already been printed. It is planned to be completed in 1974. This means that even now the map constitutes a sound basis for a number of studies of a general planetary character. Apart from this, the comparatively rapid composition and publication of the map guarantee its contemporary accuracy and chronological unity.

5. Of significance for the problem under examination here is the fact that the map contains a large number of geographical names, which have been written in accordance with scientifically based and strictly observed principles. In countries which do not use the Roman alphabet, the names are in most cases romanized according to a system officially adopted or in wide-spread use for the purpose.

These qualities demonstrate eloquently that the map could be used to advantage for a number of purposes connected with the study of our planet and, naturally, with the study of geographical names over extensive territories.

The role of the World Map in the study and standardization of geographical names

The geographical names[3] included so far in the map, as well as the fact that they were being represented according to not merely nationally but universally valid principles, long ago prompted the makers of the map to plan for their rational utilization. The international editorial board of the World Map took a decision and

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* The original text of this paper, prepared by B. R. Koen, President of the Council of Orthography and Transcription of Geographical Names, was contained in document E/CONF.61/L.94.

[1] Among studies published in the last few years we should like to mention E. I. Pospelov, *Toponymy and Cartography* (Moscow, 1971); Josef Breu, "Cartography and toponymy", paper read at the Fourth International Conference on Cartography, Stresa, 1970; and Josef Breu, *Die Transkription in der Kartographie* (Vienna, 1970).

[2] Bulgaria, the German Democratic Republic, Romania, Poland, Hungary, the USSR and Czechoslovakia took part in the work on the preparation of the map.

[3] The Map is planned to contain more than 400,000 names. The gazetteers accompanying the *Atlas Mira* ("World Atlas") and *The Times Atlas* — two of the world's most complete geographical reference books — contain respectively 205,000 and 345,000 geographical names.

proceeded to compose an Index of the Geographical Names on the Map. Special instructions were elaborated for this purpose and the composition of the index was started. The implementation of this project, which takes on an independent significance, will undoubtedly be an important initiative in this field. We think that for a certain period of time this index will be the most complete index of geographical names in existence.

At the same time, the World Map and the index elaborated on the basis of it provide an exact reference manual not only for the written form but also for the geographical location of a tremendous number of geographical names.

Of significance, too, is the fact that the World Map is an international work. The whole process of making the map—from the selection of the initial materials to its printing—took place under the strict, thorough and consistent international control of the participating countries. This constitutes a very strong guarantee that, with respect both to the general geographical content of the map and to the geographical names contained in it, all the national bias which to a lesser or greater degree is present in national publications containing geographical names will be overcome. This is one of the main assets of the World Map, which makes it a sound basis for the study of geographical names.

Main uses of the World Map for the purpose of standardizing geographical names on an international scale

What has been said so far reveals clearly the significance of the World Map for the international standardization and study of geographical names over extensive areas and indeed over the whole planet. It would be useful to point out certain possibilities more specifically.

The main significance of the World Map is that it can be used as a basic reference manual for the geographical names of the world and their distribution. This feature of the map has been fully enough pointed out earlier. Its significance should, however, be emphasized for comparative linguistic analysis and for the investigation of a number of linguistic phenomena from the point of view of their geographical distribution and in close connexion with the socio-economic and physico-geographical information contained in the Map.

It is also very important to realize that the Map can be used as a basis for the preparation of a number of reference aids connected with geographical names and geographical terms. As well as the General Index of Geographical Names, it is planned to compile a number of specialized indexes of geographical names for territories grouped on the basis of their physico-geographical or social and political features. Thus, for instance, it is envisaged that indexes will be prepared of the geographical names of individual continents, such as Australia (being made by the Cartographic Service of the Czechoslovak Socialist Republic), Europe and Africa. There are also projects for the preparation of indexes of geographical names related by the character of the physico-geographical or economic entities such as an index of geograpical names from the world's oceans (to be elaborated by the People's Republic of Bulgaria), an index of the names of major mountain peaks (to be elaborated by the People's Republic of Bulgaria), an index of major rivers and lakes, and indexes of names of inhabited localities of particular categories. There can be no doubt that the wide popularization of geographical names on the basis of the World Map will have a very favourable effect on the further standardization of geographical names on a world scale. It is of great importance that the scale of the map allows not only of the names of the most important geographical entities to be made available to a wide public, but also those of entities of a lower order.

The World Map reveals possibilities for standardization in other fields—in the terms comprising geographical and cartographic nomenclature, and in the abbreviations which are most closely connected with geographical names and are very often used as an inseparable part of them. All this is of very great importance for cartographic toponymy and for the standardization of geographical and cartographic terminology.

There are many questions connected with the use of the World Map for providing the geographical names on derivative maps (mostly thematic maps) or on maps of a smaller scale. This represents another very valuable way in which the World Map could be used—as a standard source of geographical names for the process of map-making.

Both through the production of derivative maps and directly, the World Map can be rationally used for the standardization of geographical names for the purposes of international communications (posts, telegraphs, telephones, air transport, railways etc.).

We feel that the possible uses of the World Map on the scale 1:2,500,000 enumerated above offer sufficient reason for the Second United Nations Conference on Geographical Names to take note of its significance and possibilities in the field of the international standardization of geographial names.

AGENDA ITEM 14

Names of features beyond a single sovereignty

(*a*) Features common to two or more nations
(*b*) Maritime features
(*c*) Undersea features
(*d*) Extraterrestrial features

FEATURES COMMON TO TWO OR MORE NATIONS

Report presented by Austria, the Federal Republic of Germany, the Netherlands and Switzerland*

For the purposes of the definitive establishment of names for such geographical-topographical features as are under the sovereignty of more than one country, or are divided among two or more countries, the following principles should apply in the field of international standardization.

If the countries that share a particular geographical-topographical feature use the same official language but identify that feature by different forms of names, they should endeavour to reach an agreement on a uniform name for that feature.

If countries that share a particular geographical-topographical feature do not use the same official language, it should be a general rule for international cartography to admit the name-forms of each of the languages in question. A policy of admitting only one or only some of such name-forms, while excluding the rest on principle, would be inconsistent in theory as well as inexpedient in practice. Technical reasons alone may make it sometimes necessary, especially on small-scale maps, to dispense with the recording of certain name-forms belonging to one language or another.

* The original text of this report was contained in document E/CONF.61/L.22.

FEATURES COMMON TO TWO OR MORE NATIONS

Report presented by Norway*

Some geographical features are under the sovereignty of more than one country or are divided between a number of countries. In such cases the following rules should apply.

If the countries in question have the same official language, or languages which are closely related, they should make every effort to reach agreement on the use of one name and one spelling. As an example of such a procedure it may be mentioned that Denmark, Norway and Sweden have previously used three different spellings of the name of the arm of the North Sea which is situated just north of Denmark, namely "Skagerrak" (Danish), "Skagerak" (Norwegian) and "Skagerack" (Swedish). The three countries have now agreed on one spelling, "Skagerrak", which is to be used in all three countries.

If the countries in question do not have the same official language, or closely related ones, the official forms of the name used in each of the languages concerned should have the same status internationally. It would not be correct to prefer one national form to another for international use.

* The original text of this report was contained in document E/CONF.61/L.61.

NAMES OF FEATURES SITUATED OUTSIDE A SINGLE SOVEREIGNTY

Report presented by the Union of Soviet Socialist Republics*

The modern age is characterized by intensive development of research into the world's oceans and into the other bodies of the solar system. The mapping of territories and water areas outside national jurisdictions is a constituent part of such research, and many coun-

* The original text of this report was contained in document E/CONF.61/L.76.

tries are engaged in it. The names of the features discovered during such research are a necessary element of maps, charts and other publications reflecting the results of the research.

At present such features are named and renamed by national or international scientific organizations, whose recommendations are not binding on the Governments that produce maps and charts. The compilation and utilization of maps, charts and other documents intended for international use is hampered by the absence of an international agreement or other form of international legal statement determining the rules and procedures for the assignment of names or other designations to features discovered and mapped in the course of investigations carried out by different countries in extra-territorial waters or in space.

In view of the ever-increasing rate and volume of exploration of the ocean, the Antarctic and the other bodies of the solar system, it is advisable, as an extension of the existing international treaties and agreements covering the high seas, the Antarctic, space and other areas, to elaborate, under the auspices of the United Nations, a special international legal statement that will serve as a general juridical basis for the adoption of technical rules and procedures for naming and renaming different kinds of geographical and extraterrestrial topographic features outside national sovereignties.

Such a statement should, in our opinion, cover two groups of problems. The first part should specify the kinds and categories of features to be named, or designated in any other way; possible means of naming or otherwise designating features; and conditions determining which means of designation should be applied to particular kinds of features and in what cases. The second part should determine what national or international organizations can recommend names or other designations for the features discovered; what data substantiating the proposal and facilitating the identification of the named feature should be supplied; and which of the United Nations bodies should register the feature names, co-ordinate them with natonal organizations and approve them as recommended for international use.

It is practical to charge the United Nations Group of Experts on Geographical Names with the elaboration of a draft of the proposed statement, after necessary consultations with appropriate United Nations bodies and other international organizations competent in the matter.

THE COMPILATION OF A LIST OF GEOGRAPHICAL NAMES FROM THE ZONE ALONG THE DANUBE

Report presented by Czechoslovakia*

At the conference of the Seventh and Eighth Regional Groups held from 4th to 6th October 1971 in Prague, which representatives of the German Democratic Republic also attended, the People's Republic of Bulgaria suggested the collection of geographical names from the zone along the Danube.

All countries from this area will participate in the work. From Czechoslovakia it wll be the Slovak Commission on Terminology of the Slovak Board of Geodesy and Cartography that will co-operate.

The list will be made from the places shown on the map on the scale 1:50,000, and will cover a fairly wide zone on either side of the river.

Having collected all the basic materials, Bulgaria will make a multilingual list of geographical names for navigational charts as well as for other maps.

Viewpoint

The Czechoslovak delegation gives full support to the suggestion submitted by the Bulgarian delegation, considering this another demonstration of the efforts for extensive international co-operation in the standardization of geographical terminology; and is fully in favour of recommending the suggestion for implementation.

* The original text of this report was contained in document E/CONF.61/L.81.

THE INDEX OF THE 1:2,500,000 WORLD MAP AS A BASIS FOR THE INTERNATIONAL LIST OF GEOGRAPHICAL NAMES

Report presented by Czechoslovakia*

The socialist countries (Bulgaria, Czechoslovakia, Hungary, the German Democratic Republic, Poland, Romania and the USSR) have compiled an International World Map on the scale 1:2,500,000, the last sections of which are to be published in 1973. By the end of 1971, 80.5 per cent of the total work had been published, i.e. 211 sheets out of the total 262.

This World Map will be supplemented by an index of the individual map sheets, which is to be published after the whole map has been completed.

The lists of names of geographical units that have appeared up to now (the so-called "Gazetteers") are based on different premises, and serve other purposes than those of the index to the 1:2,500,000 World Map that is being prepared.

For the names of geographical entities the 1:2,500,000

* The original text of this report was contained in document E/CONF.61/L.87.

International World Map fully respects the official versions as well as the rights of all countries to use official names of geographical units within their administrative boundaries. Where non-Roman alphabets are used, the names are given in the official transcription, as worked out and applied by the countries concerned; if there is no official transcription, that transcription is used which is internationally acknowledged and treated as official. The names of seas and undersea features, however, are given only in Russian, transliterated into Roman characters, and in English.

The index to the 1:2,500,000 World Map may thus be of all-round use for cartographic work in all countries as a well-arranged reference list of the world's geographical names.

The Editorial Board of the 1:2,500,000 World Map has entrusted Czechoslovakia with the task of drawing up the index for Australia and New Zealand. The maps of Australia and New Zealand will form a new set, compiled on the basis of the updated sheets of the 1:2,500,000 World Map, and provided with an introduction and an index of geographical names in the forms given on the maps.

Let us mention some of the main principles laid down for the compilation of the index of geograpical names in the 1:2,500,000 World Map.

Each geographical name given in the index, with the exception of settlements, is to be supplemented by information giving the geographical characteristics of the entity referred to in current English abbreviations. The names of the countries will be given in English. The names in the index will be listed in Roman-alphabetical order, irrespective of whether they are simple or compound. Diacritical marks will be employed only where they serve to distinguish otherwise identical names, such as Melnik and Mělník.

Geographical names which have alternative forms, and names given in two forms (names of oceans, and submarine features), will be listed in both forms with appropriate cross-references.

Each name will be supplemented by the name of the country in which the place belongs as well as its location on the map. The names of administrative units given only in the table of political and administrative divisions will be located by the administrative centre of the divisions and marked with an asterisk.

Any changes of name which may occur during the production of the map sheets will be mentioned in the index with a reference to the former name.

A list of abbreviations of geographical names, with their full forms in the language of the abbreviation, will be put at the beginning of the index.

The 1:2,500,000 World Map, with its index and publications derived from it, represents a contribution by the socialist countries to the standardization of geographical names, the purpose of which is to ensure that geographical names completely fulfil their informative function while maintaining respect for the sovereignty of individual countries even in the matter of geographical terminology.

MARITIME FEATURES BEYOND A SINGLE SOVEREIGNTY

Report presented by the Federal Republic of Germany*

The Deutsches Hydrographisches Institut, Hamburg, has published a second edition of its World Map No. 2806, "Namen und nautische Grenzen der Ozeane und Meere" ("Names and limits of oceans and seas").

The limits of the maritime areas were given in accordance with Special Publication No. 23 of the International Hydrographic Bureau (Monaco, 1953). In a few cases, where the Bureau had not made a decision, limits from other sources were chosen: in the case of the subdivision between the North Sea and the Baltic Sea, the map follows the instructions of the Naval High Command, or in the case of the limit between the Libyan Sea and the Levant Sea, the *Geographie-Duden* for Europe (1966).

For the names of oceans and seas the English and French names are used as a basis. The German versions have been discussed and approved by the Ständiger Ausschuss für geographische Namen (StAGN).

The spelling of the names of coasts, islands, capes and localities is also closely based on the recommendations of the Ständiger Ausschuss.

* The original text of this report was contained in document E/CONF.61/L.20.

MARITIME FEATURES AND UNDERSEA FEATURES

Report presented by Austria, the Federal Republic of Germany, the Netherlands and Switzerland*

Maritime Features

"Maritime features" are oceans or parts of oceans. The maritime features which we are concerned with here lie largely beyond national sovereignties. On the other hand, they are common to, or extend across, the frontiers of several States, at least in the case of major entities such as oceans and the seas at their edge. Furthermore, many names of maritime features have

* The original text of this report was contained in document E/CONF.61/L.25.

been created by seafarers from distant countries or are the result of historical coincidences. For these reasons it will hardly be possible to recommend one name-form only.

For a single maritime feature different states often use different names which—in their "specific" term or in their "generic" term or even in both of them—are not equivalent to each other.

It is therefore recommended that a list should be compiled of maritime features with their names in the different languages and stating the limits of each. Should this list show that the limits understood for certain maritime features differ from state to state, an attempt should be made to agree on standard limits. A standing committee, established under United Nations auspices, would have to be entrusted with the task of compiling such a list and establishing standard limits. The same committee should also deal with "undersea features". When a new name is given to a maritime feature, the same rules as those to be established for the renaming of "undersea features" should apply.

UNDERSEA FEATURES

We support the recommendations submitted by the Working Group on Undersea Feature Names.

It is especially recommended:

That a list should be compiled giving the equivalents for the "generic terms" in different languages—as an example of such a list we cite the paper of the "Ständiger Ausschuss für [Geographische Namen (StAGN)", "Bezeichnungen für] untermeerische Bodenformen", 2nd ed. (Bonn–Bad Godesberg, December 1971); and

That a standing committee should be set up, established under United Nations auspices, with the tasks (*a*) of collecting the existing names and trying to reconcile the "generic terms" they contain with the accepted meaning of these terms, and (*b*) of collecting, verifying and approving new names and circulating them to the other states. This standing committee should co-operate as closely as possible with the General Bathymetric Chart of the Oceans Committee of the International Hydrographic Organization, Monaco.

MARITIME FEATURES AND UNDERSEA FEATURES

Report presented by Japan*

The geographical names of oceans and seas given in the nautical charts and publications issued by the Hydrographic Department of Japan are, in principle, adopted on the basis of Special Publication No. 23, "Limits of oceans and seas", of the International Hydrographic Bureau (1953).

Geographical names of major ocean-bottom features are adopted on the basis of the Report of the Sub-Committee on Proper Geographical Names for Ocean-Bottom Features approved by the General Bathymetric Chart of the Oceans Committee, International Association for the Physical Sciences of the Ocean (1966), for inclusion in the nautical charts and publications issued by the Hydrographic Department of Japan.

The names of 55 minor sea-bottom features in the territorial waters and adjacent seas of Japan have already been approved by the joint meeting for geographical names of sea-bottom features. (This meeting was sponsored by the Hydrographic Department, and had as consultative member organizations the National Committee for Geophysics and the National Committee of Geography of the Science Council of Japan, the Oceanographical Society of Japan, the Association of Japanese Geographers, the Ocean Research Institute of the University of Tokyo, the Fisheries Agency, the Meteorological Agency and the Cultural Agency.)

The Sub-Committee on Proper Geographical Names for Ocean-Bottom Features (Chairman: K. Kawakami, Chief Hydrographer of Japan), under the General Bathymetric Chart of the Oceans Committee, will continue its co-ordination work for the standardization of minor ocean-bottom features such as seamounts.

The joint meeting for geographical names of sea-bottom features will be convened as necessary to determine geographical names of sea-bottom features in the territorial waters and the adjacent seas of Japan.

* The original text of this report was contained in document E/CONF.61/L.46.

UNDERSEA FEATURES AND MARITIME FEATURES

Report presented by Norway*

UNDERSEA FEATURES

Norway wishes to register its support of the recommendations contained in the working paper prepared by the Working Group on Undersea Feature Names. However, in the lists on "Terminology of submarine relief" and "Submarine terms" prepared by the International Hydrographic Bureau (IHB) and annexed to that working paper, a number of Norwegian generic terms are missing. Furthermore, among the terms listed, some do not represent the correct Norwegian equivalent to the English term: such is for instance the case with the term "continental slope", which has been listed as

* The original text of this report was contained in document E/CONF.61/L.91.

sokkelskråningen whereas the appropriate term in Norwegian would be *landbakken*. This indicates that the proper competence may not have been available to the International Hydrographic Bureau when compiling the lists.

Specialists in onomastic sciences who have dealt with nomenclatures of fishing-grounds and seabeds are aware how fishermen have applied words and terms for topographic features on land to corresponding features in the sea. Examples of this in Norwegian are *bakke* ("slope"), *berg* ("mountain"), *djup* ("deep"), *egg* ("edge of a bank"), *hammar* ("steep rock"), *klakk, klett* ("small mountain, mountain slope, ridge"), *stall* ("sort of table plateau"), *li* ("hill slope"), *søyle* ("off-shore mud basin") and *tå* ("toe, spur on the continental shelf").

It is therefore recommended that lists should be compiled giving full equivalents in different languages for generic terms related to undersea features (such lists must be prepared in co-operation with linguists who are familiar with the subject); and that a standing body should be set up under the auspices of the United Nations which would (*a*) collect the different existing names and reconcile them with generic terms in use, and (*b*) collect, verify and approve new names, and circulate them to the Member States. This standing body should co-operate with the General Bathymetric Chart of the Oceans Committee of the Internatonal Hydrographic Bureau.

Maritime features

Under this topic the question of names on oceans, or parts of oceans, which are located beyond the limits of national sovereignties ought to be discussed. Such ocean areas often border the territorial waters of several States and may have been given different and totally unrelated names, some of which may have ancient origins. For such areas one may have considerable difficulties in establishing a single form of the name.

Since all parties concerned would be interested in solving such problems, it is recommended that the standing body suggested above should also be charged with the compilation of lists of names in the different languages for maritime features beyond national sovereignties.

Since the area covered by the various names of such maritime features may in some cases differ, it is suggested that the lists should also include information on the geographical extent covered by each version of the name. This might assist in solving some of the problems which exist in this field. When a new name is given to a maritime feature, the same rules as those suggested for undersea features should apply.

THE UNDERSEA FEATURES GAZETTEER

Report presented by the United States of America*

The gazetteer contains about 2,800 official standard names for undersea features of the world approved, as of 1 December 1971, by the Board on Geographic Names (BGN) and the Secretary of the Interior for use by the Government of the United States. About as many unapproved variant names are listed, with cross-references to the approved names. It is the second cumulative listing of standardized undersea feature names published by the Board for use in official publications. Although binding only on the United States Government, the names are being given the widest possible circulation, to facilitate communication among oceanographers and the public at large.

How the names are listed

The first section of this gazetteer is an alphabetical list, with cross-references, of all the names included. Unapproved variant names are cross-referenced to the approved names by means of the word "see". Users of the gazetteer should always refe to main entries for approved names. The second section lists the names within blocks bounded by parallels and meridians at 30-degree intervals, which are shown on the frontispiece.

Designations

The second column of the gazetteer contains designations that identify the kind of topographic feature to which the name applies. The designator term is usually the generic term in the approved name, but will differ when a generic that is not properly descriptive under Board on Geographic Names definitions is retained as part of a name in established usage. In names of features that constitute dangers to surface navigation, generics have been changed where necessary to make them properly descriptive and emphasize the danger.

The following are the designations and definitions currently used by the Board. Designations not appearing in this gazetteer because no names of such features had been approved by the time it was published are indicated by an asterisk.

**Archipelagic apron* — a gentle slope with a generally smooth surface on the see floor, particularly found around groups of islands or *seamounts*.

Bank — an elevation of the sea floor located on a *shelf* and over which the depth of water is relatively shallow but sufficient for safe surface navigation.

Basin — a depression of the sea floor more or less equidimensional in form and of variable extent.

Borderland — a region adjacent to a continent, normally occupied by or bordering a *shelf*, that is highly irregular with depths well in excess of those typical of a *shelf*.

Canyon — a relatively narrow, deep depression with steep slopes, the bottom of which grades continuously downward.

**Continental rise* — a gentle slope with a generally smooth surface, rising toward the foot of the *slope*.

Cordillera — an entire mountain system including all the subordinate ranges, interior *plateaus* and *basins*.

* The original text of this report was contained in document E/CONF.61/L.14.

Escarpment — an elongated and comparatively steep slope of the sea floor, separating flat or gently sloping areas.

Fan — a gently sloping, fan-shaped feature normally located near the lower termination of a *canyon*.

Fracture zone — an extensive linear zone of unusually irregular topography of the sea floor, characterized by large *seamounts*, steep-sided or asymmetrical *ridges*, *troughs* or *escarpments*, and not necessarily of transform fault origin.

Gap — a steep-sided depression cutting transversely across a *ridge* or *rise*.

Knoll — an elevation rising less than 1,000 metres (or 500 fathoms) from the sea floor and of limited extent across the summit.

**Levee* — an embankment bordering one or both sides of a *seachannel* or the low-gradient seaward part of a *canyon* or *valley*.

Moat — an annular depression that may not be continuous, located at the base of many *seamounts* or *islands*.

Plain — a flat, gently sloping or nearly level region of the sea floor.

Plateau — a comparatively flat-topped elevation of the sea floor of considerable extent across the summit and usually rising more than 200 metres (or 100 fathoms) on at least one side.

Province — a region composed of a group of similar bathymetric features whose characteristics are markedly in contrast with surrounding areas. Term used once in this gazetteer as a designation for Guadalupe Arrugado, an area characterized by subdued corrugations on a scale previously unreported. *Arrugado* has not been incorporated into the standard term list of the Board on Geographic Names.

Reef — an offshore consolidated rock hazard to navigation with a least depth of 20 metres (or 10 fathoms) or less.

Ridge — a long, narrow elevation of the sea floor with steep sides and irregular topography.

Rise — a long, broad elevation that rises gently and generally smoothly from the sea floor.

Saddle — a low part on a *ridge* or between *seamounts*.

Seachannel — a long, narrow, U-shaped or V-shaped, shallow depression of the sea floor, usually occurring on a gently sloping *plain* or *fan*.

Seamount — an elevation rising 1,000 metres (or 500 fathoms) or more from the sea floor, and of limited extent across the summit.

Shelf — a zone adjacent to a continent or around an island, and extending from the low water-line to the depth at which there is usually a marked increase of slope to greater depth.

Shoal — an off-shore hazard to navigation with a least depth of 20 metres (or 10 fathoms) or less, composed of unconsolidated material.

Sill — the low part of the *ridge* or *rise* separating ocean *basins* from one another or from the adjacent sea floor.

Slope — the declivity seaward from a shelf into greater depth.

Spur — a subordinate elevation, *ridge*, or *rise* projecting outward from a larger feature.

Tablemount or *guyot* — a *seamount* having a comparatively smooth flat top.

Terrace — a bench-like structure bordering an undersea feature.

Tongue — used only once, to designate Catoche Tongue, a lateral protrusion from a *slope*; this term has not been incorporated in the list of standard terms and definitions of the Board on Geographic Names.

Trench — a long, narrow and deep depression of the sea floor, with relatively steep sides.

Trough — a long depression of the sea floor, normally wider and shallower than a *trench*.

Valley — a relatively shallow wide depression with gentle slopes, the bottom of which generally grades continuously downward. This term is used for features that do not have canyon-like characteristics in any significant part of their extent.

NOTE: in the case of "reef" and "shoal", 30 metres (15 fathoms) will be the critical depth in those areas where vessels of deep draught navigate.

Names including the word "Deeps", which really referred to deep soundings rather than physical features, were once proper names with "deep" as the generic term indicating the class of thing named, and commonly with the ship's name as the specific term identifying the individual entity within the class. Deep soundings are now identified on charts by a notation of the ship that made the sounding, the sounded depth and the year, rather than by name. All names including the word "deep" have been dropped, whether or not they are listed as variants.

Extensive changes in terms and definitions have been made in the light of experience and discussions since the first edition of this gazetteer, most of the changes being in the direction of simplification. The terms "fishing area", "section of sea", "shelf edge", "spit" and "strath" were dropped and not replaced. While "shelf edge" does not appear to be needed in proper names, this does not prejudice its use in text as a common noun with lower-case initials. The identity of a shelf edge of continental extent is generally clear from context; and the reference value of sections of a long shelf edge would vary with the subject under consideration, and hence can be handled by specific reference in text better than by name. Furthermore, as defined, it would not equate to the Norwegian *egg* or *egge* which, as found in names, apply to the upper part of a slope where fish abound, often a zone of some 300 metres across. Features to which the term "strath" had been applied have been redesignated "valley", and that term has also been used as the generic term in the names. The definition of "valley" was amended to say that it "generally" grades continuously downward.

The term "continental" has been deleted from "continental borderland", "continental shelf", and "continental slope"; the simple term "seamounts" has replaced "seamount chain", "group" and "range" as the generic and the designation in all cases. The term "guyot" is recognized as a permissible alternation to "tablemount". The definition of "fracture zone" was modified by stating that it is not necessarily of transform fault origin, and a "plateau" now need only have the rise of more than 200 metres on one side instead of on all sides.

As in the case of "shelf edge", simplification of the terms for use in names in no way precludes the use of longer terms in continuous text, where for instance the Patton Seamounts might be referred to as a seamount group, or Sohm Plain as an abyssal plain.

LATITUDE AND LONGITUDE

The third and fourth columns indicate geographical co-ordinates, with the longitude based on Greenwich. Co-ordinates serve only to identify the features named.

LOCATIONAL REFERENCES

Features such as reefs, shoals and banks can usually be identified on the nautical charts published by official government agencies in various countries for navigational use. Index maps showing the area covered by each chart are available in catalogues to be obtained from the publishing agencies. For bathymetric features, however, it is usually necessary to consult relatively recent special

charts issued by both government and private agencies. One that will be useful in locating many of the larger features named in this volume is *The World*, H. O. Misc. 15,254, 12 sheets (Naval Oceanographic Office). With the rapid accretion of new knowledge of the oceans, new features are being identified and named faster than charts can be revised to show them. Some are shown only on small maps in journal articles; still others have yet to appear in published material. It is not feasible to cite all the sources, nor to indicate in which category individual names fall. Current textual and map or chart literature is examined and names appearing there are acted upon, but as the backlog of published names is reduced the emphasis is shifting to pre-publication assimilation and the international exchange of new names.

All the decisions by the Board on Geographic Names on these undersea names have been approved upon the recommendation of its Advisory Committee on Undersea Features. The present members of the Advisory Committee are Charles D. Rouse, Chairman, and Frederick Edvalson, of the Naval Oceanographic Office; A. W. Anderson and John O. Boyer, of the National Oceanic and Atmospheric Administration; Ned A. Ostenso, of the Office of Naval Research; Jack W. Pierce, of the Smithsonian Institution; Joshua I. Tracey, Jr., of the Geological Survey; and Meredith F. Burrill, *ex officio*. The members serve as individuals with special knowledge, not as representatives of agencies. Others who have served on the Committee since it was first constituted late in 1962, with their Government connexion while serving, are John V. Byrne (National Science Foundation), Joe S. Creager (National Science Foundation), John B. Hersey (Office of Naval Research), Harry Ladd (Geological Survey), John Lyman (National Science Foundation/Fish and Wildlife Service), H. W. Menard (Executive Office of the President), Harley D. Nygren (Environmental Science Services Administration), Roger S. Revelle (Department of the Interior), Harris B. Stewart, Jr. (Environmental Science Services Administration), Lorne G. Taylor (Environmental Science Services Administration), Miller J. Tonkel (Environmental Science Services Administration), and I. Eugene Wallen (Smithsonian Institution).

The Committee has met more than 130 times. Research assistance has been provided by, successively, staff geographers Fred G. Alberts, William Lloyd and Boyd D. Peterson. Record maintenance and gazetteer preparation are done by the Geographic Names Division of the United States Army Topographic Command.

Undersea name policies

The policies of the Board on Geographic Names applied in the official standardization of the approved names in this gazetteer are listed below.

1. The Board will consider appropriate name proposals by United States nationals for undersea features in international waters.

2. The Board will consider name proposals for features under United States territorial waters on the same basis as other domestic names.

3. Before a feature is named, its character, extent and position shall have been established sufficiently for identification. Positions shall be given in terms of geographical co-ordinates. If it is necessary to refer to a feature before such details have been fully established, it is suggested that the reference should be by co-ordinates and generic term with the addition of (PA) after the co-ordinates if the position is not adequately established and (?) after the generic if the nature of the feature is in some doubt.

4. Undersea names in the immediate vicinity of the coast of another country will be treated as names in that country.

5. The Board will ordinarily approve names of undersea features beyond the limits of the United States that are bestowed, or approved, by other countries, or nationals of other countries, unless there is some conflict or other question. Generics in English, if appropriate to the feature, will be accepted; those in other languages will be translated.

6. *Guidelines for selection of specific terms.*

(*a*) It is long-established policy of the Board on Geographic Names to favour short and simple names as the most efficient, other things being equal.

(*b*) Specific terms in the names of major undersea features should, wherever feasible, indicate the general location of the area in which they lie, e.g. Mariana Trench, Ninetyeast Ridge.

In some cases, this can be accomplished simply by using the same specific term in the names of adjoining features, e.g. Aleutian Ridge, Aleutian Basin, Aleutian Trench, Mariana Ridge, Mariana Trench, Bellona Plateau, Bellona Reefs, Bellona Shoal.

In some cases, the specific term may indicate direction from a large well-known associated feature, e.g. South Honshu Ridge, West Caroline Basin.

In cases where the extent of a long linear feature needs to be identified and the extremities can be identified by named geograpical features, the names of those features may be hyphenated as the specific terms, e.g. Azores-Gibraltar Ridge, Peru-Chile Trench.

Canyons, since they usually extend close to the shore, are normally given as specific terms the names of rivers, points or other readily identifiable named land features, e.g. Barrow Canyon, Scripps Canyon, Ascension Canyon.

(*c*) Specific names for other features can be derived from ships or other vehicles utilized in the discovery of the feature, from expedition names, from individuals associated with the discovery, from organizations and institutions sponsoring the expedition on which it was discovered, or from individuals who have specifically been involved in the recognition of the uniqueness of the feature through the interpretation of the data.

Names of ships may be applied to features such as seamounts, knolls, canyons and tablemounts. The ship name to be used should be that of the discovering ship, or, if that has been previously used for a similar feature, it should be the name of the ship verifying the feature, e.g., San Pablo Seamount, Atlantis II Seamounts.

An example of a feature named after a specific vehicle utilized in its discovery is the Kiwi Seamount, so named

from the geomagnetic survey plane *Kiwi* under Project Magnet which discovered its existence through a magnetic anomaly.

An example of the use of an expedition name is Northern Holiday Seamount.

Individuals associated with the discovery of a feature whose names may be used include the captain of the ship, expedition leaders or survey party chiefs, and individuals in charge at the time of discovery and recognition of the feature.

Individuals involved in the interpretation of data leading to the recognition of the unique character of a feature include bathymetrists, oceanographers, geologists and hydrographers.

Examples of features named after persons who have made important contributions to knowledge of the oceans (including the interpretation of oceanic data, or the preparation of charts of the oceans), such as historical hydrographers, oceanographers and scientists, are the Maury Channel and the Ewing Seamount.

An example of a feature named after an organization or institution involved in the study of the seas is provided by the Scripps Canyon.

Names of persons prominent in the past history of the nation may also be used.

(*d*) It is permissible to name groups of features after specific categories of historical personages, mythical figures, stars and constellations, fish, birds, animals etc. Groups like these might be made up:

Musicians' Seamounts — Bach Seamount, Brahms Seamount, Schubert Seamount;

Electricians' Seamounts — Volta Seamount, Ampere Seamount, Galvani Seamount;

Ursa Minor Ridge and Trough Province, Kochab Ridge, Polaris Trough, Suhail Ridge.

(*e*) Descriptive names will be acceptable if not duplicated, particularly when they refer to distinguishing characteristics, e.g. Hook Ridge, Horseshoe Seamounts.

(*f*) Names considered inappropriate include names applied to similar features elsewhere; full names or unwieldy titles of individuals, institutions or organizations; names of commercial products or their manufacturers; and names of individuals proposed because of relationship or friendship with the proponent.

7. Existing names that have been applied for many years may be accepted even though they do not coincide with the above policy.

Name proposal form

Proposal forms for undersea names are provided in this publication to facilitate submission and expedite approval and promulgation of names. Anyone may propose a name for an unnamed undersea feature that has been adequately identified as to type and geographical location.

A separate form (or copy of the form, if necessary) should be used for each name proposed, and all the blanks that are pertinent should be filled in. Coordinates of latitude and longitude should be given, ordinarily taken at the approximate centre of the feature, and read fine enough to identify the feature—to the nearest degree for basins, as a general rule, and to the nearest minute for smaller features such as canyons.

For "kind of feature", the appropriate term should be chosen from the list of designations and definitions in the current edition of the Board on Geographic Names Gazetteer of Undersea Features. This term will ordinarily also be used as the generic term in the name. If the feature is of a kind not covered by these terms or definitions, an explanation should be provided in a supplementary note.

Although "reference to prior publication" is provided for, it is hoped that authors will refer names not yet acted upon to the Board before publication, and every effort will be made to act on them in time to meet publication schedules.

Reporting of errors

It is requested that all who use this gazetteer will aid in its correction for future editions by reporting errors to the Board on Geographic Names, Department of the Interior, Washington, DC 20240. A statement of the source of the correct information will be helpful.

Note

The publication of geographical names or their spellings does not necessarily reflect recognition of the political status of an area by the United States Government.

Annex

BOARD ON GEOGRAPHIC NAMES — UNDERSEA FEATURE NAME PROPOSAL

Ocean or Sea _____ Name proposed _____

Lat. _____(N) (S), Long. _____ (E) (W);

_____ nautical miles in _____

_____|direction from _____

Description: kind of feature:

Identifying or categorizing characteristics (size, shape, dimensions, least depth, steepness etc.):

Associated features:

Chart reference:

Shown and named on chart (map)

Shown but not named on chart (map)

Not shown but within area covered by

Reason for choice of name (if that of a person, state how associated with the feature to be named):

Discovery facts: Date _____; by (individuals or ship)

By means of (equipment):

Navigation used:

Estimated positional accuracy in nautical miles:

Description of survey (track spacing, line crossings, grid network etc.):

Nature and repository of other survey activities (dredge samples, cores, magnetics, gravity, photographs etc.):

Supporting material:
(Enclose, if possible, a sketch-map of the survey area, profiles of the feature etc.)

Reference to prior publication if any:

SUBMITTED BY:
Address:

Date:

CONCURRED IN BY (*if applicable*):
Address:

MAIL TO: Executive Secretary
Board on Geographic Names
Department of the Interior
Washington, D.C. 20240

UNDERSEA FEATURES

Report presented by Canada*

INTRODUCTION

Canada is a country bordered by three oceans: the Atlantic on the east, the Pacific on the west and the Arctic on the north. Recent measurements of the Canadian coastline, including large and medium-sized islands beyond the mainland, produced the astonishing total of 156,000 statute miles.

The exploitation of the natural resources of Canada's off-shore waters has been the subject of scientific study for a long period. The search for oil under the seabed has accelerated. Protection of the natural environment while sea resources are being utilized has become a matter of urgent concern. In these circumstances, it is natural for Canada to take a keen interest in the identification and designation of undersea natural features.

RELATED CANADIAN AGENCIES

Hydrographic survey work in Canada under Canadian Government auspices began in 1883. The Canadian Hydrographic Service was established in 1904. This work was primarily directed towards ensuring safe surface navigation of coastal and inland waters, but of necessity embraced some investigation of sea-bottom features.

During the past decade, a consolidation of the agencies concerned with inland and ocean waters has been brought about under a Department of the Environment. It includes an Inland Waters Branch and a Marine Sciences Branch; the latter performs hydrographic surveys and oceanographic research.

Canada is a member of the General Bathymetric Chart of the Oceans (GEBCO) organization of the International Hydrographic Bureau, and produces general bathymetric charts of specified areas.

CANADIAN PARTICIPATION IN UNITED NATIONS WORK ON UNDERSEA FEATURE NAMES

Since the United Nations Conference on the Standardization of Geographical Names held at Geneva in 1967, Canada has had a representative on the Group of Experts on the Standardization of Geographical Names. A representative has participated in the meetings of the Group of Experts at United Nations headquarters in 1970 and 1971. He is a member of the Working Group concerned with undersea feature names, and presented papers to the Group of Experts on naming principles, generic terms and the control and dissemination of the nomenclature of undersea features.

Canadian interest has been increased by the production of large-scale bathymetric charts. Four have been published covering areas along the Atlantic coast. These are the first bathymetric charts issued by Canada aside from the small-scale general charts compiled for the General Bathymetric Chart of the Oceans.

RECENT CANADIAN ACTIVITY

The Canadian Permanent Committee on Geographical Names appointed a sub-committee to deal with undersea feature names in 1967.

This sub-committee includes the representative on the Group of Experts in its membership, which is composed of hydrographic, oceanographic and environmental specialists. Thus most of the organizations interested in undersea work make a contribution to the sub-committee's work. The sub-committee has devoted considerable time to a study of generic terms for undersea features.

While consideration of these topics is still incomplete, it is felt that the interim reports of a working group reporting to the sub-committee may be of interest to other countries. These reports are presented here as annex I, "International nomenclature of ocean-bottom features", and annex II, "Glossary of definitions of undersea terms". It should be noted that the sub-committee has not yet accepted the majority of the terms in the glossary.

Annex I

INTERNATIONAL NOMENCLATURE OF OCEAN-BOTTOM FEATURES

International efforts to obtain approved nomenclature of ocean-bottom features cover a period of more than 20 years. The International Hydrographic Conference to be held in Monaco in 1972, and the United Nations Conference on Cartography to be held in London during 1972, will both be considering the topic of the nomen-

* The original text of this paper, prepared by G.F. Delaney, Chief of the Toponymy Division, Department of Energy, Mines and Resources, and Executive Secretary of the Canadian Permanent Committee on Geographical Names, was contained in documents E/CONF.61/L.32 and addenda 1 and 2.

clature of ocean-bottom features. The purpose of this brief is to document efforts made by the International Hydrographic Bureau (IHB) and the International Association of Physical Oceanography (IAPO) to achieve an approved nomenclature, and to help establish the Canadian positions at these two conferences.

Brief history of international efforts

On 22 September 1952, general principles governing the selection of terms were adopted (see reference 2).

From 1952 to 1962 specific terms were selected, defined and circulated (see references 2, 3, 4, 5, 6, 7 and 9).

In 1962 the International Hydrographic Bureau reported on progress to the Eighth International Hydrographic Conference (see reference 10) and proposed that new nomenclature be dopted (see references 9 and 11).

Discussion of the proposed nomenclature revealed the existence of two nomenclatures (see reference 12).

The Eighth International Hydrographic Conference decided to refer the nomenclature to the International Hydrographic Bureau for consideration by correspondence (see reference 13).

The International Hydrographic Bureau prepared a comparison of the two nomenclatures, which it circulated in 1963 for consideration (reference 14).

Canada replied that it could not offer an opinion at that time, but would endorse any action on the part of the Bureau which would make it easier to reach a decision (see reference 15).

The International Hydrographic Bureau requested the International Union of Geodesy and Geophysics, at its thirteenth general assembly, to reform the International Association of Physical Oceanography Committee on Ocean Bottom Nomenclature in order to arrive at an approved list (see reference 18).

In 1964 the first meeting of the reformed International Association of Physical Oceanography and General Bathymetric Chart of the Oceans Committee on Ocean Bottom Nomenclature (see references 19 and 19a) was held.

At the Ninth International Hydrographic Conference, 1967, the International Hydrographic Bureau reported on the work of the International Association of Physical Oceanography and General Bathymetric Chart of the Oceans Committee on Ocean Bottom Nomenclature (reference 21).

The Ninth International Hydrographic Conference resolved that a member of the Directing Committee of the International Hydrographic Bureau shall serve on the General Bathymetric Chart of the Oceans Committee and on any other international committee or sub-committee which may be formed to consider the nomenclature of ocean-bottom features (see reference 22).

The results of the International Association of Physical Oceanography and General Bathymetric Chart of the Oceans Committee on Ocean Bottom Nomenclature were published in the *International Hydrographic Review*, January 1971 (reference 27).

In August 1971 the United States proposed that the official General Bathymetric Chart of the Oceans nomenclature (see reference 27) be used by all compiling nations of the General Bathymetric Chart of the Oceans (see reference 29).

Thus, after over 20 years of effort a proposed nomenclature of ocean-bottom features has been prepared. It should be noted that, to date, no official resolution has been submitted to the Tenth International Hydrographic Conference to be held in Monaco, 1972, to have the proposed nomenclature approved. There is, however, a resolution (see reference 29) before this conference which assumes that the nomenclature proposed (see reference 27) has been approved.

Summary

The arguments for approving or rejecting the proposed nomenclature may be summarized as follows.

Factors favouring approval of the nomenclature

The International Hydrographic Bureau expressed the opinion that the International Association of Physical Oceanography was the qualified body to define these terms (see reference 16).

Canada supported the view of the International Hydrographic Bureau (see reference 15).

Over 20 years of effort have been expended on the proposed terms.

Factors opposing approval of the nomenclature

Canada strongly opposes the proposed generic "strath".

Canada feels that the connotation for safe navigation incorporated in the definition for "bank" should be deleted. It is not possible to predict what banks will be safe for surface navigation 20 years from now.

The limiting depths for "shoal" and "reef" are already well out of date.

The placing of numerical values on feature definitions should be avoided.

Some definitions are too restrictive (see "valley").

The latest definitions of the United States Board on Geographic Names differ from the proposed international definitions in five places (see references 26 and 28).

Conclusion

Several of the definitions require further clarification; some terms should be deleted, and an additional one added.

With the advent of a United Nations Committee to consider the subject, it would appear to be more advantageous to obtain international approval of a common nomenclature at both the United Nations and the International Hydrographic Bureau simultaneously.

Recommendation

The proposed nomenclature should be rejected and referred to the United Nations and the International Hydrographic Bureau for further refinements.

References documenting the development of an internationally approved undersea terminology

Number	*Title and description*
1	International Hydrographic Bureau, *Terminology of Submarine Relief*, Special Publication No. 22c (1932)
1a	————, "Report of the committee on the criteria and nomenclature of the major divisions of the ocean bottom", *International Hydrographic Review*, vol. 19 (1942)
2	————, "International committee on the nomenclature of ocean bottom features" (minutes of meeting held at the International Hydrographic Bureau at Monaco, 22 September 1952), *International Hydrographic Review*, vol. 31 (1954)
3	John D. Wiseman and C. D. Ovey, "Definitions of features on the deep-sea floor", *Deep-Sea Research*, vol. 1 (June 1953)
4	International Hydrographic Bureau, "General principles governing the naming of new small oceanic features", International Hydrographic Review, vol. 32 (1955)
5	John D. Wiseman and C. D. Ovey, "General principles governing the allocation of names", *Deep-Sea Research*, vol. 2 (1955)
6	International Hydrographic Bureau, Circular letter 8 (1958)
7	————, "French translation of nomenclature of ocean bottom features", *International Hydrographic Review*, vol. 35 (1958)

Number	Title and description
8	United States Board on Geographic Names, "Bathymetric nomenclature adopted at the 62nd meeting of the Board on Geographic Names, 19 July 1960"
9	International Hydrographic Bureau, "French translation of nomenclature of ocean bottom features", *International Hydrographic Review*, vol. 39 (1962)
10	————, "Report on work of IHB, B.25, International Committee on the Nomenclature of Ocean Bottom Features", *Eighth International Hydrographic Conference, Monaco*, 8–18 May 1962, Report of the Proceedings, p. 31
11	————, "Proposal 71. Nomenclature of ocean bottom features, *Eighth International Hydrographic Conference, Monaco, 8-18 May 1962. Report of the Proceedings*, p. 135
12	————, "Proposal 71. Discussions of nomenclature of ocean bottom features", *Eighth International Hydrographic Conference, Monaco, 8–18 May 1962, Report of the Proceedings*, p. 342
13	————, "Proposal 71. Decision regarding nomenclature of ocean bottom features", *Eighth International Hydrographic Conference, Monaco, 8–18 May 1962, Report of the Proceedings*, p. 413.
14	————, Circular letter 10 (1963), annex 1, "Comparison of nomenclatures" and annex 2, "Principal differences between the nomenclatures"
15	Reply of Canada to circular letter 10 (10 July 1963)
16	Reply of the International Hydrographic Bureau to Canada about circular letter 10 (17 July 1963)
17	"Undersea feature terms and definitions adopted at the 11th meeting of the advisory committee on undersea features" (United States Board on Geographic Names, 27 June 1963)
18	At the request of the International Hydrographic Bureau, the general assembly of the International Union of Geodesy and Geophysics at Berkeley in August 1963 reconstituted the International Association of Physical Oceanography and General Bathymetric Chart of the Oceans Committee
19	*General Bathymetric Chart of the Oceans, Nomenclature of Ocean Bottom Features (List and Definitions)* (May 1964)
19a	Announcement of above in *International Hydrographic Bulletin*, May 1964
20	F. M. Edvalson, "Sea floor names in principle and pactice", presented to the Tenth Pan-American Consultation on Cartography, Pan-American Institute on Geography and History, Guatemala City, June–July 1965 and published by the United States Naval Oceanographic Office
21	International Hydrographic Bureau, "Report on work of IHB, B.8.4, Nomenclature of ocean bottom features", *Ninth International Hydrographic Conference, April 1967. Report of the Proceedings*, p. 48
22	————, "Proposal 87. Nomenclature of ocean bottom features", *Ninth International Hydrographic Conference, April 1967. Report of the Proceedings*, p. 642
23	United Kingdom, CB order No. 150, "Names of ocean-bed features" (1969)
24	————, "Naming of ocean-bed features" (14 July 1969)
25	Rhodes W. Fairbridge, "Ocean bottom features" in *Terminology and Nomenclature Encyclopedia of Oceanography*
26	*United States Gazetteer for Undersea Features of the World.* Approved on 1 April 1969 by the United States Board on Geographic Names
27	General Bathymetric Chart of the Oceans, "Nomenclature of ocean bottom features", *International Hydrographic Review* (January 1971)
28	Letter from the Secretary of the United States Board on Geographic Names to the Secretary of the Canadian Permanent Committee on Geographical Names, dated 16 April 1971, indicating that the American Committee on Undersea Features has recommended and the United States Board on Geographic Names has approved dropping "strath" as both generic and designation in favour of "valley"
29	United States of America, Circular letter 22 (August 1971), annex 7, "General Bathymetric Chart of the Oceans (GEBCO) geographic names overlay"

Annex II

GLOSSARY OF DEFINITIONS OF UNDERSEA TERMS[a]

The reference numbers in this list correspond to those in the accompanying somewhat amended glossary of definitions of undersea terms. Attention is particlarly drawn to the notes on references 8a and 12a.

INDEX OF REFERENCE SOURCES

D-23/9/71 Decision of the Sub-Committee on Undersea Features, 23 September 1971.

R-30/11/71 Recommendation of the working group convened 30 November 1971 following a meeting of the Sub-Committee on Undersea Features.

1. International Committee on the Nomenclature of Ocean Bottom Features, Minutes of meeting at the International Hydrographic Bureau, Monaco, 22 September 1952.
2. John D. Wiseman and C. D. Ovey, *Deep-Sea Research*, vol. I (1953), pp. 11-16 (based on reference 1 above).
3. "General principles in naming new small features", International Committee on the Nomenclature of Ocean Bottom Features, Monaco, 9–10 September 1954.
4. John D. Wiseman and C. D. Ovey, "General Principles", *Deep-Sea Research*, vol. 2 (1955).
5. "Bathymetric nomenclature adopted by the United States Board on Geographic Names (BGN)", 19 July 1960.
6. International Hydrographic Bureau, Circular letter 10 (1963), "Comparison of Nomenclature: (*a*) of the International Committee on Nomenclature of the International Association of Physical Oceanographers (IAPO), dissolved at Toronto in 1957 (same as given in references 1 and 2 above), (*b*) of the United States Board on Geographic Names, adopted at 62nd meeting, 19 July 1960 (reference 5 above)".
7. Advisory Committee on Undersea Features of the United States Board on Geographic Names, "Terms and Definitions adopted 27 June 1963".
8. "Nomenclature of ocean bottom features", based on a meeting of the Committee for the General Bathymetric Chart of the Oceans (the General Bathymetric Chart of the Oceans Committee) in May 1964.

8a. General Bathymetric Chart of the Oceans list, "Nomenclature of ocean bottom features", published in the January 1971 issue of *International Hydrographic Review* (the Journal of the International Hydrographic Bureau). The text describes this as the

[a] Including a number approved by the Sub-Committee on Undersea Features, 23 September 1971, and a large number now recommended for the consideration of the Sub-Committee.

list approved by the General Bathymetric Chart of the Oceans Committee in Monaco in May 1964, coupled with a new French text prepared under the guidance of André Gougenheim, Chairman of the Committee. It is assumed that this supersedes the previous list drawn up by the Committee, reference 8.

9. CB Order 150, "Names of Ocean-bed Features" (Admiralty, 1969).
10. Hydrographer of the Navy, "Naming of ocean-bed features" (London, July 1969). This is apparently a selection from CB Order 150 above, with some minor differences.
11. Rhodes W. Fairbridge, *Encyclopedia of Oceanography* (1969).
12. Frederick M. Edvalson, "Sea floor names in principle and practice" (1965). These terms and definitions are understood to have been first established by the United States Board on Geographic Names and to have been accepted in 1964 by the General Bathymetric Chart of the Oceans Advisory Committee. Some difference may be noted, however, between references 8, 8a, 12 and 12a, though all are based on the list accepted in 1964 by the Committee.

12a. List of definitions in Undersea Gazetteer No. 111, published in June 1969 by the United States Board on Geographic Names. It is assumed that this supersedes the previous list published by the Board, reference 12.

13. "Translations: terminology of submarine relief" (International Hydrographic Bureau, 1932). Several of the translations may not now be in use.
14. Glossary of definitions of undersea terms based on reference sources 1 to 12a above, compiled by J. C. Gillis of the Canadian Hydrographic Service.

Explanation of symbols

# indicates a definition given in this list which differs from that in the latest General Bathymetric Chart of the Oceans list, reference 8a above. The differences may be major or minor and they include cases where a synonym in the Chart of the Oceans list is being recommended for deletion.

* indicates differences in the use or non-use of synonyms compared with the source from which the definition was taken, particularly reference 8a, the General Bathymetric Chart of the Oceans list.

Θ indicates a rarely used term. In each case, the term is defined in the United States Board on Geographic Names Undersea Gazetteer but does not appear as a designation in the Gazetteer because no names of such features had been approved by the Board up to the date of publication.

\+ indicates a suggested new term not included in current international lists including that of the General Bathymetric Chart of the Oceans, reference 8a, and the United States Board on Geographic Names Undersea Gazetteer, reference 12a.

RECOMMENDED DEFINITIONS FOR CONSIDERATION BY THE SUB-COMMITTEE ON UNDERSEA FEATURES

	Term	*Proposed definition or note*	*Reference*
	Abyssal gap	Not recommended. See *gap*.	D-23/9/71
#	*Abyssal plain*	Synonym for *plain*.	D-23/9/71
	Alee basin	Not recommended. Use *basin*.	D-23/9/71
	Alluvial apron	Not recommended.	D-23/9/71
	Apron	Not recommended. See *Archipelagic apron*.	D-23/9/71
#	*Arch*	Not recommended. This term is given as a synonym for *rise* in 8a and 12. Arch is used as a geological term, for example in "Boothia arch" in the Arctic.	D-23/9/71
Θ	*Archipelagic apron*	A gentle slope with a generally smooth surface on the sea floor, particularly found around groups of islands or seamounts. Another term for which an almost identical definition has been used is "continental rise", a similar type of feature found on the seaward side of a continental slope.	D-23/9/71 8, 8a, 12, 12a
#	*Bank*	An area of positive relief generally occurring on a continental (or Island) shelf.	D-23/9/71
#	*Basin*	A closed depression of the sea floor more or less equidimensional in form and of variable extent. The above is the definition in 8, 8a, 12 and 12a, with the word "closed" added. There is general agreement that the presence of a Sill is an important feature of a basin and this is the reason for the inclusion of the word "closed".	D-23/9/71
	Bench	Not recommended. See *terrace*.	D-23/9/71
	Borderland	Not recommended. See *continental borderland*.	D-23/9/71
	Borderland slope	Not recommended. Not used in any recent international list.	D-23/9/71
#	*Break*	Not recommended. See *shelf edge*.	D-23/9/71
	Cauldron	Not recommended. Seems to refer to a particular type of *basin*.	D-23/9/71
+	*Cap*	Not recommended as an undersea generic term. It is used in the name "Flemish Cap" but the reason is lost in history. It has been suggested that, when the Flemish sailors reached it on their return voyages, they may have said they had set their caps for	

	Term	Proposed definition or note	Reference
		home. The feature is regarded as part of the continental shelf. If used elsewhere, the term might apply to the top of an elevation as distinguished from the entire elevation.	
#	*Canyon*	A relatively narrow, deep depression with steep sides, the bottom of which has a continuous slope.	D-23/9/71
	Chain	Not recommended. See *seamount chain.*	D-23/9/71
#	*Channel*	Not recommended. See *trough.*	D-23/9/71
	Cone	Not recommended. Not a synonym for "fan", as apparently indicated in one list, although 8a gives *cône* as the French form for "fan".	
Θ	*Continental borderland*	A region adjacent to a continent, normally occupied by or bordering a continental shelf, that is highly irregular with depths well in excess of those typical of a continental shelf.	8, 8a, 12, 12a
+	*Continental margin*	The whole edge of the continent, including some of the shoreline, right down to the deep ocean depths.	Suggested definition
Θ #	*Continental rise*	A gentle slope rising toward the foot of the continental slope. The definition in 8a, 12 and 12a is: a gentle slope with a generally smooth surface, rising toward the foot of the continental slope. Recent information indicates that some continental rises may be not at all smooth. Note our comment on the similarity of this feature to "archipelagic apron". It is possible the reference to a generally smooth surface should be deleted from that term also. Pending further information, it has been retained.	Suggested
Θ #	*Continental (or island) shelf*	A zone adjacent to a continent (or around an island) and extending from the low water-line to the depth at which there is usually a marked increase of slope to greater depth.	8, 8a, 12, 12a
#	*Continental (or island) slope*	The declivity seaward from a shelf edge to the beginning of a continental rise or to the point where there is a general reduction in slope. This definition is considered clearer than that in 8a, 12 and 12a: The declivity seaward from a shelf edge into greater depth.	Suggested
	Continental terrace	Not recommended. This term has been used for the zone around the continents extending from the low water-line to the base of the continental slope, but it is not in current lists. See *continental margin.*	
#	*Cordillera*	An entire mountain system including all the subordinate seamount groups, interior plateaus, and basins. Note: It is recommended that this term continues to be used only where it is already established. It is believed that all features fitting this description have already been discovered. No effort should be made to change names such as "Mid-Atlantic Ridge". There are four cordilleras named in the United States Board on Geographic Names Undersea Gazetteer: Albatross Cordillera, Alpha Cordillera, Indian Cordillera and Nansen Cordillera. A Canadian chart shows one of these as "Alpha Ridge" and it is sometimes known as "Alpha Rise".	R-30/11/71
	Crater	Not recommended. Use *basin.*	
	Crest	Not recommended. Probably would refer to the top of a ridge or possibly of a seamount.	
	Deep	Not recommended. Use more definite term.	
	Deep sea channel	Not recommended. Use *trough.*	
	Deep sea cone	Not recommended. Use *fan.*	
	Deep sea fan	Not recommended except were already established; otherwise use *fan.*	
	Deep sea terrace	Not recommended. Use *terrace.*	
+	*Delta*	Deposits of sediment found in the mouth of a river, in the ocean or in a lake, which result in progradation of the shoreline.	R-30/11/71

	Term	Proposed definition or note	Reference
	Depression	Not recommended. Use more definite term.	
	Depth	Not recommended as an undersea term.	
+	*Dome*	A roughly symmetrical upfold, the beds dipping in all directions more or less equally from a point.	R-30/11/71
	Edge	Not recommended. Use *shelf edge*.	
	Escarpment (scarp)	An elongated and comparatively steep slope of the sea floor, separating flat or gently sloping areas. * "Sea scarp" is also used as a synonym in 8, 8a, and 12. Ref. 12a, the United States Board on Geographic Names Undersea Gazetteer, uses no synonyms whatever, for any term. A quick examination of the Gazetteer appeared to indicate that escarpment alone is used by the United States Board both as a name and as a designation.	8*, 8a*, 12*, 12a*
	Fan	A gently sloping, fan-shaped feature, normally located near the lower termination of a canyon. Fairbridge uses the term "deep sea fan" or "cone" (with *cône profond* as the French version), but "cone" is not given as a synonym in any other list in this study, including 8a which gives *cône* as the French term for fan. It had been listed as a synonym in the previous version of these proposed definitions, but Bedford says "cone" is definitely not synonymous with fan.	8a, 12a
#	*Fracture zone*	An extensive linear zone of irregular topography of the sea floor, presumably produced by displacement in the earth's crust, and usually characterized by large seamounts, steep-sided or asymmetrical ridges, troughs, or escarpments. Refs. 8a and 12 give: A linear extensive zone of unusually irregular topography of the sea floor, characterized by large seamounts, steep-sided or asymmetrical ridges, troughs, or escarpments.	Suggested
+	*Furrow*	A micro-relief feature, appearing as a long and narrow indentation of the sea floor, resulting from natural or artificial ploughing action. Note: The term "micro-relief" is used here to refer to features too small to show up in the contouring on most charts. Fairbridge (ref. 11) uses furrow for another type of feature, giving the definition: valley or canal-like incision of the shelf-edge, more or less normal to the latter.	R-30/11/71
	Gap	A break in a ridge or rise.	8, 8a, 9, 12
	Group	Not recommended. Use *seamount group*.	
#	*Gully*	A small valley. The definition in 8, 8a and 12 is: small valleys cut into soft sediments on the continental shelf or continental slope. It is suggested that gully would be an appropriate term wherever small valleys might occur. Gully is not listed in 12a.	Suggested
	Guyot	Synonym for *tablemount*. It is also given in 8a as the French form of tablemount. Fairbridge says it was named by Hess after Arnold Guyot.	
#	*Hill*	Not recommended, although it is given in 8, 8a and 12 as a synonym for "knoll".	
	Hole	Not recommended.	
	Island shelf	See definition coupled with *continental shelf*.	
	Island slope	See definition coupled with *continental slope*.	
#	*Knoll*	A submerged elevation of rounded shape rising from the sea floor. The internationally accepted definition is: an elevation rising less than 500 fathoms or 1,000 metres from the sea floor and of limited extent across the summit. * The synonym "hill", is added in 8, 8a and 12. It seems redundant. Note: The recommended definition gives no reference to size. The distinction between "seamount" and	R-30/11/71 8*, 8a*, 12

	Term	Proposed definition or note	Reference
		knoll is that a seamount is usually of volcanic origin and a knoll is not.	
⊕ #	*Levee*	An embankment bordering one or both sides of a canyon or valley. The definition in 8a and 12 is: An embankment bordering the sides of a canyon or channel. This seems to suggest that it must be situated on both sides, which need not be the case. The definition in 12a reads: an embankment bordering one or both sides of a seachannel or the low-gradient seaward part of a canyon or valley.	7 (amended)
+	*Median rift*	The central cleft of the mid-oceanic ridge system.	R-30/11/71
	Mid-ocean canyon	Not recommended except where already established. Otherwise use *trough*.	
#	*Moat*	An annular depression that may not be continuous, located at the base of an isolated elevation. The established definition is: an annular depression that may not be continuous, located at the base of many seamounts or islands. * The synonym "sea-moat" is used in 8, 8a, and 12, but not in the other sources.	Suggested 5, 6b, 7, 8a*, 8*, 12*, 12a
+	*Moraine*	A ridge-like accumulation of debris built along the margin of a glacier.	Suggested
	Oceanic bank	Not recommended. Use *bank*.	R-30/11/71
+	*Pass*	A low part between elevations on a ridge or between seamounts.	D-23/9/71
# +	*Peak*	A prominent elevation on a Ridge. Peak is not recommended as a synonym for "seamount", as given in 8, 8a and 12.	Suggested
	Pinnacle	A sharp-pointed rock or Reef in shallow water. This term is sometimes used on nautical charts for this type of feature. It is considered useful.	Suggested
#	*Plain (abyssal plain)*	A flat, gently sloping or nearly level region of the sea floor. Refs. 8, 8a and 12 do not give abyssal plain as a synonym. They give the following for plain: a flat, gently sloping or nearly level region of the sea floor (for example, abyssal plain). The term abyssal plain has been widely used and appears on at least one recent Canadian chart. It is suggested it be retained as a synonym.	5, 6b, 7, 12a
#	*Plateau*	An extensive flat or nearly flat area usually measured in tens of kilometres, which is at a relatively high level, dropping off abruptly on one or more sides to much lower topography. The definition in 8a is: a comparatively flat-topped elevation of the sea floor of considerable extent across the summit and usually rising more than 100 fathoms or 200 metres on all sides.	R-30/11/71
	Province	A region composed of a group of similar physiographic features whose characteristics are markedly in contrast with surrounding areas. This term is rarely used in marine cartography. It appears only once as a designation in the United States Board on Geographic Names Undersea Gazetteer.	8, 8a, 12
	Range	Not recommended. See *seamount chain*.	
#	*Reef*	An off-shore hazard to navigation composed of rock or coral. The definition in 7, 8, 8a and 12 is: an off-shore consolidated rock hazard to navigation with a least depth of 10 fathoms or 20 metres or less.	Suggested
#	*Ridge*	A long, narrow elevation of the sea floor with steep sides. The established definition adds the words "and irregular topography".	Suggested
+	*Rift*	Synonym for *median rift*.	R-30/11/71
+	*Rift valley*	Synonym for *median rift*.	R-30/11/71

	Term	Proposed definition or note	Reference
	Rise	A long, broad elevation that rises gently and generally smoothly from the sea floor. * Both "arch" and "swell" are listed as synonyms for rise in 8a and 12. The United States Board on Geographic Names Gazetteer does not define any synonyms at all. For a name such as "Truxton Swell", it shows "rise" in the designation column. See comments under *arch* and *swell*, neither of which is recommended as a synonym.	5, 6b, 7, 8*, 12*, 12a, 8a*
#	*Saddle*	A pass that slopes downward in both directions from an elevated point somewhere near its centre.	D-23/9/71
	Scarp	Synonym for *escarpment*.	
#	*Seachannel*	Not recommended. See *trough*. This is a synonym for "channel" which was "not recommended" in the meeting of the Sub-Committee on 23 September 1971.	
	Seahigh	Not recommended. Use more definite term.	
	Seaknoll	Not recommended. Use *knoll*.	
#	*Sea-moat*	Not recommended, although it is used as a synonym for "moat" in 8, 8a and 12. It is not used in several other sources, which give "moat" alone.	
#	*Seamount*	An isolated or comparatively isolated elevation of the sea floor, of limited extent across the summit and presumably of volcanic origin. The definition in 8, 8a and 12 reads: an isolated or comparatively isolated elevation rising 1,000 metres from the sea floor, and of limited extent across the summit. "Peak" is given as a synonym for seamount in 8, 8a and 12. It is now being recommended that "peak" be defined as a separate feature.	R-30/11/71
#	*Seamount chain*	Several seamounts in a line. The definition in 8, 8a, 12 and 12a is: several seamounts in a line with bases separated by a relatively flat sea floor. The recommended definition is intended to apply to features formerly designated as either "seamount chain" or "seamount range".	R-30/11/71
	Seamount group	Several closely spaced seamounts not in a line.	R-30/11/71 8, 8a, 12, 12a
#	*Seamount range*	Not recommended. Use *seamount chain*. The definition in 8, 8a, 12 and 12a is: several seamounts having connected bases and aligned along a ridge or rise. There are nine seamount ranges listed in the United States Board on Geographic Names Undersea Gazetteer.	R-30/11/71
+	*Seamounts*	A group of seamounts with or without definite alignment. Note: It is recommended that seamounts be used as an interim generic subject to change on the basis of more complete information. An example is "Newfoundland Seamounts", approved on Chart 802. The United States Board on Geographic Names has now accepted the term seamounts, both as a generic and as a designation (letter from M.F. Burrill to G.F. Delaney, 5 May 1971).	R-30/11/71
	Seapeak	Not recommended. Use *seamount*.	
#	*Sea scarp*	Not recommended, although it is listed as a synonym for "escarpment" in 8, 8a and 12. "Scarp" is also listed as a synonym in 8a and 12. "Escarpment" alone is listed in 5, 6b, 7 and 12a.	
+	*Shelf*	Synonymous with *continental shelf*, but can be prefixed to indicate a distinguishable portion of a continental shelf with a geographical name. Examples are "Scotian Shelf" and "Newfoundland Shelf", both widely recognized but not yet officially approved, and "Northeast Newfoundland Shelf", approved on Chart 802.	Suggested (Bedford, p. 5)

	Term	Proposed definition or note	Reference
	Shelf break	Not recommended. Use *shelf edge* (see comment below).	
Θ #	*Shelf edge*	The line along which there is a marked increase of slope at the outer margin of a continental (or island) shelf. * "Shelf break" is given as a synonym in 8, 8a, and 12. Shelf edge is given alone in 12a (in which it is indicated that the term is rarely used as a designation) and in 1, 2, 5, 6b and 7, in which variant definitions are given.	8*, 8a*, 12, 12a
	Shelf terrace	Not recommended. See *terrace*.	
#	*Shoal*	An off-shore hazard to navigation composed of unconsolidated material. The established definition in 7, 8, 8a, 12 and 12a is: an off-shore hazard to navigation with a least depth of 10 fathoms or 20 metres or less, composed of unconsolidated material.	Suggested contraction
Θ #	*Sill*	The low part of a ridge or rise separating basins from one another or from the adjacent sea floor. The definition in 8, 8a, 12 and 12a reads: the low part of the ridge or rise separating ocean basins from one another or from the adjacent sea floor. The word "ocean" seems superfluous.	D-23/9/71
	Sill depth	Not recommended as a generic, although the term is useful. It refers to the greatest depth over a sill.	
+	*Slope*	Synonymous with *continental slope*, but can be prefixed to indicate a distinguishable portion of a continental slope with a geographical name.	Suggested (Bedford, p. 5)
	Spur	A subordinate elevation, ridge or rise, projecting outwards from a larger feature.	8, 8a, 12, 12a
#	*Strath*	Not recommended. See *trough*. Partly to meet Canadian objections to the term, the United States Board is recommending that strath be deleted. They plan to modify the definition of "valley" by dropping the criterion of a continuous slope to make it accommodate features they have previously designated as Straths. The important distinguishing criterion of a continuous gradient for "valley" was retained at the meeting of the Canadian Sub-Committee on 23 September 1971, and "channel" was dropped. The definition approved for "trough" is believed adequate to cover known features for which strath has been used. Strath has never been approved by the Canadian Sub-Committee.	
#	*Submarine canyon*	Not recommended, although given as a synonym for "canyon" in 8, 8a and 12.	
#	*Submarine valley*	Not recommended, although given as a synonym for "valley" in 8, 8a and 12.	
	Summit height	Not recommended. Defined by Fairbridge as the highest elevation on a ridge or rise.	
#	*Swell*	Not recommended, although given as a synonym for "rise" in 8, 8a, 12. Bedford does not agree it is a synonym for "rise" because of the many diverse meanings that have been applied to it. They recommend it should not be used.	
	Tableknoll	Not recommended. Probably not required. Not in current international lists.	
	Tablemount (guyot)	A seamount having a comparatively smooth flat top.	8, 8a, 12, 12a*
#	*Terrace*	A relatively flat horizontal or gently inclined surface, sometimes long and narrow, bounded by a steep ascending slope on one side and by a steeper descending slope on the opposite side. This term is not included in 8a but it is defined in 7 and 12a as: a bench-like structure bordering an undersea feature.	Suggested
	Tongue	Not recommended. See *spur*. A note in 12a indicates that tongue is used once in the	

	Term	Proposed definition or note	Reference
		Undersea Gazetteer, where it designates "catoche tongue", a lateral protrusion from an island slope. The term has not been incorporated in the United States Board on Geographic Names list of standard terms and designations. It is not in 8a nor in the other lists of definitions consulted.	
	Trench	A long, narrow and deep depression of the sea floor, with relatively steep sides.	D-23/9/71 8, 8a, 9, 10, 12, 12a
#	*Trough*	A long depression of the sea floor, wider and shallower than a "trench", which may or may not be open-ended. The definition in 8, 8a, 9, 10, 12 and 12a is: a long depression of the sea floor normally wider and shallower than a trench.	D-23/9/71
#	*Valley*	A relatively shallow, wide depression with gentle slopes, the bottom of which has a continuous gradient. Please see comments under *strath.*	D-23/9/71
	Zone	Not recommended. Use *fracture zone.*	

THE APPLICATION OF NAMES TO UNDERSEA FEATURES BEYOND THE SOVEREIGNTY OF MARITIME NATIONS*

Report presented by the Union of Soviet Socialist Republics

Analysis has shown that in many cases the same undersea features are named in a different way on the charts of different countries. Frequently it is not only the specific names of features that differ but also their generic terms, i.e. the terms defining the type of undersea formation to which the features belong.

Ambiguity in the definition of generic terms is attributable mainly to the absence of a common approach to the classification of the sea bottom in world geographical science. Inaccurate definitions of generic terms, discrepancies between the definitions of identical generic terms accepted in different countries, and the premature assignment of generic terms without adequate identification of features also bear a grave responsibility for aggravating the problem. Even the changing of a generic term with the intention of selecting a more accurate one results sometimes not in general recognition of a new term, but in inconsistency in the application of generic terms. Finally, different generic terms may be assigned in various countries to the same feature when the feature in fact possesses no distinctive generic characters.

Differences in specific names of features are attributable to the aspiration of states to claim priority in the study of the oceans or to preserve a deep-rooted and customary name, or to merely formal reasons connected with the transferring of names from one language into another (which frequently results in an alteration in the structure of a name, as when what was originally a generic term becomes included in a specific name).

Along with the sources of ambiguity in the generic terms and specific names assigned to undersea features, there are factors which contribute to the introduction of uniformity in the names of features. The main factor is the objective nature of the conclusions of world geographical science, unifying the terminology accepted in various countries.

History has also played a certain role, as charts used to be published by only a few countries, with other states either using foreign charts or reproducing them, retaining usually generic terms and specific names of features.

Finally, the standardization of the names of undersea features is to a considerable extent promoted by international co-operation in the study of the oceans as well as in the publication of charts.

At present the development of techniques in the study of the oceans and the identification of a great number of new undersea features call for the establishment of general principles governing the allocation of generic terms and specific names to newly discovered undersea features, their registration, and the distribution of information on the names assigned. These principles, which could be determined by concluding an appropriate international convention, should be binding on all States.

Practical work on the regulation of the naming of undersea features beyond the territorial waters of individual countries could be best of all carried out by an *ad hoc* agency attached to the United Nations. The decisions of that agency could be binding on all Member States of the United Nations, and a wide representation of countries in it could enable it to define generic terms of features with very great accuracy. However, should any difficulties arise in establishing such an agency under United Nations auspices, its powers could be entrusted to the most representative interna-

* The original text of this report was contained in document E/CONF.61/L.78.

tional organization concerned with undersea features, viz., the International Hydrographic Organization.

In our opinion this organization is ready to fulfil the functions of an international legislative body for the co-ordination of generic terms and specific names of undersea features. The advisory committee of this organization (the General Bathymetric Chart of the Oceans Committee) has already carried out considerable work on the standardization of the names of undersea features. The international agency on the standardization of names of undersea features should be guided in its work by two principal documents: the paper determining the main principles for defining generic terms of undersea features, and the paper determining the principles for assigning specific names to undersea features.

Specific names should be assigned only to those undersea features of the oceans which have been sufficiently examined, i.e. those whose limits, general nature and greatest depth (or the area of the extension of such depths) have been identified, and whose co-ordinates can be given.

It is desirable to abstain from assigning specific names only on the basis of individual soundings or lines of soundings since this may result in an error even in the identification of the type of bottom feature.

It should be considered reasonable to attach to the recommendations on the assignment of names for newly discovered and identified bottom features the following documents:

Proposals, explaining reasons, for the assignment of a specific name;

An explanatory note, briefly describing the newly discovered and identified feature, the methods of geographical identification and the accuracy of the work carried out; and

A plotting sheet showing characteristic depths and curves, indicating fairly completely the nature of the bottom, and covering both the newly discovered and identified undersea feature and the areas surrounding it and contributing to the determination of the limits of the new feature.

REPORT OF THE WORKING GROUP ON THE NAMES OF EXTRATERRESTRIAL TOPOGRAPHIC FEATURES*

Introduction

In accordance with the recommendations of the United Nations Secretariat, the problem of names of extraterrestrial topographic features was included as a special item on the agenda of the second session of the *Ad Hoc* Group of Experts on Geographical Names held in New York from 10 to 20 March 1970. As was pointed out in the report of the second session, the Group of Experts "first considered whether its competence covered the consideration of extraterrestrial topographic nomenclature. The proposition was advanced that such names are not geographical and that they fall more properly within the field of the astronomer, but the majority opinion was that changing technology in space matters was placing it within the purview of both the cartographer and the geographer."[1]

A special working group, composed of M. F. Burrill (United States of America), A. M. Komkov (USSR) and H. A. G. Lewis (United Kingdom of Great Britain and Northern Ireland), was formed for the further study of the problem. A. M. Komkov was nominated as Chairman of the working group, and in the period between the second and the third sessions of the Group of Experts he prepared, on the basis of a preliminary examination of the material, a report on the names of extraterrestrial topographic features.[2]

The paper was discussed at the meeting of the working group on 5 February 1971, and was adopted as background material. The members of the working group agreed that the nomenclature system applied to major lunar formations approved by the International Astronomical Union (IAU) should be maintained as the standard, but it was pointed out that the system had proved to be inadequate for designating numerous small topographic features, the mapping of which had lately become possible owing to new means of space investigation.

The working group recommended continued study of the problem and the development of adequate systems for designating extraterrestrial topographic features, particularly systems based on the use of selenographic co-ordinates. The working group noted that such work should be carried out by astronomers, geodesists and cartographers, in conjunction with the United Nations *Ad Hoc* Group of Experts on Geographical Names. These recommendations became the basis of the final report of the working group for the 1972 London Conference, which was drafted by the Chairman.[3]

An exchange of information took place with the representatives of the International Astronomical Union immediately interested in the problem.[4] The data received

* The original text of this report, prepared by the three members of the working group, was contained in document E/CONF.61/L.41.

[1] Report of the *Ad Hoc* Group of Experts on Geographical Names on its second session from 10 to 20 March 1970 (ESA/RT/C/GN/I), p. 11.

[2] Third session of the *Ad Hoc* Group of Experts on Geographical Names, 2-12 February 1971, Information Paper No. 23.

[3] Report of the *Ad Hoc* Group of Experts on Geographical Names on its third session, April 1971 (ESA/RT/C/GN/2), annex Y, pp. 18-19.

[4] *A. Dollfus* (France), Convener of the Inter-Union Commission on Lunar Studies, President of IAU Commission 17 (The Moon) and member of the IAU Working Group on Lunar and Martian Nomenclature; *B. Yu. Levin* (USSR), Vice-President of IAU Commission 17 (The Moon) and member of the Working Group on Lunar Nomenclature; and *D. Menzel* (United States), Chairman of the Working Group on Lunar Nomenclature.

were used in the preparation of the present report. Since not all the participants in the Conference have previously confronted the problems involved in naming extraterrestrial features, a short historical survey is given below.

I

The present system for naming extraterrestrial features, including lunar surface formations, goes back to the middle of the seventeenth century. About 300 features on the moon's surface were first assigned names on the maps compiled and published by the astronomers Langrenus, Hevelius and Riccioli in the period 1645–1651. Terminology for larger formations of the lunar surface, based on their outward resemblance to the forms of terrestrial relief, such as continents, seas, gulfs, lakes, marshes, mountain ranges and craters, also first appeared in that period and has been preserved.

Terrestrial place names were borrowed for lunar mountain ranges: the Alps, the Appenines, the Caucasus and others. Lunar "seas" were assigned abstract symbolic names: "Mare Crisium", "Mare Tranquillitatis" and the like. Craters, the most numerous group of lunar surface formations, were assigned names commemorating at first outstanding astronomers and later on other scientists from antiquity up to the present. The number of features requiring a designation on maps and in catalogues constantly increased in the course of time. The largest of them continued to be assigned proper names, but for the designation of smaller features a system of letter indices added to the known names was brought into use at the end of the eighteenth century.

The tradition of writing lunar names in Latin has been preserved since mediaeval times.

II

In view of the progress of scientific investigation, and the danger of naming the same extraterrestrial feature independently on maps and charts and in catalogues published in different countries, the International Astronomical Union displayed useful initiative in accepting responsibility for the international standardization of extraterrestrial nomenclature. The fifth General Assembly of the Union (Cambridge, Massachusetts, 1932) approved for the first time a list of names of 672 major formations on the visible side of the moon.[5] In the following years the list was supplemented with only a few proper names of large features, but it was substantially enlarged to include a great number of relatively small features designated by additional letter-indices attached to the named large features.

Photographs of the far side of the moon, taken first by the Soviet automatic station Luna 3 in 1959 and after that by Zond 3 and the American spacecraft Orbiter, have opened a new chapter in exploration of the moon. New features became known, and it was necessary to assign them names. This was first done in the atlas of the far side of the moon compiled in the USSR, and the terminology was approved by the Eleventh General Assembly of the International Astronomical Union (held at Berkeley, California, in 1961). The Assembly also reaffirmed its approval of previous rules, with several additions, for designating lunar surface features.[6]

In accordance with these rules the Working Group on Lunar Nomenclature of International Astronomical Union Commission 17, formed in 1967 with the participation of national organizations, prepared a list of personal names for 513 craters on the far side of the moon. The list was approved, with a few corrections, at the Fourteenth General Assembly of the Union, and was published in 1971 in Space Scientific Review.[7]

Thus, the names of about 1,200 of the most prominent surface features on the visible and invisible sides of the moon have now been established in conformity with the rules adopted by the International Astronomical Union. Besides these, several thousands of minor topographic features have been designated on published maps with letter-indices attaching them to the names of major features.

III

International Astronomical Union Commission 16 (Physical Study of the Planets) is responsible for the naming of the topographic features of various planets—especially Mars, because, apart from those on the moon, the greatest number of topographic formations needing designations have been identified on the surface of Mars.

The Tenth General Assembly of the International Astronomical Union (Moscow, 1958) revised the Martian nomenclature system current at that time and, following the "Principles of guidelines"[8] worked out by the subcommission on Martian nomenclature, approved a list containing 125 names of major formations on Mars. According to these principles, such formations "were designated each by a name drawn from mythology, in accordance with the former classical system"; and the use of planetographic co-ordinates to designate minor features was recommended.

A great increase in the amount of Martian data during recent years, resulting from the use of research spacecraft, led to the necessity of revising the "Principles of guidelines" adopted in 1958. During the Fourteenth General Assembly (Brighton, 1970), Commission 16 adopted new proposals drawn up by the sub-commission on Martian nomenclature. According to these proposals, "the hundred or so largest and most prominent craters on Mars are to receive names of deceased persons whose work had relation to the planet Mars".[9] The names adopted in 1958, it was recommended, should be used as names of provinces or sub-provinces, abbreviated to

[5] M.A. Blagg and K. Müller, *Named Lunar Formations* (London, 1935).

[6] *Transactions of the International Astronomical Union*, vol. 11B (London and New York, 1962) p. 266.

[7] *Space Scientific Review*, N 2 (1971), pp. 136-186.

[8] *Transactions of the IAU*, vol. 10 (Moscow, 1960), pp. 259-263.

[9] *Ibid.*, vol. 14B (London, 1971), p. 129.

four-letter or two-letter symbols; similarly, three-letter abbreviations should be established for constellations.

A working group was appointed, under the chairmanship of Professor de Vaucouleurs, charged with the following tasks, to be completed before the next General Assembly of the International Astronomical Union in 1973: (*a*) to define substantially the province boundaries; (*b*) to elaborate the principles for naming topographic features in the regions explored with the help of spacecraft; and (*c*) to propose appropriate names for certain prominent Martian topographic features.

It is evident that the system for designating Martian topographic features is still in the process of exploration and formation, and is progressing without reference to the development of the lunar nomenclature.

On Venus, Mercury and the other planets, science has not yet accumulated sufficient data for nominating their topographic features. But in the next five or ten years such data will undoubtedly be obtained; and the problem of designating the surface features of distant planets will also demand solution.

IV

The rules adopted by the International Astronomical Union, and the systems for designating extraterrestrial topographic features based on them, in spite of some defects, have won recognition and been used in many countries. Their application proved their value, and gave rise to no difficulties in the compiling and utilization of extraterrestrial maps, charts and catalogues as long as place names were only required for a few very prominent features.

However, the situation has substantially changed. Outstanding achievements in space studies now permit the production of large-scale maps showing numerous topographic details. Especially in the mapping of the moon, the principles and procedures formerly applied by the Union for establishing names or other designations for extraterrestrial topographic features prove to be inefficient. Difficulties arise not only in large-scale mapping but also in drawing maps on the scale 1:1,000,000. For each feature having a proper name, there are several dozen rather large nameless features. According to the data presented by A.A. Furstein and K.B. Shingareya (scientists connected with the Institute of Space Research of the USSR Academy of Sciences), even on the visible side of the moon, about 300 craters with a diameter of 50 kilometres and over have no names at all.

The system adopted by the International Astronomical Union of additional letter-indices was meant to provide the possiblity of designating all the features of the lunar surface down to the smallest detail; but in practical applications the system has proved to be limited, since it lacks the necessary strictness and unambiguousness and supplies designations for minor features that are too complicated and bulky. It is not coincidental that the authors of many maps, charts and atlases do not apply it: for example, the authors of the well-known *Photographic Lunar Atlas* (Chicago, 1960).

Critical evaluations of the currently applied systems for designating lunar formations have been expressed by many authors, in particular by H. Kenny, C. Borkowski and D.W.G. Arthur.[10]

V

The necessity of processing a large amount of lunar information and of drawing lunar maps on ever larger scales obliges those facing these problems to devise more adequate systems for designating topographic features.

One such system has been submitted to the International Astronomical Union for consideration by A.A. Gurstein and K.B. Shingareva.[11] It may be called the "block-numerical" system, and it is recommended by the authors for the designation of craters only.

This system works as follows. The representation of the lunar surface is divided by meridians and parallels into parcels (blocks) in such a way that no less than one named crater falls within the limits of each block. If there are several craters in a block, the one situated in the centre gives its name to the block. The craters are divided into numbered classes (according to their dimensions) and those which fall into a block are indicated with corresponding numerical indices conveying some additional information beyond that provided by the IAU system of letter-designations.

An original system, "Lunese I", described as a microlanguage for labelling topographic features of the lunar surface, has been elaborated by Casimir Borkowski (Department of Computer Science, Graduate School of Library and Information Sciences, The Knowledge Availability Systems Center, University of Pittsburgh). The system is based on the transfer of the numerical value of co-ordinates of named features into an artificial language form in accordance with a special code. According to this system the names of lunar surface features appear as chains of syllables, every one of which corresponds to a digit of the co-ordinates (latitude and longitude) of the feature. The transfer of the feature designations from numerical (co-ordinate) form into artificial language form and vice versa may be carried out with the help of electronic computers and, in the author's opinion, it will allow for automatic processing and retrieval of lunar information.

VI

Simultaneously with their search for new ways and methods of designating extraterrestrial topographic features, the countries carring out large-scale mapping of the moon continue using either the International Astro-

[10] H. Kenny, "Place names on the moon: report", *Names*, vol. 12, No. 2 (1964); C. Borkowski, "Syntax and semantics of Lunese I, a microlanguage for labelling topographical features of the lunar surface", *Proceedings of the Tenth International Congress of Onomastic Science*, vol. 2 (Vienna, 1969); D.W.G. Arthur and A.P. Agniery, "The system of lunar craters, quadrant I", *Communications of the Lunar and Planetary Laboratory*, vol. 2, No. 30 (University of Arizona, 1963).

[11] A.A. Gurstein, K.B. Shingareva, "To the problem concerning the lunar crater designation system" (Materials of the IAU, 1970).

nomical Union "classical system" of names and letter-designations or the methods of terrestrial topography. It is of great interest to analyse the informal names given by the crew of Apollo 15 to 80 minor topographic features of the lunar surface in the region of strike of the spacecraft. The list of these names[12] demonstrates that the astronauts, having inspected the area on 26 June 1971, followed the example of surveyors mapping a monotonous uninhabited desert territory for the first time.

Without evaluating these names, some of which are more and others less felicitous, it should be pointed out that the direct transfer of a method of naming terrestrial topographic features to extraterrestrial ones, especially when mapping large areas of lunar surface, can hardly have a satisfactory outcome, as the conditions of formation of terrestrial and extraterrestrial features are quite different.

Out of a great number of natural phenomena on the earth connected with the life and activity of people and their surroundings (giving rise to an infinite variety of toponyms), only a few can be reflected in extraterrestrial feature-names (or "cosmonyms"). Therefore the choice of names acceptable for surface topographic features of the moon or Mars still remains limited. The possibilities of designating extraterrestrial topographic features with the help of planetographic co-ordinates are also limited: the accuracy with which the co-ordinates can be determined, even on the moon, is lower than is necessary for representing smaller features on a large-scale map.

VII

The necessity for consolidating separate efforts in a comprehensive study of the problem of designating extraterrestrial topographic features, and for the development of a co-ordinated system for internatonal use, has become evident. Such a system should meet the following general requirements: it should not violate the historically traditional International Astronomical Union nomenclature for the most prominent formations; it should be based on general principles applicable to the designation of not only lunar surface features but also those of Mars and other planets; and it should be applicable to the designaton of not only large features but also small ones.

Developing such a system is a complicated problem which has scientific and technical, not to mention legal, aspects. The former are connected with the necessity of studying and developing scientific principles and technical rules regulating the designation of different kinds and categories of extraterrestrial topographic features; the latter, with the necessity of establishing international procedures for registration, consideration and approval of the designations proposed, as well as for the dissemination of information about approved designations recommended for international use.

[12] "Informal names for surface features in the Apollo 15 area" (Aeronautical Chart and Information Center, St. Louis, 4 October 1971).

VIII

The programme of research and development of scientific principles and technical rules for designating extraterrestrial topographic features should include the study and determinaton of the following main points:

(*a*) The general characteristics and peculiarities of the surface features of different planets;

(*b*) The kinds and categories of topographic features to be designated on maps, on charts and in catalogues, and their morphological and morphometrical characteristics;

(*c*) Possible means of designation of topographic features—generic terms, specific names (including the ones borrowed from terrestrial features such as memorial, descriptive, conventional and symbolic names), alphabetical or numerical indices, co-ordinates and others;

(*d*) Rules determining which means of designation should be applied for certain kinds and categories of features and in what cases; and

(*e*) Rules for the original spelling of names, and methods of rendering them from one language or writing system into others.

While working out problems of designating extraterrestrial topographic features in their legal aspect it is necessary to determine the following:

(*a*) What national or international organizations or private persons may recommend names or other designations;

(*b*) What data facilitating the identification of the feature and substantiating the proposal should be supplied;

(*c*) What representative international body should register, consider, and co-ordinate recommended names with national organizations, and approve them as compulsory for international use;

(*d*) Whether, taking into consideration the unceasing study and mapping of the moon, Mars and the other planets, this body should be periodical or permanent; and

(*e*) Who should disseminate the information about adopted decisions and by what means.

The points listed in this section do not cover all possible questions to be studied, and any additions and corrections are welcome.

IX

In conclusion it is necessary to dwell on ways of organizing international collaboration in this matter. It seems expedient that the International Astronomical Union with its working groups on lunar and Martian nomenclature should remain as the leading organization in studying scientific and technical problems.

At present one representative from the International Geographical Union (IGU) and one from the International Union of Geological Sciences (IUGS) are to be introduced into the Working Group on Lunar Nomenclature, following a recommendation of the Inter-

national Commission on Lunar Studies formed by the International Council of Scientific Unions (ICSU). This is believed to be insufficient, as not only astronomers but representatives of other sciences too—geodesists, geophysicists, geomorphologists, cartographers, photogrammetrists and others—take part in studying and mapping the moon and other planets. It would be expedient to enlarge the circle of experts to include in the working groups on lunar and Martian nomenclature those who deal immediately with map production.

As the International Astronomical Union is an international scientific organization with no permanent scientific staff, the appropriate national organizations should probably be charged with working out the specific problems connected with scientific and technical experiments and producing tentative maps; the results of such work should be subsequently discussed at the meetings of appropriate commissions of the Union or at international symposia.

The most competent and representative body for pursuing the solution of the legal aspects of the problem is the United Nations. The names of many kinds of features, terrestrial, marine or extraterrestrial, that are situated beyond the jurisdiction of individual countries can be approved only through an international intergovernmental organization functioning on the basis of a special international convention if such names are to come into common use in all countries.

THE NAMING OF EXTRATERRESTRIAL FEATURES*

Report presented by the International Astronomical Union

With the photographs of the far side of the moon, first by the USSR and then by the United States of America, the need for assigning identifying names to various lunar features became urgent. At the general assembly of the International Astronomical Union held in Prague in August 1967, a working group was established within Commission 17 (The Moon) for the purpose of establishing lunar nomenclature. The group consisted of A. Mikhailov of the USSR, M. Minnaert of the Netherlands, and Donald H. Menzel of the United States of America (Chairman). A. Dollfus of France, newly elected President of Commission 17, was also a member, *ex officio*, of the new working group.

A few names had already been assigned to far-side features and approved by the Union in 1961, at the general assembly held in Berkeley, California. These assignments were based on the Pioneer photographs taken by Soviet scientists. Features on the near side of the moon have traditionally been named after distinguished people, chiefly scientists, with a few named after terrestrial objects, such as the mountain ranges of the Alps and the Apennines.

The working group decided that the assignment of names should be as international as possible. To this end, as Chairman of the Group, I drafted a letter for the signature of Fred Seitz, President of the National Academy of Sciences of the United States of America, which was sent to all the recognized academies of science or equivalent organizations throughout the world. The letter requested suggestions for the names of lunar craters and other features. I specifically requested that each nation provide me with a list of its most distinguished deceased scientists for our consideration.

The response to this request was excellent. The data so furnished, together with our own studies of the scientific literature, provided us with a card catalogue of over 2,000 potential candidates.

The working group held a number of sessions, one in New York, several in Paris, and one in Moscow. A. Mikhailov was replaced as a member of the working group by B. Levin of the USSR.

As a first objective, we decided to assign approximately 500 or 600 names, so that the density of named craters would be approximately the same on the far side as on the near side.

The selection of these names was not an easy process. However, we finally arrived at a satisfactory list, for which we had prepared short identifying biographies.

There was considerable discussion over the way in which we would assign the names to the features. We seriously considered, for example, starting with names beginning with A near the north pole and distributing the alphabet systematically in strips of latitude ten or so degrees in width, moving from west to east towards the south pole. This procedure would have made names very easy to find, without a catalogue of latitudes and longitudes. Many people with whom we conferred, however, strongly objected. The cartographers, especially, thought that a large-scale map of the moon where most of the craters had names beginning with the same letter would not be artistic. We finally gave up the idea and decided on more or less random placement.

Another difficulty that we encountered was that a few cartographers objected to using names that conceivably might be confused orally. As a result, we assigned a crater to Neils Bohr but denied one to Max Born; H. A. Lorentz received a crater, whereas E. O. Lawrence did not; we denied one to Sir Ernest Rutherford because of a crater named Rutherfurd already on the moon's near side. And so on. There were other similar injustices. I have the feeling, from discussion with other cartographers, that this limitation was far too strict. Surely we could have put the conflicting names on, provided we separated them by some distance from the other crater of each pair. These are points that we shall wish to

* The original text of this report, prepared by Donald H. Menzel, Chairman of the Working Group on Lunar Nomenclature, International Astronomical Union, was contained in document E/CONF. 61/L.55.

reconsider, and on which we should certainly like to have the advice of other cartographers.

A related problem is presented by the pronunciations given to certain names by people speaking different languages. For example, the last name of Percival Lowell is pronounced, in German-speaking countries and in the USSR, as "Lovell", a pronunciation very different from the English or American one. Even so, we did assign craters to the American astronomer and also to Lovell, one of the American astronauts.

We divided the names into five groups, from group 1 for the most distinguished scientists down to group 5 for the least distinguished. Thus we were able to assign the largest craters to names in group 1, and so on down the line. To ensure the fairness of our choice, we used a computer to assign random numbers to the names. The Aeronautical Chart and Information Center of the United States Air Force had already prepared large-scale maps of the moon, on which craters were identified by numbers. Thus, with a few exceptions, we assigned names at random, irrespective of national origin, later identifying the crater by means of its latitude and longitude.

The two major exceptions were made in recognition of the space studies of the USSR and the United States of America. These were specially commemorated by "Mare Moscoviensis" and a large crater complex called "Apollo", both on the far side of the Moon. In these areas, smaller craters have been assigned to astronauts of the nations commemorated. A special crater was assigned to Gagarin, the first cosmonaut to achieve earth orbit. A few living astronauts and cosmonauts were similarly honoured, the only exceptions made to the traditional rule that an individual should be deceased before his installation on the moon.

We presented our list at the general assembly of the International Astronomical Union held in Brighton, England, in 1970. Apart from a number of minor objections, the list was unanimously approved, first by Commission 17 and later by the entire assembly. The objections that were raised related to the fact that we had questioned the reality of several features whose names had been assigned previously and approved at an earlier general assembly. We made corrections accordingly in the published list.

About two months after the general assembly, M. Minnaert, who had worked hard and actively on the working group, died. We therefore provisionally assigned the name of Minnaert to one of the larger craters that was found, in the final check, to be without a name. This name is included in the published list, even though it had not received the official sanction of the Union.

Our group recognizes that there are still many problems connected with lunar nomenclature. On the near side, smaller, satellite craters have generally been designated by the name of the major crater, followed by letters of the alphabet.

One of the major problems facing the working group, as it continues in its task, will be the development of methods for identifying and for naming smaller features. This is important for selenodesy, and the need for such methods will increase. A number of suggestions have been made, such as dividing the moon into tesserae bounded by specified meridians and parallels.

There are a number of other features, such as the lunar rilles, which are becoming more important for study. The United States National Aeronautics and Space Administration has specifically asked that these be classified according to their degree of sinuosity. The traditional method of naming a rille after its associated crater cannot be applied to the new class of rilles, since there often are no obvious craters with which we can associate the longer ones. A search of the record indicates that perhaps 50 or 60 rilles should be named and identified.

The various Apollo astronauts, in the course of their operational work, have often assigned provisional names to craters. These are for navigational purposes, identification, and so on. The working group, in consultation with officials of the United States National Aeronautics and Space Administration, must determine whether any of these should be kept, perhaps as mementoes of the successful Apollo operation.

There will be many other problems of extraterrestrial nomenclature in addition to those of the moon. Chief of these will be that presented by the planet Mars as a result of the various Mariner photographs, especially those taken by Mariner 9. These show details with a precision hundreds of times greater than can be achieved with any terrestrial telescope. And when the results have been tabulated, and maps have been prepared of the explored areas, it will undoubtedly be necessary to expand greatly the current system of Martian nomenclature. It has not been decided yet whether our working group should be assigned the task of naming Martian features. However, I am currently in touch with several of the individuals most involved in the Mariner programme.

There is still one additional area where some naming is desirable. Seven of Jupiter's satellites are not yet named—they are still designated by Roman numerals. Our working group has begun to study this question and may have some specific recommendations at a later date.

The opinion of those in the International Astronomical Union with whom I have discussed the question is that the United Nations special working group should be satisfied to delegate the problem of the naming of lunar and possibly other extraterrestrial features to the International Astronomical Union and its working group or groups. For its work on the naming of lunar features, this group should be enlarged to include someone from the International Union of Geodesy and Geophysics, and possibly other members or consultants. However, the total number of official members should be kept small, in the interest of efficiency.

We feel that a proliferation of working groups on extraterrestrial nomenclature would serve no useful purpose. Furthermore, I feel that the United Nations special working group should agree to accept the recommendations approved by the International Astronomical Union in this particular field. To divide the responsibility with other commissions, other nations, and other unions would only produce chaos.

Let me conclude with one final observation by the International Astronomical Union Working Group on Lunar Nomenclature. We have noticed a tendency on the part of popular writers and even, to a certain extent, among cartographers to provide literal translations of the official Latin designations of the various maria. This practice has led to such meaningless designations as "Sea of Moisture", "Ocean of Storms", "Sea of Rain", and so on. We feel that cartographers should encourage the use of official names wherever possible.

NAMES ON CELESTIAL BODIES AS TOPOGRAPHIC OBJECTS*

Report presented by Czechoslovakia

The standardization of the names of details of the surface features of the moon, Mars, Venus and other planets of the solar system, considered as topographic objects, is as important as that of the names on the earth.

Up to now celestial bodies have been given names by astronomers. Nowadays surveyors, geologists, geomorphologists, cartographers, topographers and other experts are also concerned in the investigation and mapping of the planets.

The number of newly discovered celestial bodies revealing topographical objects is continually increasing, creating a need for an ever greater number of appropriate names.

As a result of the stupendous rate at which research into space is now progressing, not only the International Astronomical Union (IAU), but also the United Nations terminological authorities represented in the groups of United Nations experts in geographical terminology, who have a great deal of experience in the formation and usage of geographical names on the earth, both face a very important task in the allocation of names to newly discovered celestial bodies as well.

Even though the methods by which terminology for earthly objects was developed cannot be fully applied to celestial bodies, co-operation between the United Nations Group of Experts on Geographical Names and the corresponding commission of the International Astronomical Union is necessary and useful. Only close co-operation between those two authorities can lead to the establishment of really good terminology for celestial topographic objects.

VIEWPOINT

The Czechoslovak delegation fully supports the suggestion of the USSR concerning the standardization of the names on celestial bodies as topographical objects, and is convinced that the commission headed by A. M. Komkov (USSR) will prove equal to the task. We are ready to take part in the challenging effort undertaken by the commission.

* The original text of this report was contained in document E/CONF.61/L.83.

CONTEMPORARY PROBLEMS OF SELENONYMY

Report presented by the United States of America*

In recent years an urgent need has arisen for the naming of lunar features. American and Soviet space probes have brought the moon into our "back yard" to be examined and analysed, and to have its surface formations identified by specific or specific and generic nomenclature.

At the present time, there are approximately 5,000 named features on the moon. This figure includes those letter features identified merely by the unimaginative expedient of adding letters to the name of the major physiographic unit in an area. Thus the smaller craters in the area of Sabine become "Sabine A", "Sabine B", and "Sabine C", and so on (see attached the section illustrated of the Ranger VIII Lunar Map).

A glance at the history of the naming of lunar features reveals the need for a uniform, internationally acceptable and self-sufficient system for deriving names for them.

As long ago as the seventeenth century, map-makers such as Jan Hevelius (1647) used the names of terrestrial continents, seas, and mountains to identify the larger plains, craters, ridges, mountains and other features on lunar maps. Thus, such names as "Alps", "Apennines" and "Carpathians" still survive on our maps of the moon today. Some map-makers, like van Langren, 1645, experimented with the naming of lunar features after deceased astronomers, scientists and other prominent personages. This proved to be more popular than the application of terrestrial names. As more powerful telescopes were built, astronomers were able to observe many additional configurations on the face of the moon and mappers soon depleted their reserve of deceased notables, turning to the use of names of living persons, often includng their own. Finally, they had to resort to the above-mentioned procedure of adding letters to the names.

A major step towards international acceptance of lunar feature names was taken in 1935 when the International Astronomical Union (IAU) approved the name

* The original text of this report, prepared by O. Waddell and C. Barsky, was contained in document E/CONF.61/L.107.

listing prepared by M. Blagg and K. Müller. This listing, published under the title *Named Lunar Formations*, with its subsequent revisions by the Union, has become a primary source for recent lunar nomenclature or "neo-selenonymy".

Since the first space vehicle eyed and photographed our satellite at close range, the problems of selenonymy have been compounded. So many additional features on the moon have become visible and require identification that neither the International Astronomical Union listing nor any other procedure at present used for naming lunar features will serve to satisfy the appetites of the map-maker or the selenographer. Soon names and letter-designations will be exhausted. The International Astronomical Union meetings are held only periodically, and consequently the assignment and approval of lunar nomenclature has proved to be too slow to keep pace with the mapping effort. Furthermore, as the different countries of the earth become the first to photograph particular regions of the lunar surface in detail, they tend to name the features they find there, and naturally do so in accordance with considerations of national character, interest and policy. This often results in outcries of non-acceptance from other nations.

In order to resolve these problems, a new system is required to provide instant assignment of lunar names. This system must in no way interfere with the historico-classical selenonymy that is already in use, nor must it hinder any future decisions by the International Astronomical Union. It must, further, lend itself to unerring international communication, and at the same time be easily adaptable to automatic data processing, which has become an integral part of the space age.

The system we propose will satisfy these conditions and allow for the automatic naming of even very small lunar features (for example, craters less than 100 feet in radius). This system eliminates duplication, carries no national connotations, is limitless in scope, and should obviate the necessity of obtaining international agreement on each individual reference. The new system would relieve those who are hard pressed in their search for new selenonymic identifications, and will eliminate the time, effort and expense that is now allotted to this activity.

The new system is based on the adoption of an internationally accepted system of lunar co-ordinates (the Selenographic Co-ordinate System, which appears on the section illustrated of the Ranger VIII Lunar Map), and the conversion of the co-ordinates in this system into phonetic units that will be used to construct lunar feature names.

Because in the Selenographic Co-ordinate System there is no east or west and the meridian identifications run through a full circle (from 0° to 360°) the conversion of the co-ordinates into phonetic units will reflect the longitude first. The selenographic latitude notation, which is more conventional (0° to 90° north and 0° to 90° south) follows. Thus, arranging the co-ordinates of Sabine B (on the Ranger VIII Lunar Map), to the nearest tenth of a minute, for conversion into phonetic units, the reading would be 22° 05.5′ N 01° 19.0′.

For purposes of naming, two six-digit units would be constructed. In the case of Sabine B, a zero would be added in front of the longitude reading, which will constitute the first unit, making it 022055—the three digits on the left representing degrees, the next two, minutes, and the sixth, tenths of a minute. The latitude reading will constitute the second unit. Again for Sabine B, it would stand as N01190, the first character (a letter) indicating the hemisphere, the next two, the degrees, the fourth and fifth, minutes, and the last one, tenths of a minute.

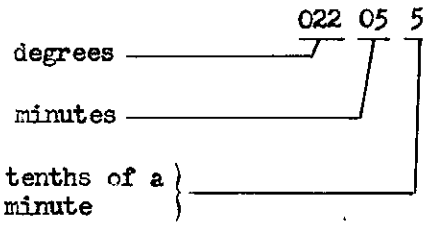
In order to convert the numerical designations to phonetic equivalents, the following table has been constructed:

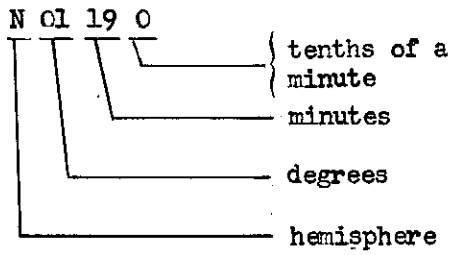
0	1	2	3	4	5	6	7	8	9	
B	C	D	F	G	H	J	K	L	M	first alphabet
N	P	Q	R	S	T	V	W	X	Z	second alphabet

The first alphabet will be used for converting numbers to phonetic equivalents, except in cases where two or more like numbers follow one another in the longitude or latitude readings, in which case the letter equivalents would alternate between the two alphabets for each succeeding like number. (For example, a reading of 333° 33.3′ would phoneticize as FRFRFR.)

The vowels A, E, I, O, U, and the semi-vowel Y are assigned no numerical values and are to be used to render the consonant-combinations pronounceable.

The full reading for Sabine B, therefore, is





A conversion to letters would make

0	2	2	0	5	5		N	0	1	1	9	0
B	D	Q	B	H	T		N	B	C	P	M	B

Note that the designations N and S indicating the hemispheres retain their phonetic values.

The insertion of vowels into the BDQBHT NBCPMB combination evolved for Sabine B would result in some reasonably pronounceable sequence such as

BADQUIBHAT-NOBCAMPMOB

We recognize, of course, that at first sight such a derivation might seem lengthy and "unterrestrial", yet habit will overcome such preliminary objections, as it always has in the course of man's progress.

Since the selection of vowels is to be related to the phonemics of a language, their sequence and position may not be predetermined. Nevertheless, the choice and succession of vowels within a particular selenonym should be made subject to the approval of a competent body that concerns itself with toponymics, such as the United States Board on Geographic Names. Such a routine would standardize the spelling of lunar names for use within a given language.

Our proposal is not intended to replace the present naming procedure but rather to supplement it. As more "desirable" names become available and are acted upon they may be included in the selenonymic repertory. Just as it has been man's age-old prerogative to rename features on the earth, so shall it remain on the moon.

If this system had been in use, a combination such as FEDACUB-NONFEDHALBY might have been renamed GRUITHUISEN, which indeed is the name borne by the feature today, and DIMFEDHAB-SOCJIGHUB would have become CRÜGER.

The advantages of this system far outweigh its phonic drawbacks.

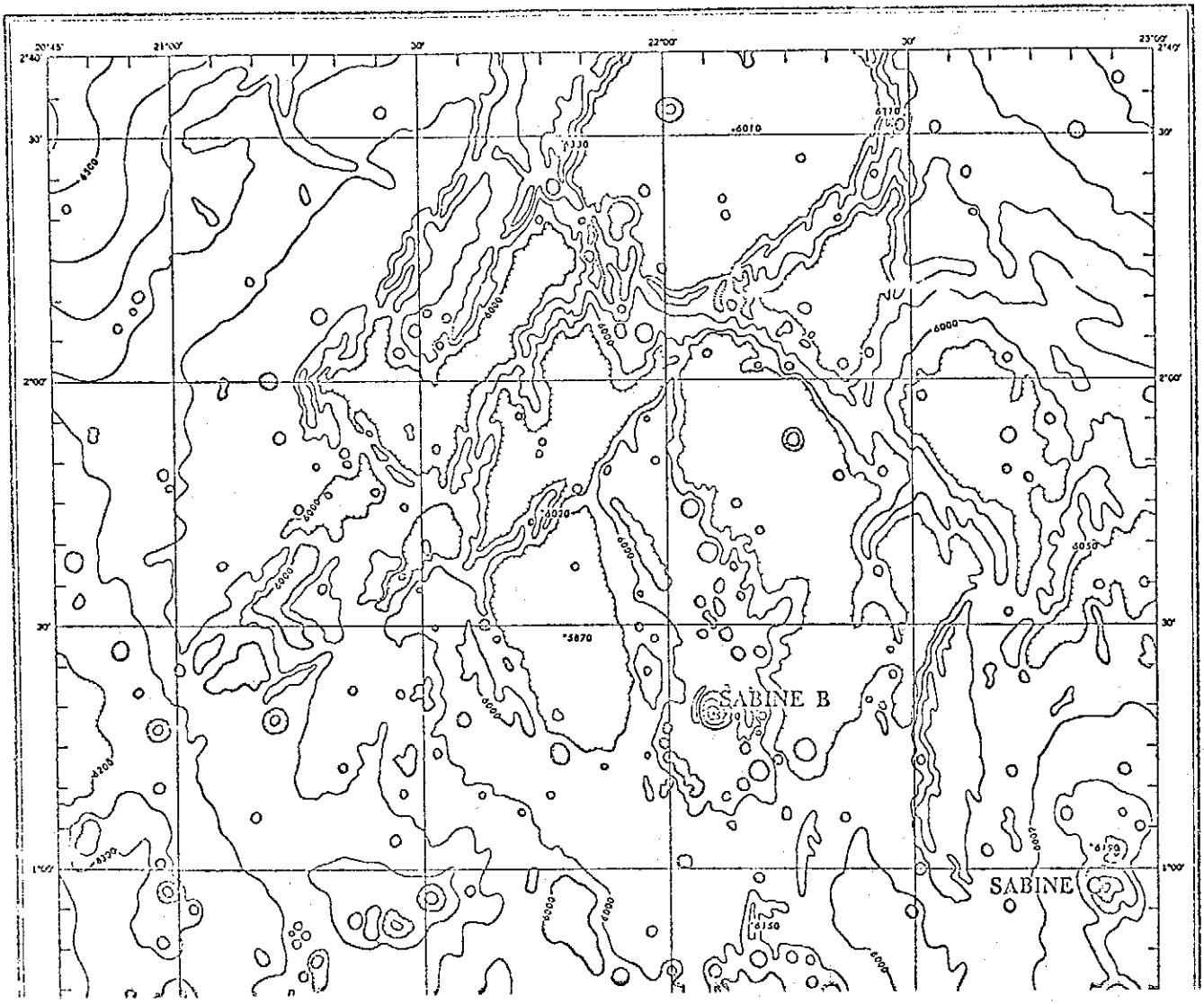
1. A computer or a human can automatically derive a name for a feature from its selenographic co-ordinates. Of course, the reverse is true as well. Given the name, either the human or the electronic element can locate the feature.

2. All lunar features may be named without duplication or exhaustion of possibilities.

3. There will be international uniformity in the derivation of selenonyms and, even though the selection of vowels may differ, this would have no effect upon any conversion back to co-ordinates, since vowels have no numerical values.

4. Indicating the location of lunar features in directives, articles and project reports would be considerably simplified since the name itself would provide the key. If additional identification is required on the type of feature, it would be an elementary matter to assign numerical values to the generics with the same alphanumeric code, using the first two consonants of the generic.

SABINE B



AGENDA ITEM 15

International co-operation

(*a*) Composition and functions of the United Nations Group of Experts on Geographical Names
(*b*) Exchange of information
(*c*) Regional meetings
(*d*) Technical assistance
(*e*) Bibliography

STATUS REPORT OF THE INTERNATIONAL HYDROGRAPHIC ORGANIZATION*

Presented by the International Hydrographic Organization

Since the First United Nations Conference on the Standardization of Geographical Names at Geneva, the following progress in the International Hydrographic Organization on the standardization of geographical names can be reported.

First, since the Geneva Conference our name has changed. The new Convention on the International Hydrographic Organization, which had been approved by the Ninth International Hydrographic Conference in May 1967, won the required number of formal ratifications and entered into force on 22 September 1970. From that date, what had been known as the International Hydrographic Bureau since 1921, almost 50 years before, now became the "International Hydrographic Organization", or IHO. But the designation "International Hydrographic Bureau", or IHB, was retained to identify the permanent headquarters organization in Monaco. Thus our 43 member States belong to the IHO, while the three directors and the staff constitute the IHB, a part of the IHO.

Since 1967 the Organization has also grown a little. We lost one member, Paraguay, but we have added three, for Ecuador rejoined our ranks and Colombia and Zaire have both become members. Moreover, it is a pleasure to report that Singapore needs now only to deposit its instrument of ratification to complete the last step of formalities in order to become the forty-fourth member.

There have been no changes made to those existing technical resolutions of the Organization on the subject of geographical names (some of which date back to the First International Hydrographic Conference of 1919) which were reported at Geneva. These were extracted and distributed at the 1967 Conference and they were then reproduced in volume 2 of the *Proceedings* of that Conference on pages 115-116.

It can be reported with pleasure, however, that some small but rather significant progress in the form of additional or closer compliance with those existing resolutions by some countries has occurred. During the past five years specifications were developed by a study commission of the Organization, and then adopted by our member States, for the first two series of international charts, at the scales 1:10,000,000 and 1:3,500,000, and it is particularly gratifying to note that the first few of these "INT" charts have just recently been published. A few words of background explanation may be appropriate for those who are neither hydrographers nor navigators—or maybe not even cartographers. The example of the charting of the Mediterranean Sea will serve to illustrate the problem. Until now a number of countries have felt they needed to have a nautical chart, available for their merchant marine and for their naval fleet, for the entire Mediterranean. So there existed a Spanish chart, a French chart, an Italian chart, a British chart, a German chart, a United States chart ... each one of which had been laboriously compiled in detail in the individual hydrographic office of the particular producing nation, but all of which were essentially very similar when completed, even as regards scale, and in many of the symbols, thanks to the standardization of symbols and abbreviations that the International Hydrographic Bureau has brought about in the past 50 years. But it was clear that it would be quite possible for just one nation to do the original compilation of such a chart and then, if reproduction materials were made available, other nations needing the same chart could use these to print their own versions—possibly making slight changes by shifting to national languages in the chart title block or adding place names for international features in the national language, if they felt it necessary or desirable. This is exactly what has now happened in these first two small-scale series, which are already well on the way to completion, and now a new study commission is to take up the next, admittedly more difficult, question

* The original text of this paper was contained in document E/CONF.61/L.103.

of possible international charts at medium and large scales.

But the point of great interest for the standardization of names is this. As a result of the existence at the present time of specifications for charts that are to be used internationally, the United States of America (to cite a specific example) had indeed previously used on its nautical charts of foreign areas geographical names for cities, places, islands and so on that were "in exact agreement with the most authoritative usage of the country having sovereignty", as specified in the International Hydrographic Organizaton technical resolution. But the United States of America (the Naval Oceanographic Office in this case) had used English versions for the names of the countries themselves on its charts. To comply with the specifications for the "INT" charts, however, it was brought to the attention of the United States that the name should appear as, for example "Republica Dominicana" on the chart and not as "Dominican Republic". Now we can expect that the Italian "INT" chart being produced to cover the western Mediterranean will use the name "France" instead of "Francia", and so on. Thus some progress is definitely being achieved.

An action taken by the Tenth International Hydrographic Conference in April 1972 should also be reported. There was a proposal by the United States of America that those nations which are responsible for compiling the General Bathymetric Chart of the Oceans (GEBCO) —the GEBCO plotting sheets, where, at a scale of 1:1,000,000, all known depths are plotted—should prepare a corresponding overlay for geographical names, using the official nomenclature for the Chart. Discussion of this proposal first covered the question of whether such an overlay should be required at a scale of 1:1,000,000, which is the scale of the plotting sheets, or only at a scale of 1:10,000,000, which is the scale at which the finished 24 sheets of the Chart are printed by the Institut géographique national in Paris for sale and distribution. Logic seemed to favour doing the name work at the larger scale; and it was clear that the Governments represented on the International Hydrographic Organization desired to have the International Hydrographic Bureau in Monaco serve as a repository for these compilations of names, and to shift the role of the General Bathymetric Chart of the Oceans Sub-Committee on Geographical Names to an advisory one rather than let it continue its task of acquiring names (this refers to the work done by Dr. Matsuzaki of Japan until 1969 and since then by Dr. Kawakami, the present Japanese Hydrographer; a publication last appeared in 1966).

The final action taken by the Tenth International Hydrographic Conference on this proposal for the overlays showing geographical names was to refer it to the International Hydrographic Bureau to be studied and then handled by correspondence as a detailed change to the General Bathymetric Chart of the Oceans regulations; so that it will first be considered and voted upon by those 19 nations (now including Turkey and the Philippines; they may soon also include Greece) who are the voluntary participants in the General Bathymetric Chart of the Oceans programme and who have accepted the responsibility for keeping up to date the bathymetric plotting sheets on the 1:1,000,000 scale.

Mention was made at Geneva of the International Hydrographic Organization Special Publication No. 23, "Limits of oceans and seas"—which is also mentioned in at least two of the national reports that have been distributed for this present Conference. This publication had been out of print in English, but in 1971 it was reprinted and it is now again available for free distribution to the Hydrographic offices of International Hydrographic Organization member States or for sale to any other agency or individual who wishes to have one; it also exists in French. A copy is being delivered to the Conference to be placed on display for inspection by anyone not already familiar with it. At the same time it must once more be emphasized that definite disclaimers apply to this publication: it serves a vital purpose in establishing, for the use of hydrographic offices, some arbitrary and accepted lines of demarcation between various oceans, seas, bays and so forth, so that, for example, when notices to mariners are broadcast or distributed the same thing will always be understood by the "Tyrhennian Sea" or the "Gulf of Mexico". These arbitrary lines, however, do not necessarily follow any strict geological basis, which explains why sometimes oceanographers or geomorphologists, not understanding why this publication exists, may criticize it.

Finally, at the Ninth International Hydrographic Conference in 1967, the Chilean delegation made a strong plea, which was noted briefly in the remarks of the International Hydrographic Bureau representative at Geneva, for action to retain long-established place names that honoured explorers or surveyors and that had come to be well known to navigators the world over—to prevent such place names from being changed when some wave of nationalism seeks to put all place names into the national pattern and eliminate foreign influences. Two illustrations will clarify what Chile had stressed. One example might be the Strait of Magellan, which should not be changed by either Chile or Argentina (or by anyone else, we hope) to some other name. In this case, not only is it used in a great number of nautical charts and sailing directions and other publications of hydrographic offices of many nations, but it has in turn provided the basis for the scientific biological names of many species of fauna and flora found in those waters. As a second example, Chile gave a very vivid demonstration of the need to avoid translating place names which were the names of persons by citing the case of an island named after a Lieutenant Graves of the Royal Navy of the United Kingdom who had done the original surveying of the area, off the coast of Chile, and whose name appeared on charts in "Graves Island". But a French chart of the same area had appeared where this had been translated as "Ile des Tombeaux".

The action taken during the past five years on this resolution introduced in 1967 by Chile and some other countries has been that it has been published in the *Report of Proceedings* of the 1967 Conference, which was distributed in 1969, so we can hope that hydrographic offices are indeed reminded not to change these long-

standing names; and further action was referred to the International Hydrographic Bureau. What has the Bureau done? Primarily we have sought to establish closer co-operation with the United Nations on the whole general subject of geographical names, and that is one reason of course why we are looking forward to the Second Conference. The International Hydrographic Organization will be represented during the appropriate committee sessions, particularly in committee V on discussion of agenda items 14 and 15.

We assure the United Nations of the basic desire of the International Hydrographic Bureau and the International Hydrographic Organization to continue and to improve co-operation in this vital area.

REPORT ON THE ACTIVITIES OF THE SEVENTH AND EIGHTH REGIONAL GROUPS BETWEEN 1967 AND 1971*

Presented by Czechoslovakia

The Seventh Regional Group (the countries of eastern, central and south-eastern Europe) called a joint session with the Eighth Regional Group (the USSR), and also the representatives of the German Democratic Republic, which was held from 4th to 6th October 1971 at Prague.

The representatives of Bulgaria, Hungary, the USSR, Yugoslavia, Poland, Czechoslovakia and the German Democratic Republic advanced information both on the activities of their national groups of experts in geographical terminology during the previous few years and on the present organization of terminological work and what it had achieved.

The Conference was concerned with:

(*a*) Acquiring information on the activities of the Group of Experts since the First United Nations Conference on the Standardization of Geographical Names in Geneva;

(*b*) Acquiring information on the present state of the effort to standardize geographical names in member States;

(*c*) Appraising recent problems of romanization;

(*d*) Appraising the problems of national standardization of geographical names and the possibilities for the compilation of an international dictionary of geographical terms;

(*e*) Appraising the possibilies for the compilation of an index of geographical names from the zone along the Danube and the area round the Black Sea;

(*f*) The problems relating to the standardization of names on celestial bodies and those of oceanic and submarine features;

(*g*) Appraising the possibility of utilizing the index of the 1:2,500,000 International World Map in the compilation of an international list of geographical names;

(*h*) The exchange among the participating countries of information and bibliographies relating to terminological effort;

(*i*) Making preparations for the Second United Nations Conference on the Standardization of Geographical Names; and

(*j*) Planning further activities in the field of the standardization of geographical names.

After a comprehensive discussion following the delivery of the reports, it was recommended:

(*a*) That the activity of the participating countries should be increased;

(*b*) That the exchange of information about the contemporary results achieved in individual countries should be continued, that an exchange of materials in the field of geographical terminology should be implemented, and that a working bibliography should be drawn up;

(*c*) That endeavours should be encouraged to make the results of the activities of the commissions on terminology binding on all organizations using geographical terms;

(*d*) Having evaluated the contemporary status of various ways of transcribing Chinese characters into the Roman alphabet, that, in the representation of geographical terminology, the Pinyin system of transcription, officially used in China since 1958, should be accepted;

(*e*) That Bulgarian and Soviet specialists should be entrusted with the construction of a mandatory official transcription of individual Cyrillic alphabets into Roman characters;

(*f*) That an index to the 1:2,500,000 World Map, which will considerably contribute to the standardization of geographical names, should be compiled as soon as possible;

(*g*) That an international dictionary of geographical terms occurring in the geographical names used in general geographical maps should be compiled; and

(*h*) That a list of geographical names should be made from the zone along the Danube.

Before the session was closed, the representative of the USSR gave information on the standardization of names of oceanic, submarine and celestial objects.

The next session of the Seventh and Eighth Regional Groups is to be held in 1973.

* The original text of this paper was contained in document E/CONF.61/L.84.

REPORT OF THE *AD HOC* GROUP OF EXPERTS ON GEOGRAPHICAL NAMES ON ITS SECOND SESSION, 10-20 MARCH 1970

The *Ad Hoc* Group of Experts on Geographical Names held its second session at United Nations Headquarters from 10 to 20 March 1970.

The session was attended by 25 experts, representing 12 of the 14 major linguistic/geographical divisions of the world as defined at the first United Nations Conference on the Standardization of Geographical Names, held at Geneva in 1967.[1] A list of participants is given in annex I.

Erik O. Dahle, Chief, Cartography Section, Department of Economic and Social Affairs of the United Nations Secretariat, acted as the Executive Secretary and Chris N. Christopher served as the Secretary for the Group.

The Acting Assistant Director of the Resources and Transport Division of the United Nations Secretariat opened the session on behalf of the Under-Secretary-General of the Department of Economic and Social Affairs.

The Group adopted as its rules of procedure those of the Geneva Conference,[2] with the following modifications:

Rule 1. Each participant shall participate as an expert rather than as a representative of a State.

Rules 2-4. These rules were not applicable, credentials not being required since the experts were invited rather than appointed.

Rule 6. The officers elected at the Geneva Conference shall function until the next conference.

Rule 24. Decisions shall be made either by a consensus of the Group or by a majority vote of the divisions rather than by a majority of the experts present.

Rule 26. Roll-call votes, if required, shall be taken beginning with the division whose name is drawn by lot by the Chairman.

The officers at the second session were those elected at Geneva: Meredith F. Burrill (Chairman), A. M. Komkov (Vice-Chairman), F. Nédélec (Rapporteur); J. Loxton, P. M. J. Geelan and C. R. Page were appointed by the Chairman as assistants to the Rapporteur.

The Group adopted the agenda reproduced in annex II.

AIMS, FUNCTIONS AND *modus operandi*

By Economic and Social Council resolution 1314 (XLIV), the *Ad Hoc* Group of Experts was charged with providing for continuous co-ordination and liaison among countries to further the standardization of geographical names and to encourage the formation and the work of linguistic/geographical divisions.

In order to carry out its work and to achieve the results required, on both the national and the international level, as specified in the resolutions adopted at the Geneva Conference,[3] the linguistic/geographical divisions as defined in the report of that Conference will continue to exist and the *Ad Hoc* Group of Experts will encourage and support meetings to be held within each of the divisions.

The 14 major linguistic/geographical divisions of the world as defined at Geneva in 1967 and subsequently modified by the *Ad Hoc* Group are as follows:

1. United States of America and Canada
2. Latin America
3. United Kingdom group
4. Dutch-speaking and German-speaking group
5. Norden
6. Romance languages area, other than Latin America
7. Europe, east central and south-east
8. Union of Soviet Socialist Republics
9. Arabic
10. Asia, south-west, other than Arabic
11. Indian group
12. Asia, south-east
13. Asia, east
14. Africa south of the Sahara

A country not already a member of a division will decide for itself to which division it wishes to belong. A country may also participate in the activities of divisions other than its own, provided the total number of countries and the nature of their participation are not such as to change the linguistic/geographical character of the division.

The *Ad Hoc* Group of Experts is composed of one representative from each division. Countries within each division will select, by methods of their own choosing, an expert to represent the division at meetings of the *Ad Hoc* Group of Experts and to speak, when required to do so, on behalf of the division as a whole at United Nations conferences on the standardization of geographical names. As an interim measure, the officers of the present *Ad Hoc* Group of Experts will continue to function until replaced by election.

The appointed expert will be responsible for ensuring that the work of the *Ad Hoc* Group of Experts and its potential for technical assistance are brought to the attention of the individual nations within his division and for reporting to the United Nations any special problems within his division.

Governments may appoint national experts to attend meetings of the *Ad Hoc* Group of Experts on the understanding that the said national experts will have the right of voice and that their attendance will be co-ordinated with the expert who represents the division in question and who will vote on behalf of the division.

The *Ad Hoc* Group of Experts will elect the following officers: a chairman, a vice-chairman and a rapporteur.

The elections will be held at the termination of the United Nations conference on the standardization of geographical names. The officers will serve until their

[1] During the course of the meeting, it was agreed that the word "division" should replace the word "region". See *United Nations Conference on the Standardization of Geographical Names, Volume I: Report of the Conference* (United Nations publication, Sales No. E.68. I.9), p. 7.

[2] *Ibid.*, para. 5.

[3] *Ibid.*, pp. 9-15.

successors are elected at the next conference. The United Nations Secretariat will provide the secretariat for the Group.

In the absence of the chairman, the vice-chairman will assume the office of chairman. In the absence of the vice-chairman or the rapporteur, the chairman will appoint persons to complete the unexpired portion of their terms of office.

The *Ad Hoc* Group of Experts will meet just before and immediately after each United Nations conference on the standardization of geographical names in the place where the conference is to be held; the Group will meet at least one year in advance of each such conference in order to make preparations for the conference; at times other than those mentioned above, meetings of the *Ad Hoc* Group of Experts may be specially convened.

Persons with special knowledge of particular aspects of the standardization of geographical names may be invited to place before the *Ad Hoc* Group of Experts their specialized knowledge.

During the meetings of the *Ad Hoc* Group of Experts, special working groups may be appointed to deal with particular issues. Upon completion of the appointed task, the working group will be automatically disbanded unless especially directed to remain in being.

Between meetings of the *Ad Hoc* Group of Experts, working groups of specialists may be formed under the chairmanship of one of the national experts to study particular problems. Such groups will only be formed with the approval of the *Ad Hoc* Group of Experts. Their conclusions and recommendations will require approval by the *Ad Hoc* Group of Experts before submission to the United Nations conferences on the standardization of geographical names for final acceptance.

The working languages of the United Nations selected for the conduct of business during the meetings of the *Ad Hoc* Group of Experts will depend upon the nature of the representation and the facilities available at the time.

The *Ad Hoc* Group of Experts will maintain communication among themselves and will render a report of their main activities semi-annually to the United Nations Secretariat and to the members and officers of the Group.

Apart from communication through formal channels, experts representing divisions and also national representatives will be notified by informal means of the transactions, programmes and requirements of the *Ad Hoc* Group of Experts.

The *Ad Hoc* Group of Experts will encourage countries to supply information to other nations within or outside their respective divisions and also to the United Nations Secretariat.

Activities of the *Ad Hoc* Group of Experts and of its Chairman

The Chairman reported on the results of the Economic and Social Council meeting of 18 May 1968 at which the Geneva Conference resolutions for a permanent committee and the holding of a second conference were considered. Unfortunately, it was not possible to establish a new body, such as the permanent committee, nor to make any financial commitments owing to lack of funds. However, the Economic and Social Council had invited the *Ad Hoc* Group of Experts already established at the Conference to carry out the functions proposed for the permanent committee and had requested the Secretary-General to consult with the *Ad Hoc* Group of Experts on the holding of a second conference on the standardization of geographical names. During the Council session, members had taken note of the excellent attendance at the Geneva Conference and the high percentage of technically qualified participants, and it had been stated that the obvious success of the Conference was a very strong argument to continue the *Ad Hoc* Group of Experts and its programmes.

At the first session of the *Ad Hoc* Group of Experts at Geneva, most of those who had expressed interest in serving as experts had said that they would require the consent of their Governments inasmuch as the expenses of attending the meetings would have to be borne by their Governments. Few of them had subsequently provided information on that point and therefore the composition of the Group had not been established. It was further not feasible to implement the suggestion recorded in the report of the Geneva Conference[4] that the countries should select the expert to represent the division, and it was decided that any country wishing to send an expert to the meetings should be free to do so. Since the final composition of the proposed permanent committee had been referred to the *Ad Hoc* Group of Experts, it had not been considered essential to resolve the problem in advance.

The Chairman had attended two international conferences during 1968: the First Central American Regional Meeting on the Standardization of Geographical Names, held in Guatemala in October, and the International Geographical Congress held at New Delhi, India, in December, and at both conferences he had reported on the results and resolutions of the Conference at Geneva. At the Guatemala meeting, he had presented a paper entitled "International aspects of geographical name standardization",* and at New Delhi one entitled "International geographical names standardization, 1967 Conference".*

En route to and from New Delhi in 1968, the Chairman had visited geographical names specialists at Athens, Ankara, Beirut, Jerusalem, Manila, Nicosia, Taipei and Tokyo. It had become apparent that communications from the United Nations were not always getting through to the people interested in geographical names, and that additional channels were necessary. It was also evident that sincere attempts were being made to implement the resolutions of the Geneva Conference.

In September 1969, Meredith Burrill attended the tenth International Congress of Onomastic Sciences at

[4] *Ibid.*, p. 7.

* An asterisk accompanying the mention of a document indicates that copies of that document may be obtained from the Cartography Section, Department of Economic and Social Affairs, United Nations Secretariat.

Vienna in his capacity as United States member of the International Committee on Onomastic Sciences (ICOS). Within the framework of that Congress, a section had been established to deal with cartographic toponymy. A group of toponymists had submitted to that section a resolution[5] which was discussed and finally accepted by the Congress. Mr. Burrill had unsuccessfully urged the International Committee to enhance its role as a scientific fact-finding body and refrain from endorsement of controversial subjects of that kind. Mr. Breu, the expert from Austria, had shown the visiting United States delegation some of the results of the work that had been done in Austria since the Geneva Conference and had provided copies of a specialized glossary that had been distributed both before and during the Congress.*

The United States Board on Geographic Names (BGN) and the Permanent Committee on Geographical Names (PCGN) had held the seventh meeting in their series of biennial consultations in 1968, at which, among other matters, a joint statement on romanization had been worked out; a copy of the paper entitled "Statement on romanization" was distributed to the Group.

The Chairman further reported that he had participated in the First Central American Regional Meeting on Standardization of Geographical Names, held at Guatemala City in October 1968. Guatemala had put at the disposal of its neighbours its experience and expertise in a national programme of name standardization, including a field demonstraton. All Central American countries had attended and all but Nicaragua had sent technical people. Great interest had been stimulated and several countries were expected to register new programmes.

The Dutch-speaking and German-speaking Group had held a meeting in January 1969. A report of that meeting was submitted to the Group.*

The Chairman reported that the United States Board on Geographic Names had extended its co-operative activity with other countries by supplying them with print-outs of punched-card files and negatives from which gazetteers could be made after appropriate revision, and by sending them name lists to be checked by their names authorities.

Two new gazetteers of the Board on Geographic Names,* the first edition of No. 111 on undersea features and the third edition of No. 14 on Antarctica, incorporated the results of extensive co-operation with other countries.

[5] "The 10th International Congress on Onomastic Sciences recommends all concerned with topical onomastic questions, especially the United Nations Group of Experts on Geographical Names, to apply where possible in the field of onomastic sciences the rules of transliteration contained in the recommendations of the International Organization for Standardization (ISO), unless in particular cases important reasons warrant deviations. The existing divergences between ISO rules of transliteration and customary practice in countries using non-Latin scripts should be eliminated by co-operation between such countries, the ISO, and the competent scientific (philological) organizations."

Communication "network"

A problem in communication had arisen because the experts and other participants at the Geneva meeting had failed to supply their full addresses, and certain of the materials sent had been returned by the postal authorities. The problem had been further compounded by the fact that United Nations material distributed through official channels was, in many countries, not reaching the persons concerned with geographical names problems. The Group therefore provided their official addresses, which are listed in annex I. It was agreed that, in order to speed up communications, the Group would distribute material directly among themselves as well as to the United Nations.

It was further agreed that, using United Nations Terminology Bulletin No. 248 (ST/CS/SER.F/248 and addenda) as a basis, one person should be designated from each of the countries listed as a Member of the United Nations or as a member of its specialized agencies or as a Party to the Statute of the International Court of Justice to serve as the recipient of all material circulated through that communication network. In addition, all the experts and the designated contacts would be informally alerted to the distribution of United Nations material sent through official channels.

Activities at the national level

In his general report to the Group, the Chairman introduced written reports by the experts from France, India, Iran, Kenya, Lebanon, Norway and the Union of Soviet Socialist Republics. A joint report was submitted by the Dutch-speaking and German-speaking Group, representing Austria, Federal Republic of Germany, Netherlands and Switzerland.* Verbal reports were given by the experts from the remaining countries participating. Each of the reports indicated accelerated progress in the standardization of names that was directly attributable to the Geneva Conference of 1967, and an increase in communication among countries on that subject.

Minority languages

In view of the widespread difficulties involved in dealing with the languages of minority peoples, and in order better to comprehend the variety of conditions in the individual countries, the Group suggested that the representatives collect and analyse the pertinent information available in their respective countries, prepare statements and disseminate them to the 14 linguistic/geographical divisions.

Undersea features

In connexion with item 4 (*b*) of its agenda, "Review of the activities of international bodies dealing with maritime and undersea features", the Group defined the following areas for consideration: terms and definitions, new names, and consultations with international bodies.

A. M. Komkov submitted a paper entitled "Concerning the establishment of names and terms to designate

maritime and undersea features", which was considered by a working group composed of M. Burrill, G. F. Delaney, P. Hovda, A. M. Komkov, E. Meynen and M. Sadeghian. The substance of their deliberations is contained in annex III. The working group unanimously recommended that further study should be made by the *Ad Hoc* Group of Experts with respect to creating guidelines for name applications, the definition of descriptive terminology, methods of recording and stabilizing undersea nomenclature, and the determination of the agency or agencies best suited to centralizing and disseminating such information.

Several reports by delegates related in part to undersea nomenclature, notably that by E. Meynen in connexion with his work on compiling a dictionary of geographical names and technical terms.

The Group decided to establish a working group of specialists on the question to study further, in the terms set out above, the nomenclature of undersea features. It was agreed that the working group should include experts from Canada, Federal Republic of Germany, India, Netherlands, Norway, United Kingdom, Union of Soviet Socialist Republics and United States of America. G. F. Delaney was nominated as the organizer of this working group.

African languages

The Group of Experts considered resolutions 16 and 18 of the Geneva Conference[6] on the problems of recording geographical names from African languages, many of which are still wholly or partially unwritten.

It was agreed that more detailed information would need to be collected from Africa before the Group could make recommendations on those problems. As a first step, the Group requested the Secretariat to send a questionnaire approved by it to the 35 Member States of Africa south of the Sahara. However, closer investigation would be necessary as a follow-up to this problem. It was suggested that a divisional conference of those countries might be held, but finding a host country and ensuring 100 per cent attendance from the 35 States was considered at this time to be impracticable. It was considered that a more practical proposal would be for J. Loxton, the divisional expert sitting with the Group of Experts, to tour the countries of his division, prepare a study on each of them and compile a comprehensive report for future consideration by the Group. Financial aid would be necessary to carry out the proposal, however, and it was suggested that the Ford Foundation should be approached since that institution might consider this an appropriate project for financing. The Group requested the divisional expert to submit an application to the Ford Foundation regional office at Nairobi, Kenya.

Extraterrestrial topographic names

The Group first considered whether its competence covered the consideration of extraterrestrial topographic nomenclature. The proposition was advanced that such names are not geographical and that they fall more properly within the competence of the astronomer, but the opinion of the majority was that changing technology in space matters was placing it within the purview of both the cartographer and the geographer.

A. M. Komkov spoke at some length on the production by the Union of Soviet Socialist Republics of maps of the far side of the moon and noted that a significant number of names had been tentatively applied on such maps. He explained that it was impossible to wait for approval of those names by the International Astronomical Union if the maps were to be issued within a reasonable period. H. A. G. Lewis supplemented Mr. Komkov's remarks with a summary of the history of lunar nomenclature. He pointed out that a numbering system had been employed by the United States of America in lieu of names to avoid the establishment of terminology not yet internationally approved.

The Group decided to establish a working group on this subject composed of experts from the United Kingdom, Union of Soviet Socialist Republics and United States of America. Mr. Komkov was nominated as the organizer of the Group.

Unwritten languages

The Group, recognizing that adequate documentation for a very large number of the unwritten languages of the world is currently unavailable, and taking cognizance of the principles and procedures embodied in resolution 16 of the Geneva Conference of 1967, urged that, prior to the next full conference, each country which has a problem with regard to unwritten languages collect the pertinent information and material available, prepare a descriptive statement, and disseminate that statement to the 14 divisions. Particlar attention was drawn to Information Paper No. 4, "Standardizaton of place names",* presented by Mr. Nédélec, as a valuable tool in the collection of pertinent information on unwritten languages.

Chinese

The Group, in considering resolution 15[6] of the Geneva Conference of 1967, took cognizance of working paper No. 17, presented by Mo Tsao, entitled "Report on romanization".* The Group recommended that countries doing work on Chinese geographical names prepare statements of the procedures they follow and their reasons for doing so, and disseminate them to the 14 divisions.

Cambodian

The Group, noting the desirability of adopting a single romanization system for Cambodian geographical names, and in pursuance of the recommendation of the representative of Cambodia at the Geneva Conference

[6] *United Nations Conference on the Standardization of Geographial Names, Volume I: Report of the Conference*, chap. III.

of 1967,[7] agreed that the joint Cambodian and BGN/PCGN 1962 system for transliteration of Cambodian geographical names in official use in Cambodia should be proposed for adoption. A copy of the system will be made available to the next conference.

Amharic

The *Ad Hoc* Group of Experts requested the United Nations Secretariat to contact the Ethiopian cartographic authorities with a view to obtaining official confirmation that the Ethiopian national names authority had adopted the joint Ethiopian and BGN/PCGN 1967 transliteration system for Amharic.

Working group on a single romanization system

In accordance with resolution 9 of the Geneva Conference,[8] the Group agreed to set up a special working group charged with making a comparative study of the various systems of transliteration and to analyse the advantages and disadvantages of each for the international standardization of geographical names. The members of the special working group are J. Breu, P. J. M. Geelan, Guido Gómez de Silva, E. F. Halvorsen (provisionally recommended by Per Hovda), A. M. Komkov, F. Nédélec, C. R. Page and D. N. Sharma.[9] The Group of Experts recognized that such a comparative study would need to be extremely detailed and would have to be carried out by correspondence, at least in its early stages. Later, the special working group would have to meet when and where necessary. A. M. Komkov stressed that the services of specialists would be indispensable and that the members of the special working group should be prepared to play a liaison role in this respect.

Preparation of a list of geographical names

The Group recommended that working papers Nos. 7 and 25, entitled respectively "List of geographical names in the official languages of the United Nations" and "List of geographical names for international use"* be referred to the *Ad Hoc* Group of Experts at its fourth session which, it is expected, will be held immediately before the second United Nations Conference on the standardization of geographical names. The Group will also consider any other documentation on the subject that may be made available at that session.

Staffing

The Group recommended that the Cartography Section of the United Nations Secretariat be strengthened to meet the anticipated increase in work related to the standardization of geographical names.

Periodicity of conferences

It was the conclusion of the *Ad Hoc* Group of Experts that United Nations conferences on the standardization of geographical names should be held at intervals of no less than three years and no more than four years.

Place and date of the third session of the *Ad Hoc* Group of Experts

The Group agreed that a preparatory session before the next conference should be held at United Nations Headquarters early in 1971, the expenses incurred by the experts to be borne by their Governments.

Second United Nations Conference on the Standardization of Geographical Names

The Group agreed that a second United Nations conference on the standardization of geographical names should be held during the last quarter of 1971 or the first quarter of 1972.

Annex I

NAMES AND OFFICIAL ADDRESSES OF PARTICIPANTS

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[7] See *United Nations Conference on the Standardization of Geographical Names, Volume 2: Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. E.69.I.8), pp. 71-72.

[8] *United Nations Conference on the Standardization of Geographical Names, Volume 1: Report of the Conference*, chap. III.

[9] Guido Gómez de Silva was unanimously elected Chairman of the special working group.

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Annex II

AGENDA

1. Opening of the session
2. Adoption of the agenda
3. Report of the Chairman of the *Ad Hoc* Group of Experts:
   (*a*) Activities of the *Ad Hoc* Group of Experts
   (*b*) Regional meetings
   (*c*) Activities at the national level
4. Items referred to the *Ad Hoc* Group of Experts by the United Nations Conference on the Standardization of Geograpical Names:
   (*a*) Composition and *modus operandi* of the *Ad Hoc* Group of Experts (pp. 7-8)[a]
   (*b*) Review of the activities of international bodies dealing with maritime and undersea features (resolution 8.B.1, p. 12):
      (i) Terms and definition
      (ii) New names
      (iii) Consultations with international bodies
   (*c*) Recording and processing:
      (i) Unwritten African languages (resolution 18, p. 14)
      (ii) Minority languages (resolution 20, p. 14)
      (iii) Cambodian (p. 6)
      (iv) Amharic (resolution 17, p. 14)
      (v) Chinese (resolution 15, p. 13)
      (vi) Working group on a single romanization system (resolution 9, paras. 2 and 3, pp. 12-13)
5. Extraterrestrial topographic names
6. Convening of a second United Nations conference on the standardization of geographical names
7. Other business
8. Adoption of the report of the session

[a] Information in parentheses is a reference to *United Nations Conference on the Standardization of Geographical Names, Volume 1: Report of the Conference* (United Nations publication, Sales No. E.68.I.9).

Annex III

STATEMENT OF THE WORKING GROUP ON THE STANDARDIZATION OF GEOGRAPHICAL NAMES OF UNDERSEA FEATURES AND RELATED DESCRIPTIVE TERMINOLOGY

It became rapidly apparent that a consensus existed in the Working Group on the need to standardize the names of undersea features.

There was general agreement that while some useful work had been done towards the resolution of problems in the designation of undersea features by such organizations as the Intergovernmental Oceanographic Commission (IOC), the International Hydrographic Bureau (IHB) and the International Association on Physical Oceanography (IAPO), and valuable contributions to this subject are embodied in the work of Wiseman and Ovey as well as in the report of the Sub-Committee on General Bathymetric Charts of the Oceans (GEBCO) of the International Association on Physical Oceanography and in the works on geographical names issued by national agencies, none the less, the proposition succinctly stated in the working paper entitled "Concerning the establishment of names and terms to designate maritime and undersea features".[a] "under such circumstances the United Nations, as the most representative organization, can and should take the initiative in working out the international rules regulating the treatment of the names and terms for maritime and undersea features, namely, collection, concordance among and approval by all the countries concerned, final acceptance and distribution of the forms established, represented the view of this working group respecting the need for further study of this subject on the following specific points:

(*a*) Guidelines governing the appropriateness of names proposed for application to undersea features and an explanation of the rationale of such guidelines;

(*b*) A continuing consideration of descriptive terminology respecting such features;

(*c*) The establishment of an internationally accessible collection, recording and control system;

(*d*) The designation of the agency or agencies best suited to the attainment of those objectives;

(*e*) The method by which these desiderata could best be implemented.

In conclusion, it was considered that the points noted above should be referred to a working group of the *Ad Hoc* Group of Experts on Geographical Names for investigation and report, and, further, that this working group should avail itself of the expertise of specialists available to the United Nations.

[a] A copy of the paper may be obtained from the Cartography Section, Department of Economic and Social Affairs, United Nations Secretariat, on request.

REPORT OF THE GROUP OF EXPERTS ON GEOGRAPHICAL NAMES ON ITS THIRD SESSION, 2-12 FEBRUARY 1971

The *Ad Hoc* Group of Experts on Geographical Names convened its third session at United Nations Headquarters from 2 to 12 February 1971. The Group met to consider the preparations for the Second United Nations Conference on the Standardization of Geographical Names, which will be held in London during

the first half of 1972. The Group also considered reports on regional activities, by division, and the work of its three Working Groups, set up during its second session, on Undersea Features, Extraterrestrial Topographic Names, and a Single Romanization System.

The session was attended by 23 experts representing 12 of the 14 geographical/linguistic divisions of the world as defined by the Group of Experts in their aims, functions and *modus operandi* (see annex I).

Erik O. Dahle, Chief of the Cartography Section, acted as the Executive Secretary and Chris N. Christopher served as the Secretary for the Group.

The session was opened on behalf of the Secretary-General by the Executive Secretary.

The Group adopted as its rules of procedure those of the Geneva Conference[1] as modified at its second session.

The officers at the third session were: Meredith F. Burrill (Chairman), A. M. Komkov (Vice-Chairman), D. P. Blok (Rapporteur); P. J. M. Geelan, F. Nédélec and O. R. Page were appointed by the Chairman to assist the Rapporteur.

The Group adopted the revised provisional agenda as its agenda for the session (annex II).

Name of the Group

During the session, the Group agreed that the term "*Ad Hoc*" should be dropped from its title. The Group therefore recommends to the Second United Nations Conference on the Standardization of Geographical Names that the name should be changed to "United Nations Group of Experts on Geographical Names".

Reports on regional activities

Africa south of the Sahara

In accordance with the request made by the Group of Experts at its second session, the Secretariat had sent out a questionnaire to the 35 Member States in this division. J. Loxton reported that 13 Governments had replied; he had summarized those replies in his report which was circulated during the session as information paper No. 4.* In the absence of Mr. Loxton, the Chairman gave additional background information on the report. He informed the Group that, though Mr. Loxton was no longer with the Survey of Kenya, he remained the expert for the division. H. A. G. Lewis expressed his willingness to ask South Africa to provide information on the work being carried out on geographical names.

Latin America

Francis Gall reported on the Second Regional Meeting on the Standardization of Geographical Names, held in Panama from 19 to 23 October 1970. He gave a list of the countries represented and discussed some of the 23 resolutions adopted during the meeting. Resolutions 21, 22 and 23 would be translated into English and distributed to the Group. The Chairman stressed the importance of the Meeting and of the work done by Mr. Gall. The Chairman reported on his findings in the Latin American countries he had visited. In Venezuela, a national gazetteer was in the making and a national authority was to be set up. The Chairman had suggested that the Venezuelan authorities should not specify penal provision for the use of other than standardized names. In Ecuador, a first list of standardized names was ready and a geographical dictionary was in course of preparation. In the Dominican Republic, a 1:50,000 map series with standardized names was in the making. In Peru, an active research programme at the University of San Marcos had produced a file of over 400,000 entries containing much information on indigenous names. There was an urgent need to co-ordinate this work with that of the Instituto Geográfico Militar of Peru. Mr. Gall commented that much of the effort in Latin America had been to help each country to create a national names authority and programme. A. M. Komkov asked for information on those countries that were not represented at the meeting in Panama. In reply to another question, the Chairman explained that the Panama meeting had met at the invitation of the Government of Panama; most Central American and Caribbean and some South American States had been invited; the Chairman had represented the Group of Experts, as well as the United States of America.

Other

Emil Meynen reported on the meeting of the Dutch-speaking and German-speaking group and summarized information paper No. 19,* containing four working papers which was distributed. The Chairman summarized a letter from Mr. Földi (Hungary) on a projected meeting of the East Central and South-East European division to be held at Prague in September 1971. Its aim was to create a common platform for the London Conference. Josef Breu pointed out that the main items of the agenda would be the problems of conventional names and of romanization. Kazem Vadiie reported on the progress made in Iran, where the compilation of material for a geographical encyclopedia had been completed, based on questionnaires, maps and other documents. D. N. Sharma stated that the existing romanization system of India did not permit reversibility of transliteration and that he had made an attempt to produce a revised system of transliteration in the booklet that he distributed. Somboon Vichitranuya, reporting for the South-East Asia division, summarized information paper No. 13, "Report on regional activities".* H. A. G. Lewis, reporting for the United Kingdom, mentioned the work done in connexion with the mapping of the southern part of the Arabian Peninsula, Indonesia, the western

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[1] *United Nations Conference on the Standardization of Geographical Names, Volume I: Report of the Conference* (United Nations publication, Sales No E.68.I.9), p. 1.

* An asterisk accompanying the mention of a document indicates that copies of that document may be obtained from the Cartography Section, Department of Economic and Social Affairs, United Nations Secretariat, on request.

part of the USSR, Georgia and Azerbaijan, western China, the Maldives, Cyprus and the British Solomon Islands. He described the difficulties of finding appropriate sources for names in some of those areas. Much information was now compiled in the files of the Permanent Committee on Geographical Names (PCGN) and available on request. The Russian language forms of all Cyrillic script names have been used as a basis, not the local languages, such as Ukrainian or White Russian. In reply to a question from Francis Gall, Mr. Lewis stated that in the West Indies, where the maps were done by the United Kingdom, the names were collected and approved by the local authorities.

A. M. Komkov asked if the names problems in the British Isles themselves were all solved. Mr. Lewis agreed that Gaelic names in Scotland and Welsh names in Wales provided some difficulty and that there were other inconsistencies, but that these were fewer than was presumed by foreigners; internally, there was not much ambiguity. Mr. Komkov reported on the work done in the USSR in information paper No. 16.* In that connexion, Mr. Sharma pointed out the difficulties of transliterating English names symbol by symbol into a non-Roman alphabet, because there was no simplified English orthography. Mr. Breu referred to resolution 4, recommendation E, of the Geneva Conference[2] on the use of the International Phonetic Association (IPA) system in rendering the pronunciaton of names. Per Hovda, reporting for the Norden division, mentioned the joint transliteration system accepted by the Nordic countries for names in Cyrillic script; it differed from both the BGN/PCGN and the ISO systems. The Norden division was now planning lists of standardized names from other non-Roman script systems. Standardization was proceeding in all Scandinavian countries. Lappish names were to be recorded by means of portable tape recorders. Official forms of names in Norway were to be found only on the most recent maps. Gazetteers would contain both the local and standard pronunciations.

C. R. Page, reporting for the United States of America, mentioned information papers Nos. 7, "Una ortografía tentativa quechua y aymara por empleo cartografico", 10, "A glossary of Spanish and Portuguese geographical terms with English equivalents", 11, "A brief glossary of terms employed in geographical names standardization", and 12, "Transliteration of Khmer writing",* and the gazetteers already published for the USSR, Israel, Malaysia and Lebanon. It was hoped that before 1972 a definitive list of conventional names might be completed. A revision was in progress of the gazetteers of undersea features, Antarctica, Jordan, Algeria, the Dominican Republic, the Republic of Viet-Nam and the Khmer Republic, the last two by new printing methods because of the many diacritical marks. Discussion arose on the problem of conventional names. Some speakers held that it was impossible to make a definitive list of them because different levels of use had different needs; all depended on the use to be made of a publication which contained certain conventional names. International co-operation at an early stage was urged. There was recognition of a general tendency towards a reduction in the number of conventional names. Meredith Burrill announced that the United States would inform the London Conference on its procedures in that respect. G. F. Delaney reported on standardizing activities in Canada (information paper No. 21).*

Francis Gall reported that activity in Guatemala concerned mainly the names on maps of the country on different scales. Mr. Gall was further engaged in the enlarging and the revision of the Diccionario Geográfico de Guatemala, which would soon be published. El Salvador was working on the publication of a geographical dictionary in three volumes. D. N. Sharma reported that in the course of the printing of the new maps of India, thousands of names were to be treated monthly. It was intended to produce a comprehensive national gazetteer of India. Josef Breu reported on progress made in Austria, where the publication of a national gazetteer was under way.

M. Z. Al-Ayubi reported on the work done by the competent Lebanon names authority (DAG) in conformity with the principles of transliteration from the Lebanese-Arabic to Roman characters applied since 1963 on the official Lebanese maps which have just been finished. A provisional edition of the French-Arabic alphabetical list of geographical Lebanese names was distributed to the experts. The new list proposed a newly developed system, presented to the Group of Experts as information paper No. 32* for adoption at the next meeting of the regional division in conjunction with the meeting of the Arab League.

Reports of the working groups

The Working Groups on Definitions, Names of Undersea Features, Extraterrestrial topographic names, and A Single Romanization System made their reports (see annexes III to VI).

Provisional agenda for the Second Conference

The following provisional agenda was drawn up for the Second United Nations Conference on the Standardization of Geographical Names:

1. Opening of the Conference
2. Adoption of the rules of procedure
3. Election of officers
4. Report on credentials
5. Adoption of the agenda
6. Organization of the work
7. Reports by divisions and Governments on the situation in their regions and countries and on the progress made in the standardization of geographical names since the first United Nations Conference on the Standardization of Geographical Names
8. Terminology of geographical names standardization
   (*a*) Terms
   (*b*) Definitions
9. National standardization
   (*a*) Field collecton of names
   (*b*) Office treatment of names

[2] See *United Nations Conference on the Standardization of Geographical Names, Volume 1: Report of the Conference* (United Nations publication, Sales No. E.68.I.9), p. 11.

(c) Treatment of names in multilingual areas
(d) National gazetteers or other similar publication in which countries make available their standardized names
(e) Administrative structure of national names authorities

10. Geographical terms
    (a) Classification of geographical entities and geographical names
    (b) Glossaries
        (i) Process of compilation
        (ii) Uniformity of presentation
        (iii) Generic terms
        (iv) Designations
        (v) Coded items
        (vi) Abbreviations
        (vii) Other
11. Writing systems
    (a) Transfer of names from one writing system into another
        (i) Into Roman
        (ii) Into other writing systems
    (b) Writing of names from unwritten languages
12. Conventional names
    (a) Definition
    (b) Usage
13. International standardization and its field of application
14. Names of features beyond a single sovereignty
    (a) Features common to two or more nations
    (b) Maritime features
    (c) Undersea features
    (d) Extraterrestrial features
15. International co-operation
    (a) Composition and functions of the United Nations Group of Experts on Geographical Names
    (b) Exchange of information
    (c) Regional meetings
    (d) Technical assistance
    (e) Bibliography
16. Special attention to problems identified in papers presented by Governments
17. Automatic data processing
18. Report of the Conference

Summary of discussion on the provisional agenda for the Second Conference

Item 7

Reports to the Second United Nations Conference on the Standardization of Geographical Names should be submitted by Governments in sufficient time for them to be made available before the beginning of the Conference. The reports would be introduced briefly in order of division and alphabetically by country within divisions. The Group of Experts recommended that Governments should emphasize in their reports the problems identified in the provisional agenda and in the report of the Group of Experts on its third session.

Item 8

The Group considered that the first United Nations Conference on the Standardization of Geographical Names had provided a sufficient definition of "generic term". The definition of "glossary", however, seemed to be too limited. Definitions of "conventional names, exonym, transcription, transliteration, romanization etc." were thought to be indispensable. A special working group, consisting of J. Breu, F. Gall, P. Hovda, H.A.G. Lewis, E. Meynen, C.R. Page and D.N. Sharma was formed to study the matter and report on it before the Second Conference.

Item 9

It was foreseen that new problems might arise in the reports on field collection of names, their subsequent treatment and their standardization. Thus the discussion which had taken place during the first Conference concerning these points might be carried further.

As to the treatment of names in multilingual areas, specific reports from delegates having experience in the matter were deemed of the highest value. It would seem useful to have a further discussion on the minimum amount of information national gazetteers ought to provide. The Group thought that the programme contained in information paper No. 28, presented by D.N. Sharma, was a good working base for the preparation of a gazetteer; however, the number of listed names might be limited, and the information given might be restricted to the form of the name, its designation, exact location and, if possible, its administrative status.

The Group was of the opinion that national reports might also give new insights into the composition, working methods and scope of the national names authorities.

Item 10

It was suggested that a standardized classification of geographical entities should be determined on for the purpose of their designation in gazetteers. On the other hand, a broad classification of the names themselves, for instance, as hydronyms (names of rivers, lakes, brooks etc.), or oronyms (names of hills, mountains etc.), was thought to be useful. The presentation of glossaries should, as far as possible, be internationally uniform. A discussion was thought to be necessary on the possible kinds of glossaries — of generic terms, designations, coded items, abbreviations and the like.

Item 11

The Working Group on a Single Romanization System would prepare comparative studies of writing systems for presentation to the Second Conference.

Item 12

The Group discussed conventional names at length and expressed the need for a definition of the term, and for discussion of the kinds of publication in which conventional names might be used.

Item 13

There was a need for discussion of the kinds of publication in which internationally standardized names would be used.

Item 14

International standardization of names of geographical features beyond a single sovereignty seemed to be both urgent and attainable. Discussion on those names and reports on the work already done in the field by international scientific organizations were deemed to be of the utmost importance for standardization in general.

Item 15

The Group requested that a bibliography of gazetteers should be prepared in accordance with the specifications outlined in annex VII. Emil Meynen undertook to prepare the bibliography with the assistance of the Secretariat, in particular of the Map Librarian of the United Nations Library.

Item 16

The Group agreed that discussion of particular problems identified in specific papers presented by Governments was an essential task for the Second Conference.

Organization of the Second Conference

The Secretariat was requested to inform Governments as fully as possible about the Conference and in particular to ask them to send specialists to it. The Group requested that the reports of its second and third sessions should be presented to the Conference as official documents. It also asked the Secretariat to send with the official letter of invitation a special information paper concerning documentation. The Group agreed to recommend the formation of five committees at the Conference and drew up a timetable for it.

P. J. M. Geelan (United Kingdom) suggested that the Conference should consider establishing an editorial committee to be made up of specialists in geographical names, to help in the preparation of the report of the Second Conference as well as other important documents of the Conference in the three working languages, English, French and Spanish.

Provisional agenda for the fourth session of the United Nations Group of Experts on Geographical Names

The Group drew up the provisional agenda for the fourth session as follows:

1. Reports of working groups
2. Organization of the Second United Nations Conference on the Standardization of Geographical Names
3. Other business

Provisional agenda for the fifth session of the United Nations Group of Experts on Geographical Names

The following list of items constituted the provisional agenda for the Group's fifth session:

1. Election of officers
2. Review of recommendations and instructions of the Second United Nations Conference on the Standardization of Geographical Names
3. Programme for the United Nations Group of Experts on Geographical Names
4. Sixth session of the United Nations Group of Experts on Geographical Names
5. Other business

Annex I

LIST OF PARTICIPANTS

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Division Chairman: Somboon Vichitranuya, Director, Royal Thai Survey Department, Bangkok, Thailand

Banland Khamasundara, Technical Officer, Royal Thai Survey Department, Bangkok, Thailand

Asia East

Division Chairman: C. H. Wang, Director, Department of Land Administration, Ministry of the Interior, Taipei, China

Chih-Hsi Chen, Senior Expert, Department of Land Administration, Ministry of the Interior, Taipei, China

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Annex II

AGENDA

1. Opening of the meeting
2. Election of the Rapporteur
3. Adoption of the agenda
4. Adoption of the rules of procedure
5. Review of progress since the second session
   (*a*) Reports on regional activities
      (i) Africa south of the Sahara (Loxton)
      (ii) Latin America (Gall and Burrill)
      (iii) Other
   (*b*) Reports of the Experts on their activities
   (*c*) Reports of three working groups set up during the second session
      (i) Undersea features
      (ii) Extraterrestrial topographic names
      (iii) Working group on a single romanization system
6. Preparation for the Second Conference
   (*a*) Agenda and organization
   (*b*) Documentation
7. Arrangements for the fourth session and the schedule of activities before the Second Conference
8. Arrangements for the fifth session immediately following the Second Conference
9. Adoption of the report of the third session

Annex III

REPORT OF THE WORKING GROUP ON DEFINITIONS

The Working Group organized during the third session met on 5 February 1971, and elected Carl R. Page Chairman.

It was agreed that the work of the Working Group should be conducted by correspondence, one copy of each communication from a member being disseminated to the Cartography Section of the United Nations Secretariat, one to the Chairman of the Group of Experts, and one to each member of the Working Group.

Information paper No. 29, "Rules and proceedings for standardization proclaimed by Guatemala and adopted by the Second Regional Meeting on the Standardization of Geographical Names",* presented to the Group of Experts by Francis Gall, was submitted to the Working Group for its consideration.[a] H. A. G. Lewis and E. Meynen agreed to distribute pertinent material on return to their respective countries.

The Chairman undertook to collate the material disseminated and to distribute to the members of the Working Group a quarterly report, beginning in March 1971. All members were urged to participate fully, so that a report containing recommendations might be prepared for presentation to the Second Conference. All members of the Group of Experts were invited to contribute by communicating with the Chairman of the Working Group.

[a] The Chairman also reminded the Working Group of the paper entitled "Technical terms", presented to the Geneva Conference, which is included in *United Nations Conference on the Standardization of Geographical Names, Volume 2: Proceedings of the Conference and Technical Papers* (United Nations publication, Sales No. 69.I.8), p. 119.

Annex IV

REPORT OF THE WORKING GROUP ON NAMES OF UNDERSEA FEATURES

The Working Group held a further meeting on 11 February to discuss questions raised in the working paper issued previously as a supplement to information paper No. 22, "Interim report of the Working Group on Names of Undersea Features".

Present were M. Burrill, A. M. Komkov, P. Hovda, E. Meynen, D. N. Sharma, H. A. G. Lewis, G. F. Delaney (Co-ordinator).

The Group agreed that:

1. Information paper No. 22* was satisfactory as the interim report of the Working Group to the Group of Experts on Geographical Names at its third session, subject to the deletion of page 4, headed "Summary";

2. The following courses were appropriate for the guidance of the Co-ordinator:

(*a*) Informal communications should be employed between concerned countries on names of undersea features, as in the case of the consideration of Antarctic names, until more formal machinery was established, as future events might dictate;

(*b*) He should continue to work by correspondence with members of the Working Group and with the General Bathymetric Chart of the Oceans (GEBCO), and circulate relevant material;

(*c*) The "Principles" outlined in addendum 1 to information paper No. 6,* "Guidelines for name applications", should not be circulated to the oceanographic community for evaluation until the United States Board on Geographic Names had had opportunity to consider them in relation to the guidelines for the application of specific

* An asterisk accompanying the mention of a document indicates that copies of that document may be obtained from the Cartography Section, Department of Economic and Social Affairs, United Nations Secretariat, on request.

names prepared by Mr. Burrill (addendum 3 to information paper No. 6);

(*d*) He should establish liaison between the Working Group and the Ocean Economics and Technology Branch of the United Nations Secretariat.

The Group endorsed the Co-ordinator's proposal to prepare a draft of the final report of the Working Group at an appropriate time before the London Conference and circulate it to members of the Working Group for comment.

Annex V

REPORT OF THE WORKING GROUP ON EXTRATERRESTRIAL TOPOGRAPHIC FEATURES

The members of the Working Group, A. M. Komkov, M. Burrill and H. A. G. Lewis met on Friday, 5 February 1971.

Discussion was confined to the problems associated with lunar nomenclature and in particular those associated with the naming of small features. Information paper No. 23[a] "Concerning the names of extraterrestrial topographic features", submitted by A. M. Komkov was taken as the background paper.

It was agreed that the names approved by the International Astronomical Union for major lunar formations must remain as the standard names and that comments by members of the Group of Experts on Geographical Names should be limited to editorial aspects.

Whereas the systems hitherto employed for naming lunar formations have been devised to suit the requirements of telescopic observation of the moon from earth, there was now a need to provide for the naming of features of very small size far beyond the limits of resolution of astronomical telescopes.

A nomenclature of the kind used for major lunar formations was, in the view of the Working Group, not feasible.

For the naming of minor lunar features, the Working Group considered the possibility of adopting a system based on selenographic co-ordinates. It was appreciated that lunar mapping was still at an early stage and that it was not yet possible to give definitive co-ordinates for very small lunar features, and that large-scale mapping in the future might result in different selenographic (selenodetic) co-ordinates from those derived from existing mapping. There would undoubtedly be further refinements in the fundamental selenodetic network, which would produce a new co-ordinate system.

Nevertheless, the Working Group recommended the study of a nomenclature or system of designating small features based on selenographic co-ordinates. The study of such a system should be carried out in conjunction with geodesists, cartographers and astronomers in conjunction with the Group of Experts on Geographical Names.

The Working Group therefore recommended that the attention of specialists in those fields should be drawn to the conclusions of the Group of Experts on Geographical Names with the object of drawing up a method of identifying small lunar features.

The Working Group agreed that Mr. Komkov should prepare a draft of the final report of the Working Group on Extraterrestrial Topographic Features at an appropriate time before the London Conference and circulate it to members of the Working Group for comment.

[a] Copies may be obtained from the Cartography Section, Department of Economic and Social Affairs, United Nations Secretariat, on request.

Annex VI

REPORT OF THE WORKING GROUP ON A SINGLE ROMANIZATION SYSTEM

The tasks assigned to the Working Group by the Geneva Conference of 1967 and by the Group of Experts during its second session in 1970 were as follows:

(*a*) To undertake comparative studies of existing romanization systems for each non-Roman writing system of cartographic importance;

(*b*) To seek ways to accomplish the adoption of a single romanization system for each non-Roman alphabet or script for international application.

The Working Group held its first meeting on 19 February 1970 in New York, where G. Gomez de Silva was elected Chairman. At its second meeting on 20 February 1970, the Working Group decided to carry out its work by means of correspondence. Subsequently, the Chairman issued four circulars. At the beginning of the third session of the Group of Experts on 2 February 1971, three written statements were distributed by members of the Working Group, and, in the absence of the Chairman, Josef Breu was appointed acting Chairman.

The third meeting of the Working Group took place on 3 February 1971, and was attended by J. Breu, acting Chairman, P. J. M. Geelan, P. Hovda, A. M. Komkov, F. Nédélec, C. R. Page and D. N. Sharma. Present as observers were Y. M. Nawabi and C. H. Wang. The meeting was begun with a general review of the activities of the members during the past year. It was stated that material on the writing systems of the following languages had been distributed to all members of the Working Group: Amharic, Arabic, Armenian, Assamese, Azerbaijani, Bengali, Greek, Gujarati, Hebrew, Hindi, Japanese, Kannada, Kashmiri, Khmer, Korean, Malayalam, Marathi, Nepali, Oriya, Punjabi, Persian, Russian, Sinhalese, Tamil, Telugu, Thai and Urdu.

The Working Group realized that the title of resolution 9 of the Geneva Conference[a] (and of the Working Group as well) led to misinterpretation and suggested that it should be amended to read: "A single romanization system for each non-Roman writing system for international application". It would refer the proposal to the Second Conference.

The need for defining certain terms to be used within the Working Group was recognized and the following definitions based on information paper No. 11 presented by C. R. Page, were agreed upon:

Script:

A set of graphic symbols which may be variously employed in representation of the phonological and/or morphological elements of a language or languages. (The items of an alphabetic script typically represent phonemes; those of a syllabic script, syllables; and those of an ideographic script, morphemes.)

Alphabet:

A specific set of graphic symbols which may be employed in representation of the phonological elements of a particular language.

Transcription:

The process of recording the phonological and/or morphological elements of a language in terms of a specific writing system.

Transliteration:

The process of recording the graphic symbols of one writing system in terms of corresponding graphic symbols of a second writing system.

Romanization:

The process of recording in Roman script either the phonological elements of a language or the graphic symbols of a non-Roman writing system. The following general principles for romanization systems were agreed upon:

1. Systemic reversibility should be sought in so far as practical.

[a] *United Nations Conference on the Standardization of Geographical Names, Volume I, Report of the Conference*, pp. 12 and 13.

2. Consistent employment of graphic symbols within any given romanization system should be sought.

The Working Group agreed to deal with romanization systems for all State languages of sovereign States, comparative studies to be prepared as follows:

1. Greek — G. Gómez de Silva.
2. Amharic — J. Breu. In connexion with the section relating to Amharic in the report of the Group of Experts, 29 April 1970, Mr. Breu was requested to study the implications of the Ethiopian reply to the inquiry by the United Nations Secretariat.
3. Hebrew — G. Gómez de Silva.
4. Arabic — J. Breu. The meeting further recommended that the expert for the Arabic division contact authorities in the various Arabic-speaking countries with a view to implementing resolution 12 of the Geneva Conference.
5. Persian — G. Gómez de Silva. The meeting ascertained from the Expert from Iran that proposed alterations to the recommended system for transliteration of Persian names cited in "Transliteration of Farsi geographic names to Latin alphabet", September 1966, had not been made up to that time. If modifications were made, the expert from Iran would inform Mr. Gómez de Silva.
6. Pashtu — P. J. M. Geelan. Particular consideration would be given to document E/CONF.57/L.61, 22 October 1970, of the Sixth United Nations Regional Cartographic Conference for Asia and the Far East.
7. Somali — G. Gómez de Silva.
8. Serbian — G. Gómez de Silva was asked to prepare a draft resolution for the Second Conference. Special consideration should be given to the fact that Serbo-Croatian appears in both a Cyrillic and a Roman writing system.
9. Macedonian — F. Nédélec.
10. Bulgarian — P. J. M. Geelan.
11. Mongol — F. Nédélec.
12. Maldivian — P. J. M. Geelan.
13. Burmese — P. J. M. Geelan.
14. Thai — C. R. Page. The meeting further suggested that Mr. Page should enumerate alterations to the recommended system for transliteration of Thai names as cited in "Romanization guide for Thai script", April 1968.
15. Khmer — C. R. Page's comparative study revealed some inconsistencies in the joint Cambodian and BGN/PCGN 1962 system referred to in the section concerning Amharic in the report of the second session of the Group of Experts, 29 April 1970. They would be brought to the attention of the authorities of the Khmer Republic in the hope that a final version of the system might be presented to the Second Conference for adoption.
16. Laotian — C. R. Page.
17. Chinese — With regard to the last sentence of the section concerning Chinese in the report of the second session of the Group of Experts, 29 April 1970, the East Central and South European division would submit to the Group of Experts on Geographical Names at its fourth meeting a report on the romanizaton of Chinese script. The United Kingdom division would also prepare a statement as would C. H. Wang of the Asia East division.
18. Korean — C. R. Page.
19. Japanese — C. R. Page.
20. With respect to the languages of the Indian division, it was recommended that the transliteration tables distributed by D. N. Sharma should be circulated for consideration, and comments should be directed to him in time for discussion at the Second Conference in relation to paragraph (*b*) of recommendation D combined in resolution 4, of the Geneva Conference.[b] The writing systems of the following languages were involved: Hindi, Nepali, Gujarati, Marathi, Punjabi, Oriya, Bengali, Assamese, Urdu, Telugu, Kannada, Malayalam, Tamil, Kashmiri, Singhalese and Bhutanese.
21. Concerning the languages of the Union of Soviet Socialist Republics division, A. M. Komkov would present a statement on the romanization of Russian to the Second Conference in 1972. Subsequently, he would give consideration to romanization systems for the State languages of the constituent Republics other than the RSFSR (Ukrainian, Byelorussian, Maldavian, Tajika, Uzbek, Turkmen, Kirghiz, Kazakh, Azerbaijani, Armenian and Georgian). In that connexion, it was proposed that the following modifications should be made to recommendation D of resolution 4 of the First Conference:[b] paragraph (*c*) should be redesignated (*d*); and a new paragraph (*c*) should be inserted as follows: "Give a recommendation as to which linguistic form or forms should be used for international standardization".
22. During the last meeting, the Working Group, on the basis of information received from G. Gómez de Silva, unanimously elected J. Breu to be the new Chairman.

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[b] *United Nations Conference on the Standardization of Geographical Names, Volume I: Report of the Conference*, p. 11.

Annex VII

SPECIFICATIONS FOR THE PREPARATION OF A BIBLIOGRAPHY OF GAZETTEERS

The bibliography will refer to:

1. National gazetteers and dictionaries of geographical names, arranged by country and territory, published by:
   (*a*) Governmental agencies;
   (*b*) Semi-official agencies;
   (*c*) Private publishers;
2. Gazetteers issued by official agencies dealing with geographical names of countries not of their own sovereignty;
3. World-wide gazetteers issued by:
   (*a*) Intergovernmental organizations;
   (*b*) Governmental and semi-official agencies;
   (*c*) Private firms;
4. Index gazetteers of atlases:
   (*a*) Regional atlases;
   (*b*) World-wide atlases;
5. Indexes to the names appearing on a particular map sheet or map series;
6. Glossaries.

AGENDA ITEM 16

Special attention to problems identified in papers presented by Governments

(No papers were submitted.)

AGENDA ITEM 17

Automatic data processing

COMPUTER PROCESSING OF GEOGRAPHICAL NAMES*

Report presented by the Federal Republic of Germany

In the Federal Republic of Germany studies on the possibility of processing geographical names by computer were initiated in 1969. In the first period of these studies special attention was given to the requirements of cartographers. Various categories of geographical names were formed, problems of data capture were considered, and the amount of peripheral information required was subjected to research. A first approach was reached at the end of 1970. Early in 1971 a circular dealing with the problems and containing recommendations was distributed to all official agencies in the Federal Republic of Germany for further comments. The answers were discussed in meetings during March and April 1971.

At this stage, the requirements of cartographers were defined. The work so far had been executed by the Institut für Angewandte Geodäsie at Frankfurt am Main, in co-operation with the Institut für Landeskunde, Bonn–Bad Godesberg.

A second period started in June 1971 when the problem was discussed with mathematicians from the Gesellschaft für Mathematik und Datenverarbeitung, Bonn-Birlinghoven. This organization is concerned with computer problems related to federal agencies. It completed an elaborate analysis of the system. Based on this analysis, a third period will begin early in 1972 — the programming of the various phases of data processing for further retrieval. In a fourth period the programmes will be tested. For this purpose a special area around Frankfurt am Main has been selected and the data capture has already been completed.

A report on the subject and the results reached so far will be given at a session of commission III during the International Cartographic Association meeting on "An Integrated System of Processing Geographical Names" at Ottawa in August 1972. The word "integrated" means not only that names are stored for the preparation of gazetteers or alphabetical listings, but also that the system will permit the retrieval of such information as listings based on the number of inhabitants, or locations either in geographical or Universal Transverse Mercator co-ordinates or in the numbering system of the national map series. Listings based on attributes such as the length of rivers, administrative status, heights above sea level etc. will also be possible.

* The original text of this paper was contained in document E/CONF.61/L.19.

THE APPLICATION OF AUTOMATION TO GEOGRAPHICAL NAMES*

Report presented by the United States of America

A review of automation in the field of work on geographical names reveals that progress has been made but that there still remains much to be done. There have been significant developments in the design of machine systems which are directed to specific name-handling, but most are limited to specialized operations and lack compatibility with general name data-bank concepts.

The development of name data banks by Governments, scientific institutions, business houses, and other organizations has been on the upsurge for many years. Requests for copies of or access to the United States Board on Geographic Names gazetteer tapes are on the increase. The ability to select names according to such criteria as political division, type of feature and map sheet makes such stored data a very valuable resource.

Some progress in the design of systems which will store and print out all desired diacritical marks and special characters has been made. As far as is known, the systems which have this capability are designed for long-range programmes involving a large volume of specialized work — for example, the preparation of library reference cards. All such systems appear to have deficiencies such as difficult and expensive input, incompatibility with other computer equipment, loss of data-manipulation capability or slow print-out speed.

It is generally agreed that input by optical scanning devices is rapid and accurate, and that it allows for the storage of diacritical marks and special caracters. However, as with other systems, the cost is high and it is

* The original text of this paper was contained in document E/CONF.61/L.48.

difficult to document the savings. As with most name files, and for any system, the cost of converting the files to a machine-readable form can be prohibitive.

Further research is necessary in the development of data storage systems which retain the capacity of processing data and interfacing directly with automatic mapping devices. No such systems are known to exist at the present time, although it is evident that the elements exist and the theory of design is well understood. To justify investment in such a system it would have to have the capability of providing names for maps and consequently a storage capacity for scores of millions of names. At this time the selection and application of names is one of the major cost- and time-consuming factors in cartography. If automation of the other aspects of compilation outruns the automation of the naming process, a serious bottleneck will result

For specialized Board on Geographic Names gazetteers such as those for the Republic of Viet-Nam and conventional names, the Board has experimented with the use of computerized photo-typesetting devices. The quality of the product has been excellent; however, the lack of compatibility of the data storage for other applications of name output is another demonstration of the problem inherent in system design. Clearly the computer industry has arrived at a stage where more attention should be paid to industry-wide standardization.

It is recommended that an increased effort should be directed to the expanded application of automation to geographical names, so as to fulfil the needs of a wide range of research and reference users, such as libraries, publishers, and educational and research institutions; and to satisfy the requirements of map production.

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