Land Survey Board. No systematic check of the spelling has, however, taken place; instead, the policy is to check and, where necessary, make connexions to place names as the national coverage of the economic map is extended. The methods used are indicated below.

The Geographical Survey Office compiles lists of property names, parish by parish, from the property registers. At the same time, the spelling of these names as they appear on available map sheets and other documents such as older economic map sheets, topographic map sheets, land office maps, land registers and church records is entered on the lists. The lists are then passed on to the Swedish Place Names Archives for comment. In cases where the suggested spelling differs from that used in the property register, the material is handed over to the National Land Survey Board for a final ruling. The Survey Board, in turn, requests the local authorities concerned, together with private land-owners to comment on the proposed changes. Thereafter the Royal Place Names Commission may comment on the collected material before the National Land Survey Board gives a final ruling. The names are spelt on the economic map sheets in compliance with this ruling.

During the field work which is later carried out by the Geographical Survey Office, place names are checked to a certain degree, largely by means of interviews with local inhabitants, and in a few cases the information obtained may be such that changes in the spelling used in the property register appear to be warranted. In these cases, also, the National Land Survey Board gives a ruling after consultation with the Royal Place Names Commission.

Other place names and feature names. A method has been worked out in conjunction with the Royal Place Names Commission such that all the names which appear on our maps are checked by place names experts. The direct result of this is that map-users can be confident of the correctness of the names which appear on the sheets. The method is described below.

Copies of all documents referring to geographical names in each proposed mapping area are obtained from the Swedish Place Names Archives. These are then used by the field surveyor when he interviews members of the local population. At the same time, the names are entered in their correct positions on the field sheet and, where possible, the areas to which they refer are also defined. In addition, the surveyor goes through all the available

name material, checks pronunciation and collects all the additional information that he deems to be of value. To help with these investigations, the surveyor has access to certain map sheets such as old economic map sheets, topographic map sheets, land office maps, forest maps etc. Since the surveyor interviews only those persons whom he happens to meet in the course of normal field work, the investigations can hardly be looked upon as systematic. A more strictly systematic inquiry into local place names is, however, carried out by the leader of the field party who contacts persons who are known to be well familiar with the area being surveyed, big land-owners and employers of companies engaged in the exploitation of local timber resources. In this way an independent check of the material collected by the surveyor is obtained. As a general rule, an attempt is made to obtain the views of at least two independent witnesses when place names are being checked.

The leader of the field party then enters the collected information on a master field sheet. All names are entered in their correct relative positions and a clear indication is given of what the place name refers to and, where possible, to the limits of the area for which the name is used, The type and size of the lettering used is determined from a key governing the different lettering types used on the economic map sheets. At the same time, the sources of information (Swedish Place Names Archives, local pronunciation, various map sheets) are indicated together with the different spellings used by these sources. The material is then handed over to the Swedish-Place Names Archives for expert examination of the spelling of those names which do not appear in the records in the archives, together with others, which, as a result of the information collected in the field, appear to require further study. Thereafter the Geographical Survey Office determines the spelling to be used on the map sheets.

The Geographical Survey Office's field staff are not geographical names experts; but they are given a certain amount of tuition with a view to making the field investigations both easier and more reliable. In this connexion, it can be mentioned that instruction is given in field methods of collecting name information. Besides this tuition, experts from the Swedish Place Names Archives give lectures before the beginning of each field season on the place names in areas where field work is to be carried out.

PROBLEMS OF STANDARDIZATION OF GEOGRAPHICAL NAMES IN A MULTINATIONAL STATE

Paper presented by the Union of Soviet Socialist Republics*

The standardization of geographical names in the USSR has distinctive features and is carried out on the basis of the principles of Soviet national policy. The Soviet Union is a multinational socialist State comprising 130 peoples, numerically large and small, each of which preserves and develops its national culture. The majority of these peoples have and develop their own languages.

National equality of rights is a law of life of the Soviet State. The peoples of all nationalities of the Soviet Union enjoy the right and have the opportunity to study in their native languages, as well as to create and develop various organizations of administrative and economic control functioning on the basis of their native languages.

The right to education in the native language is set out in article 121 of the USSR Constitution (fundamental law). In the Soviet Union, all conditions have been established for the further development and mutual enrichment of national cultures and languages. More than fifty nationalities acquired a written language only after the October revolution. At present, books, magazines, newspapers, geographical maps and atlases are issued in more than sixty national languages in the USSR. The Russian language holds a special place among them; it serves as the main means of international communi-

^{*}The original text of this paper, prepared by A.M. Komkov, Chairman, Terminological Commission of the National Council of Soviet Cartographers, appeared as document E/CONF.53/L.41.

cation and gives each of the Soviet peoples a possiblity to take advantage of the achievements of the science and culture of all the others. Furthermore, the importance of the Russian language lies in the fact that its alphabet has become the foundation for written languages of many other nations of the USSR. The peoples of the Armenian and Georgian Republics use their national scripts, and the Latin alphabet has long been used in the Latvian, Lithuanian and Estonian Republics.

Standardization under such conditions cannot be confined to the establishment of a stable and uniform spelling of geographical names in one of the national languages, for example, Russian. It involves the identification and establishment of the national form of each name, which must then be rendered in the official languages of all the other nationalities. This is carried out in three stages: standardization of names in the language of each nation of the Soviet Union; standardization of methods of rendering national spelling into Russian; standardization of methods of rendering, from Russian, names foreign to each particular language, for example, rendering Kabardinian names into the Chukot language, Armenian names into the Estonian language, Lithuanian names into the Uzbeck language etc.

Thus domestic standardization of geographical names in the Soviet multi-national State is carried out on the principles and in the order accepted in international standardization; it is therefore of definite interest to the present Conference.

Many State, scientific, cultural and social agencies are directly interested in the standardization of USSR geographical names. It is of special concern to administrative control, communication, transport, educational and publishing agencies and particularly to the State cartographic and geodesic service.

The Central Administration of Geodesy and Cartography is responsible, under the USSR Council of Ministers, among other things for co-ordinating the naming and renaming of geographical features.

The standardization of geographical names in the USSR as far as the relation of these to maps and other official documents is concerned is carried out on the basis of a "general instruction" (1958) and "regulations" (1961) which define the basic principles governing the spelling of geographical names and their transposition into Russian from the languages of the Union and Autonomous Republics.

Detailed regulations governing the rendering into Russian of geographical names from various languages of the Soviet Union are laid down in special instructions, such as the "instruction for rendering geographical names of the Azerbaijan SSR" (1956). Fifty-eight such instructions have been elaborated thus far. They are drawn up in close collaboration with administrative and scientific agencies of the individual Republics and, as a rule, are adopted in those Republics.

The toponymic investigations which have recently been developing on a large scale do much to promote the establishment of basic principles and regulations for rendering geographical names. The results of such investigations, such as the *Principles of toponomy* (1964) or the *Dictionary of local topographic terms* by E. and V. Murzaev (1959), are used to develop methods of field recording of names and to draw up recommendations on the naming of points in sparsely populated areas and the establishment and selection of traditional names.

Voluminous work is proceeding on the identification, collection and systematization of proper names of populated areas, railway stations, landing-stages, seas, lakes, islands, rivers and other water sources, mountain ridges and separate crests, passes, depressions and other local features. The main sources for the identification and establishment of names of populated areas which have been thoroughly studied from a topographic point of view and which are economically developed are reference books on administrative and territorial divisions as well as decrees issued by the presidium of the Supreme Soviet of the USSR and those of the presidiums of the Union Republics, others are official reference books published by the ministries of transport, water transport and civil aviation, as well as topographic maps and sea charts, geographical dictionaries etc. Geographical names recorded in official reference books are adopted as mandatory. As far as other names are concerned, toponymic research is carried out.

The role of such research is especially important in connexion with the detailed study and development of previously little known territories. Usually such research is conducted in the course of a topographic survey. At the present time, a majority of economically developed countries have completed or are completing the topographic mapping of their territories and acquiring the most complete indexes of national geographical names. However, in most developing countries the problem of the initial mapping of their territories is awaiting solution. For those countries it is very important to establish the proper system for the identification of local geographical names from the outset of the topographic survey, a system reflecting the national features of the population settled in this or that area of a given country. Otherwise names may appear on the maps and be adopted in official use which are unknown and foreign to the local population. It will be difficult to get rid of such names later. Many geographical names of the African continent have proved this fact.

For some developing nations, especially those with multinational populations, our experience in collecting and establishing names on this basis while performing topographic surveys can be of definite interest.

Modern methods of mapping by means of aerial photography exclude the need for observations and measurements on the terrain. At the same time, the need for visiting and making a complete examination of the mapped territory is obviated. This may adversely affect the quality of a map, mainly because the names of geographical features are not adequately established. In such cases attempts to remedy the situation by assigning new names, chosen at random, will result in nothing but harm.

In the practice of topographic surveys and collection of geographical names, Soviet experts are usually guided by the basic rules set out below.

- (a) National names of geographical points located on the territory of a certain Republic, region or national district, and which are not listed in official sources, are indicated on maps in the modern spelling of the language of the prevailing nationality.
- (b) If in a national Republic or region of the Soviet Union there is a territory with a population speaking a language which is one of those officially accepted in the Soviet Union, then the geographical names of the territory are given according to the rules established for that language. For instance, in regions of the Turkmenian

Republic populated by Kirghiz, Tadjik or Uzbek peoples, the geographical names are set up in accordance with the rules of translation from those languages.

- (c) Geographical names are collected by specially appointed persons. The names are collected not for each map sheet separately but for a particular geographical region having natural or administrative boundaries.
- (d) The names are collected in the local administrative organs, collective farms and separate inhabited localities with the help of individuals from the local population who are well acquainted with their region or terrain. The location of the geographical points named is determined through examination (with the help of such persons) of aerial photographs or photographic diagrams of the given section.
- (e) In sparsely inhabited regions, features which are not named by the local population may be given names in the process of field topographic work. These names must express the characteristics of the feature—size, shape, colour etc. Random names having no relation to the object are not recommended.
- (f) The names collected on the terrain are grouped in a certain order in the special register for each sheet of a map.

Variant of a register

	Series No.
Тур	pe of features
For	rm of name on previously issued map
For	rm of name according to local population
For	rm of name according to other data
Laı	nguage
Wr	iting in national graphics
Me	eaning of the name
De	termined form of the name
No	ites

The operations involved in the initial determination of names are usually carried out in the following order:

Determination of the official form of names, fixed legally or issued by government organs;

Determination of names found in previously issued maps, reports of various expeditions etc.;

Checking of names in the field and clarification of their Russian equivalents;

Collection of new names used by the local population and their Russian equivalents;

Assignment of names to features hitherto unnamed; Checking and approval of the list of all names in local administrative organs.

It will be noted that, in industrially developed countries entirely covered by topographic maps of large or medium scales, the execution of all these processes is unlikely to take place. Usually in such cases the topographic work will be mainly one of map revision.

Properly trained research personnel are essential for the highly skilled task of the initial recording of names. The investigator must know something of the toponymic system of the territory surveyed: which languages contributed to the formation of the modern geographical nomenclature and in what order, and the part played by the languages of the modern population in this process. He has to have some knowledge of the language (or languages) of the present population, with its sound structure, grammatical composition, orthography and local geographical terminology and vocabulary. He must also be something of a psychologist: he must know how to choose his informants, to gain their confidence and to obtain all the necessary information from them. It is essential, of course, to check the information obtained from one individual against the information obtained from another. The technique of recording is also of great value. So far, a field register and a pencil have been the most widely used equipment for setting down information. It is now high time to use portable sound recording equipment. In this way, after the field work has been completed, highly skilled experts in different languages will be able to listen to the recorded geographical nomenclature and help to determine the spelling and translation of names.

There is no doubt that the method we have described of determining names in the course of topographic surveys may be improved on the basis of the experience of other countries. This is the aim of international co-operation.

STANDARDIZATION IN MULTILINGUAL AREAS

Paper presented by the United Kingdom¹

- A. The areas involved will include:
- (1) Countries where two or more languages have equal official status (e.g. Canada, Belgium, Finland, Ireland, Switzerland, Yugoslavia²);
- (2) Federations in which constituent states have their own languages (e.g. India, Pakistan, USSR);
- (3) Countries where minor languages are spoken that have little or no local use officially.

As far as A (1) is concerned, the problem is comparatively simple: standardized names follow the language of

origin, e.g. names in Dutch-speaking areas of Belguim are written in Dutch and those in French-speaking areas in French. It will normally be the case that the names of the more important cities and features in such a country will exist in both languages, e.g. Basel/Bâle/Basilea, Helsinki/Helsingfors, Saint Lawrence/Saint Laurent.

The situation in A (2) presents rather more problems. It will usually be the case that the basic mapping of the territory is done in terms of a single official or administrative language and it will be convenient if standardization of names follows the same practice. Each constituent state will also probably produce maps and/or gazetteers with names given in the local language, e.g. Ukrainian in the Ukrainian SSR, Bengali in East Pakistan.

¹ The original text of this paper appeared as document E/CONF. 53/L.55.

² In Yugoslavia there are also two scripts having equal status.