## NATIONAL STANDARDIZATION AND GAZETTEERS

## Paper presented by France\*

The cartographers of today are increasingly concerned to provide not only as precise a geometrical description of the land as possible but also the correct names of localities, both inhabited and uninhabited. The reason for this is that with the increasing speed of communications and the transmission of information and with the growing frequency and scope of travel, more and more people are becoming acquainted with more and more places, which must therefore be unambiguously identified.

This concern is not peculiar to the last few decades. As early as the eighteenth century, Cassini had indicated the course to be followed in this regard in France by having lists of names, generally by parishes, drawn up for each sheet of his map and then having these lists checked by officials or eminent persons of the locality. A comparison of the place names in the lists with those on the map quite frequently reveals discrepancies which were not always the fault of the map engravers. Often, the name on the original draft of the map is given in a more dialectal form—for example, in a dialect of the south of France—than the form appearing in the list by parishes, the name on the map having likely been obtained in the field, whereas the name on the list was supplied by the lord or the parish priest, whose language of conversation was French.

In the preparation of the map on the scale 1:80,000, called the ordnance survey map, the same precautions were taken. As regards place names, however, the sources drawn upon for this map were the local property maps, and most of the place names were then copied on to the indexes of each commune's atlas.

In the preparation of the new map of France of 1922, the criticisms made of the previous map were taken into account, and an effort was made to improve the quality of place names through the use of more refined methods of research by which, in most cases, it is possible to authenticate a place name before its approval for use on the map.

It is not the purpose of this paper to deal any further with the research procedures that are used. Attention will be given rather to another problem, namely, that of providing the map user with a document enabling him, as he travels about the area included within the limits of the map sheet which he holds in his hand, to determine easily and quickly the name of any particular hamlet, stream, peak or other feature. The map user may also, however, be confronted with the reverse problem of trying to find on the map some locality or feature about which he has no more precise information than the name. The ease or difficulty he will experience in tracking down the locality or feature will depend, in the absence of any precise information about its geographic co-ordinates, on how large it is and how well it is known.

Different kinds of partial solutions have been found for this problem. The gazetteer or index part of an atlas enables the map user to find items and names on the maps without difficulty by means of a reference to the number of the map concerned and to a letter and numeral combination giving the position of the feature in relation to the geographic meridans and parallels. This is one of the most common methods. Somewhat apart from the purely cartographic domain are the gazetteers of the communes of France that are published by private or government bodies. The information provided by the better among these gazetteers includes a brief description of the location (direction and distance) of a place in relation to an important town, which is presumed to be better known than the one whose location is being sought.

The usefulness, however, of gazetteers more complete than the type of documents referred to above has long been recognized. As early as 1859, a ministerial circular of the imperial government set out the guidelines to be followed by the editors of the topographic gazetteers of the departments in the cases where such gazetteers were decided upon. These gazetteers (one per department) give an alphabetical listing of all the inhabited places in a department, sometimes including named places or geographical features which are more outstanding than others. The location of the named places is briefly indicated, only the name of the commune in which they are situated being given. These names, however, are very valuable for the research worker, linguist or historian because the compilers of the gazetteers have carefully recorded all the various names given to the places in question in past centuries as far back in time as it was possible to go. There are at the present time thirty-four of these gazetteers, to which may be added three more which were compiled along the same lines but are not part of the official series.

In more recent times, the National Institute of Statistics and Economic Research (INSEE), whose research activities extend to all areas of the country's life, has also given attention to this problem. It has, since 1951, been publishing a series of departmental gazetteers entitled –Nomenclature des hameaux, écarts et lieux-dits— (Gazetteer of hamlets, remote areas and named places). These gazetteers include only the names of inhabited places and thus exclude the names of rivers, mountains and ordinary named places. They are generally divided into two parts: an alphabetical list of all the inhabited places with a reference to the commune or higher administrative unit to which each one belongs, and a list giving for each commune the names of the inhabited places coming under its jurisdiction.

Although these gazetteers are more or less uniform in style, they do not always give the exact location of the places named. The information provided is of the type: direction in relation to and distance from the chief town.

At the National Geographic Institute of France (IGN), improvements in the typesetting procedures for map names have opened the way to a new solution to the problem of lists of place names.

Formerly, as each map sheet was made up, lists of names were compiled manually from the surveyor's lists of names consisting of notebooks in which the surveyors, after an investigation in the field, had recorded the place names to be included in the map. As the names on a map are printed in different kinds of lettering, the printer has to be supplied with different lists for the different fonts of type in order that the typesetting—which is now done mechanically with a Fotosetter machine—might be facilitated. The succession of manually prepared copies needed for the lists of names for maps on the scales 1:20,000, 1:50,000 or smaller scales was inevitably a source of errors. The use of punch-card machines for these operations is conducive to greater efficiency, speed and precision. The basic documents continue to be the

<sup>\*</sup> The original text of this paper appeared as document E/CONF. 53/L.60.

surveyor's list of names and the names tracing on which the field surveyor has entered the place names at the exact spot where they are to appear on the map. With the aid of these documents, a punch card is prepared for each place name by a special section of IGN. The card contains the following information:

A reference to the sheet on the scale 1:50,000 and to the double sheet on the scale 1:20,000;

The administrative location of the named item: department, arrondissement, canton, commune;

The geographic location in Lambert kilometric co-ordinates (six figures);

The name itself, including accent marks, if any;

A summary definition of the named object by means of a "detail code" (two figures);

The kind of lettering to be used;

A precise indication whether or not the name is to be retained in the derived map on the scale 1:50,000;

In the case of communes, the population to the nearest hundred.

In this way, a permanent file is built up which, through proper sorting, can be used for the preparation of a wide variety of lists: by kind of lettering, by names of rivers and so on. The sorting is done very rapidly by machine. After a batch of punch cards has been sorted, it is put in a tabulating machine, which prints the information from the cards at the rate of about two lines a second.

Alphabetical sorting is of particular interest to us because it is basic to the compilation of a gazetteer. It does, however, present certain problems, principal among which is the need to rearrange the elements of a place name. The names on the cards cannot be filed in the order in which they are normally written, specifically because the articles and certain terms (common nouns) are customarily placed after the proper noun in lists of names. For example, a punch card will bear the name "Agarus (Serre des)" instead of "Serre des Agarus" and will thus be filed under "A". Precise rules must therefore be laid down both for the guidance of the card-punching section and so as to ensure uniformity in the arrangement of the place names.

The second problem is that of alphabetical sorting by machine. Since machine sorting for all letter positions is a long and therefore costly process, the sorting has been limited to the first six letter positions. It might therefore happen, for example, that "Aigue vieille" would come before "Aigue blanque", since the blank space between the two words, which falls in each case in the sixth letter position, would be treated by the machine as a letter preceding "A". In these circumstances, the simplest solution is to make a preliminary sort and then a prelimin-

ary tabulation based on this in order to locate the errors and make the necessary adjustments. These adjustments, consisting of putting the cards which are out of place in their proper alphabetical order, can be carried out manually in a fairly short time. After that, the final tabulation is made.

The advantages of the final tabulation are that it provides the following: alphabetical arrangement, reference to the sheet and the double sheet where the name appears, general designation of the named item, Lambert coordinates and administrative location.

There are also some disadvantages.

In the first place, as the names are printed in capital letters without any accent or punctuation marks, the lists have to be revised manually in order that this information can be added with the aid of a special code to the right of the name.

In the second place, all the other information is coded, and while this does not present any difficulties for the sheet number and the co-ordinates, the need in all other cases to refer to a key is irksome to a reader who is pressed for time. Thus the following series of coded data is interpreted in the manner indicated:

87=hill, hillock

30 = department of Gard

1 = Alès arrondissement

38 = Vézénobres canton

188 = Ners commune

The last four figures are those that appear in the "Geographical code" of INSEE.

Such lists serve a useful purpose because they provide information on names which previously could be found only in the land registers. In the IGN maps on the scale 1:25,000 approximately three names are shown per square kilometre, which is the density compatible with the scale.

From a toponymic point of view, however, these lists are still very inadequate. They ought also to provide the variant forms of the name which may have been discovered in the course of the field investigation and which obviously cannot be included in the map, and the pronunciation, given in brackets, in phonetic symbols (phonetic alphabet derived from that used in the Gilliéron and Edmont linguistic atlas of France). At the head of the gazetteer, there should be a short glossary giving the dialectal meaning of certain of the words used in the place names of the relevant sheet. Pronunciation and glossary, which are required by toponymists, are more appropriately included in the gazetteer than on the map, where it is difficult to insert them. Although financial difficulties are at present standing in the way of these improvements, the preparatory studies are being continued.

## NATIONAL GAZETTEERS

## Paper presented by New Zealand\*

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The New Zealand Geographic Board, constituted under the New Zealand Geographic Board Act 1946, is the authority responsible for geographical names within New Zealand. The Minister of Lands is responsible for the Act.

\* The original text of this paper, prepared by R. P. Gough, Surveyor-General, Chairman, New Zealand Geographic Board, appeared as document E/CONF.53/L.7.

In 1956 the Government appointed the New Zealand Geographic Board as the New Zealand Antarctic Place Names Authority.

The address of the New Zealand Geographic Board is as follows: Secretary, New Zealand Geographic Board, c/o Department of Lands and Survey, P.O. Box 8003, Wellington, New Zealand.

The membership of the board is as follows:

The Surveyor-General (Chairman);