

EIGHT LANGUAGE DICTIONARY OF PHOTOGRAMMETRY, AEROSPACE SURVEYING AND CARTOGRAPHY TERMS

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ABSTRACT:

Since the Declaration of Independence of Ukraine in 1991 we can observe a considerable revival of international activity in political, scientific, humanitarian and other spheres of life in Ukraine. These positive processes also involve specialists in geodesy, photogrammetry, cartography and remote sensing. We believe that a well — compiled terminology basis corresponding to the terminology in other languages with well established traditions and experience will be of great help in promoting the integration of Ukraine in the international information space. The group of authors has carried out the election and translation of terms from Ukrainian into German, English, French, Spanish, Polish, Czech, and Russian. The paper describes the structure of the dictionary, the contents of each chapter and usage instructions, the dictionary containing 809 terms will be demonstrated at the International Congress of ISPRS.

MANUSCRIPT:

On August 24, 1991, Verkhovna Rada of Ukraine (Ukrainian Parliament) passed the Act on State Sovereignty. After this remarkable historical event the international activities of Ukraine in political, economical, humanitarian, scientific-technological and other spheres began reviving considerably. Ukraine has become member of many international organisations, unions and associations.

This positive process of reviving wholly involves specialists in geodesy, cartography, photogrammetry and aerospace surveying. In particular, in 1992 Ukraine became a member of International Association of photogrammetry and remote sensing. The process of integration of our state into the international information space is being facilitated by following factors. First of all, this is personal contacts among scientists from various countries. In this process also plays major role creation of a developed terminology base, accessible for all specialists, from Ukraine and other states.

Pursuing this aim we have put forward the idea of creating an 8-language dictionary containing the main terms of cartography, photogrammetry and aerospace surveying.

Terminology base of the following disciplines has existed in Ukraine for decades, regardless the fact that the dominant language in the former USSR was Russian. Publishing of study guides, monographs, scientific articles in Ukrainian before 1991 was a very rare event. All the dissertations works were exclusively in Russian regardless the fact that the geodesy, cartography and photogrammetry centres were not only in Moscow, St. Petersburg and Novosibirsk, but also in Kyiv and Lviv.

Thank to the fact that in the Universities in Kyiv and Lviv some lecturing was in Ukrainian we were able to develop our own terminology.

The selection of the languages of the dictionary was not accidental. The obvious is fact that the most wide-

spread languages in the scientific world are English, German and French. The rest of the European languages are not so wide-spread. However, Europe is a powerful geodesy centre with highly developed net of Universities, firms and companies which publish materials in their own languages. To this group belong Spanish, Polish, Czech, Russian and some other languages. Choosing languages for the dictionary we were constrained not by the importance of one or the other language but rather by the availability of the experts in the needed fields and languages. We regret the fact that during the preparation process we did not have sufficient contacts with the scientists from Italy, Sweden, Lithuania, Bulgaria and some other countries with big scientific centres and their languages are not included.

To compose the dictionary we have formed a team of the coauthors. Prof. A. Dorozhinsky: general editing of the dictionary, supervision of the authors collective work, selection of the terms of photogrammetry and their translation into Russian. Assist. Prof. Kh. Burshtynska: selection of the terms of aerospace surveying and their translation into Russian. Assist. Prof. Hudz: selection of the terms of cartography and their translation into Russian.

The translation into other languages was made by:

Assist. Prof. F. Kuzyk — English (en);

Assist. Prof. I. Kluchkovska — French (fr);

Engineer Z. Kuzyk — German (de);

Assist. Prof. S. Vlasenko and Engineer M. Chermshynsky — Spanish (es)

Engineer O. Drbal — Czech (cz);

Assist. Prof. R. Sydoryk — Polish (pl).

The computer and technical support were provided by Engineer T. Kundryk. Typing and editing of the text was done by Engineer N. Ivanyna.

At the beginning we were facing two principal questions;

— what kind of the dictionary should it be, terminological or usual ?

— how to select terms for the dictionary ?

For the first question the answer was received easily. In 1984 was published 6-language dictionary "Multilingual Dictionary of Remote Sensing and Photogrammetry" (Falls Church, Virginia). This dictionary to a certain extent has solved the problem of translation of some words. However, words and terminology are not the same things. The major difficulty for the dictionary editors is the fact that every language (especially technical) has its own terminological domain. Often one or the other term is being used in one language and is absent in the other. Frequently literal translation of a term from one language into another is very difficult, not precise or even impossible. It is a difficult situation, but the way out has to be found. Often it can be done by studying other languages especially technical terminology. In some cases qualified consultants are needed to resolve the problem. Historical tradition and the development of the science and technology leave their trace on the language. A language, specially its technical part has to be seen as a dynamic system which changes and improves constantly.

The concept of selection of the terms of the Dictionary was following. Every discipline was taken as a hierarchical structure. Therefore, in every discipline were selected major blocks and divided into subblocks, they into even smaller parts. The terminology base was built by the same token. This approach was probated during development of The State Standards (terms and definitions).

Some controversy composed question of the order of the terms in the dictionary. One of the options was to divide the dictionary into three parts "Photogrammetry", "Cartography", and "Aerospace Surveying". However this

option was not accepted because in our opinion all these disciplines have much in common and we decided to place all the terms in alphabetical order.

The structure of the dictionary is following. It includes an introduction (in all the languages), its main part and alphabetical indexes. All the terms are given in its main part. There are 809 of them. They are listed in Ukrainian alphabetical order. Just next to the term is its translation in the following order: German (de), English (en), French (fr), Spanish (es), Polish (pl), Czech (cz), Russian (ru).

An alphabetical index for every language (except Ukrainian) includes in itself all the terms, given in that language in alphabetical order. Next to the term there is a number under which the term is listed in the main part. This way, according to the number it is possible to quickly find a word and its translation into the other languages.

For the illustration purposes to the abstract are attached two annexes;

- a fragment of the main part of the dictionary;
- a fragment of alphabetical index of terms in English.

The work on the dictionary was completed at the beginning of 1995. However, because of the economical reasons it has not been published yet. The dictionary is well suited for students, engineers, scientists, who work in the field of Photogrammetry, Cartography and Remote Sensing.

It is understood that this work is not final and it has to be expanded and improved. Therefore, we are open for any suggestions and collaboration with anybody who is interested.