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Abstract:
Paper presents the works on Polish photogrammetric and remote sensing vocabulary. Deals with development of the dictionaries and glossaries, informs about sources for editions and recent works. Presents also Five-Lingual-Dictionary completed by Polish Working Group VI/3(Terminology-ISPRS Multilingual Dictionary)

Key Words: Education, Photogrammetry, Remote Sensing and Terminology

1. Brief review of development of the Polish Photogrammetric Vocabulary

Study and works on Polish Photogrammetric Dictionary started in 1934. Official Journal of Polish Society for Photogrammetry (Przegląd 1934-1937). "Przegląd Fotogrametryczny" (Photogrammetric Review) edited by Prof. M.B. Piascecki during 1934-37 issued (in the form of attached pages to the journal 633 terms in Polish, German and French. This dictionary was based on the Multilingual Photogrammetric Dictionary (German, English, French and Spanish) completed in 1934 by German Society of Photogrammetry and published in "Bild-Messung und Luftbildwesen". Another study on Polish Photogrammetric Vocabulary was provided during 1946-56. In 1948, at VI-th ISP Congress held at The Hague the direction of Commission VI of the ISP was delegated to the Austrian Society of Photogrammetry (Österreichische Gesellschaft für Photogrammetrie). Thereby the work in Multi-lingual Dictionary for Photogrammetry" (English, French, Spanish, German, Polish, Swedish and Italian) were concentrated in Vienna Multilingual, 1961. Financial support for edition of the Dictionary was granted by Prof. Schermherhorn and Photogrammetric Societies of USA, England and the Netherlands as well as photogrammetric companies:Officine Galileo, Nistri, Ottico Meccanica Italiana, Società d’Optique, et de Mecanique, Wild and Zeiss-Aerotopograph. The dictionary (English version) contains 4259 terms and was issued by N.V. Uitgeverij ARKUS publishing house in Amsterdam 1961.

The Dictionary comprises seven volumes. Each volume containing the words in one language in alphabetical order, consecutively numbered. Next to the words the numbers under which this word can be found in six other languages are put in six columns.


The first glossary Polish of photogrammetric terms (Polskie Narwy, 1960) was presented in 1960 as the Polish Standards "Fotogrametria" - PN 60/N 02220 updated in 1972 and 1990. It contains 163 Polish terms with explanation what does these terms means.

As can be seen from above the development of Polish photogrammetric vocabulary pass a long way. From the other hand the Remote Sensing vocabulary is the new one and needs study and setting up new terms - also in Polish language.


The first step in development of Polish Remote Sensing Dictionary was participation of Polish team from the Institute of Geodesy and Cartography (Warsaw) in the works on "Glossary of Terms on Earth Remote Sensing" (Glossary, 1985). It contains 900 terms and definitions of terms in Russian and translations of terms into 8 languages: English, Bulgarian, Hungarian, German, Polish, French, Tchechish and Russian. The Dictionary was edited by "Interkosmos", in Budapest 1985. From Polish side the following persons participated in this works: Tereza Banankowska, Krystyna Lady-Dzurycka, Andrzej Nowaniecki, Grzegorz Rudowski and Barbara Daniel-Danielewska. There are three parts in the Dictionary: Part I consists an alphabetic list of terms and their definitions in Russian. Each term is accompanied by its corresponding equivalents, arranged in the following order: English, Bulgarian, Hungarian, German, Polish, French and Tchech. A serial number is assigned to each term appearing in the Dictionary. Part II of the Dictionary contains an alphabetical list of terms in all languages listed above. After each particular term the serial number of its Russian equivalent is indicated. Part III includes some abbreviations commonly used in remote sensing.


*) Interkosmos - Scientific and research program for cosmic study organized in 1967 by former socialist countries. The program covered also field of Remote Sensing executed by special Working Group.


It was over 25 sources which were used during the works for compiling the Polish Photogrammetry and Remote Sensing Dictionary. Six of them were the main sources. Three mentioned in point 1 and 2 of this paper (Glossary, 1985; Polskie Normy, 1960; Olszyna, 1987) and another three edited abroad. The first one of the three was the "Tri-Lingual Glossary of Photogrammetry Terms" published by International Archives of Photogrammetry in Hamburg (Wolf, 1980). In 1984 our work was based mainly on this "Glossary". But in 1985 through the kindness of American Society of Photogrammetry & Remote Sensing of Geodesy Committee -Polish Academy of Sciences. The first edition was published with "Multi-Lingual Dictionary of Remote Sensing and Photogrammetry" (Multilingual, 1984). The Dictionary contains 1716 definition of terms in English and translations of terms into six languages: French, German, Italian, Portuguese and Russian. Edited and published by American Society of Photogrammetry in 1964 Fals Church, Virginia, USA.Editor-in-chief of American Society of Photogrammetry (ASP), our Working Group was supplied with "Multi-Lingual Dictionary of Remote Sensing and Photogrammetry" (Multilingual, 1984). The Dictionary contains 1716 definition of terms in English and translations of terms into six languages: French, German, Italian, Portuguese and Russian.

5. Five-Linguial Glossary for internal use in Poland.

Committee of Geodesy of Polish Academy of Sciences gave the financial support for compiling the Glossary of Photogrammetry and Remote Sensing vocabulary. The support was used mainly for different kind of technical work which were involved in the project. The basic intellectual effort was done as a welfare work of over 20 members of Working Group.

During the period 1984-86 the Group worked out 2053 Polish terms and definitions of terms as well as translations of terms into four languages English, French, German and Russian. Result of these works was DICTIONARY OF TERMS ON PHOTOGRAMMETRY AND REMOTE SENSING (with definition of terms in Polish). The dictionary (Sitek,1988) was edited in 1988 by University of Mining and Metallurgy in Cracow of only 150+28 in size. This dictionary was distributed to Polish photogrammetry scholars and next -conference was dedicated only to meet all the matters connected with issued dictionary. This conference gave valuable contribution in further compiling works on dictionary. The later step in development of Polish vocabulary on photogrammetry and remote sensing was done in the period 1988-90. The number of terms was extend to 2530 and all opinions and critical remarks presented at above mentioned conference were taken into account. In 1990 the second edition (Sitek,1990) of the dictionary - complementary and extended - was printed by the same publisher (issue 300+28).

The first and the second edition were published in two volumes. First volume contains terms and definitions of terms in Polish in alphabetical order numbered in such way that dictionary can be extended without changing the numbering of terms previously assigned (in first edition each consecutive terms was numbered with zeros at the end). First volume contains also translations of terms into English, French, German and Russian. Near by translations can be seen three groups of digits: one is number of terms, the second indicates the sources from which the terms was extracted and the third is thematic code used in ISPRS Multilingual Dictionary. Each group of digits was different shape and thickness.

The second volume consist of four bilingual glossaries: English-Polish, French-Polish, German-Polish, Russian-Polish. The terms in a foreign languages are set up in alphabetic order and they have also added the number of terms used in the first volume.

The second volume contains also the list of acronyms used in photogrammetry and remote sensing. The another list of remote sensing satellite is also attached.

During 1991 the further works were done for extending the vocabulary of Polish photogrammetry and remote sensing terms. New 344 terms were set up.

In 1992 and 1993 additional study and compilation works are planned and new third edition of the Dictionary containing about 4000 terms can be expected in 1994.


According to Lindig (1988) and having in mind the history, customs and statutes of ISPRS as well as contribution in first ISP Photogrammetric Dictionary (Multilingual,1961) - Polish Language Group can be included to the Primary Languages which create III Category of languages with own Glossary production.

The works of Polish Language Group is based on "10 Fundamental Principles" and Circular Letters of chairman of W.G.VI/3 - Dr. G.Lindig (Lindig, 1982). According to the Principles we produced separate Glossary (Volume I) with Polish entries and Polish definitions of terms extended with translation of terms into 4 foreign languages.

Volume II of Polish Dictionary consist of four special Glossaries -each containing only the
terms in English, or in French, or in German, or in Russian. To the each term listed in alphabetical order separate number is assigned. These numbers constitute the reference indices according to the relevant language (in general they differ for the same term).

In the Volume I of the Dictionary all Polish entries are also numbered in the same manner. The numbers assigned to the terms (entries) in five languages were used for compilation of third part of the Dictionary - A Reference Booklet. The Reference Booklet contains exclusively the reference indices listed in standard digits in five columns - each representing one language. The rows of this list contains the numbers (reference indices) assigned to the same terms placed in such a way that on the left side there is the number of term in original language while the next numbers in the same row are numbers assigned to the equivalents of the term in other four languages.

Five such Reference Booklets were compiled for the following original languages: English, French, German, Russian and Polish. The third part of Polish Dictionary is available in the form of paper copy of Floppy-disk.

BIBLIOGRAPHY:


Mehrsprachiges Wörterbuch der Photogrammetrie und Fernerkundung (ISPRS Dictionary - result of works of German WG VI/3 - not published yet), 1990

Mokrzycki W.,1989. Dictionary of Terms (with Definitions) on Image Processing and Interpretation (in Polish). Informatyka Nr 5 (pp.30-31) and 6 (pp.32-33)

Multilingual Dictionary for Photogrammetry. 1961. N.V.Uitgeverij ARGUS, Amsterdam, 7 Volumes, pp.830


Polskie Normy, Fotogrametria PN-60/N-02220 (Polish Standards), 1960.1972 and 1990, pp.1-10


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