INTERNATIONAL COOPERATION ACTIVITY OF THE UKRAINIAN SOCIETY OF PHOTOHRAMMETRY AND REMOTE SENSING

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ABSTRACT:

This article deals with the main tasks of Ukraine's national economy development which could be solved using fotogrammetric and remote sensing methods.

Inventory of land resoures and ecological state of environment are pointed out as urgent ones.

The characteristic of international cooperation of the Ukrainian Society of Photogrammetry and Remote Sensing is given. substantiated. The total number of photogrammetric terms is 300, that of aerospace survey terms is 85.

MANUSCRIPT

In 1995 there was the Society of Photogrammetry and Remote Sensing (USPRS) organized in a young independent Ukraine. At the constitutive meeting taking place in Kiyiv, there were the Statutes of the Society adopted, besides there were 7 commissions affirmed and the Society authorities elected. Professor Alexander Dorozhynsky was elected to be a president of the Society. Dozent Kh.Burshtyniska is a chairman of the Commission 4 "Topographicai Photogrammetry. Theory and Technology". The Statutes of the Society suggest international cooperation with ISPKS, national societies of some countries, universities, firms and persons.

In Ukraine the specialists in photogrammetry and remote sensing are working for state enterprises, at several institutes of National Academy, at some Universities and for two private firms. State enterprises basicly deal with producing cartographical materials on the basis of photogrammetrical technologies. Research Institutes cover the theoretical and practical problems of remote sensing and computer processing pictures. The State University "L'vivs'ka Politechnika" takes the leading part in this sphere among other Ukrainian Universities. In this University there is a Potogrammetry Department which exists more than 30 □years. Every year 20-30 engineers graduate from the department. The scientific investigation in the sphere of analitical and digital photogrammetry and its application in different branches of science and practice are held by the specialists of the department.

In the city of Vinnyts'a there is a scientific laboratory "Geosystem", which deals with produsing photogrammetrical devices, namely: analytical autograph "Stereoanagraph" and digital photogrammetrical station "Delta".

In countries with the transitional economy (as in Ukraine) are two main tasks set for scientists. They are as follows:

- To organize professional society which aim is to develop the branch in Ukraine;
- To strengthen international contacts, to get the information about scientific and technical achievements in different countries.

Ukrainian scientists possess tremendous experience of the use of photogrammetry and remote sensing methods. But we realize that in spite of all efforts there is a kind of lack in photogrammetry and remote sensing technologies. So Ukraine is interested in international contacts and first of all it cares about informational enrichment of the branch.

In July 1996 Ukrainian delegation participated in ISPRS Congress in Vienna. We are much obliged to professor Karl Kraus and to Organizing committee of the Congress for help. The Ukrainian delegation presented three scientific reports and the firm "Geosystem" displayed devices mentioned above. ("Stereoanagraph", "Delta"). We got all the materials of the Congress, which made it possible for our specialists to become acquainted with all new achievements of science and practice.

The international activity of our specialists is being realized owing to the General Administration of Geodesy, Cartography and Cadastre which is attached to the Cabinet of Ministry of Ukraine. Doc. Anatoliy Bodnar is a chairman of the Administration. The Administration cooperates with the services and firms of Canada, Switzerland, Sweden, France, Britain, Czech Republic, Poland and others. There is the exchange of information, delegations and specialists. Owing to the Administration there are 3 international projects being realized in Ukraine. The projects cover the problem of introduction of land registration systems.

Ukrainian Universities where our specialists are cooperate with the Universities of different countries. In particular: State University "L'vivs'ka Politechnika" collaborates successfully with Yevle University (Sweden), "Warsaw Politechnica" (Poland), Prague Research Institute of Geodesy and Cartography (Czech Republic), Delfy Association EUROLIS (Holland), Calgary University (Canada)

and some others. So we have definite experience of intensive and fruitful international cooperation.

Ukraine is quite a big country with its of more than 60.000 square km. and population 52 million inhabitans. These data are mentioned to explane the important problem which is set for our society. There is a process of privatisation started in Ukraine. This process making inventory of all land resources. As the area of our stste is very big, this aim cannot be completed by means of surface and geodesy methods only. So it is clear we should usephotogrammetry metods and technologies to make cadastre plan (scale 1:2000). One of such methods involving air space survey+ GPS+photogrammetry was ellaborated under natural conditions. This method is a result of international cooperation of scientists of "L'vivs'ka Politechnica" and Academy of Mine and Metalurgy (Krakow, Poland). Such a great amount of work suggests new approaches to technologies and management. All these caused our interest in the international experience in this sphere. Another important problem is to estimate the ecological situation with the use of remote sensing method. We have our own experience of using it, namely: there are some systems created to estimate the state of territories (GIS-''Chornobyl'" estimates radiation contamination of the territories around Chomobyl'). We try to concentrate the attention of our scientists on learning the achievements of other countries. One of the most important spheres of cooperation coveres the question of students exchange. It is extremely important and useful that young people could communicate on professional and cultural level. It leads to mutual understanding and improves international situation. Our students have a right to be the members of Ukrainian Society and we will promote international students cooperation.

To conclude everything mentioned above, it is necessary to say that it was a proper and useful step to organize the commission "International Cooperation and Data Exchange". The commission (Vl/3) is sure to develope the international cooperation with Ukrainian Society.