XV Congress INTERNATIONAL SOCIETY FOR PHOTOGRAMMETRY AND REMOTE SENSING (ISPRS) Rio de Janeiro 1984

REPORT OF COMMISSION VI

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ABSTRACT

The report covers the period August 1980 - March 1984 and deals with all subjects assigned to Commission VI by Statute ISPRS: Economics, History, Professional Aspects, Education, Periodicals, International Exchange of Information, Bibliography, and Terminology. Some comments are presented on the philosophy for running Commission VI compared to other Commissions of ISPRS. An outlook into the forthcoming quadrennial period is included.

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1 Preliminaries

The preceding President of Commission VI, Prof.Dr.Zbigniew Sitek from Poland, concluded his report to the Congress Hamburg 1980 with: "I hope that the progress achieved during the past four years will continue, and that the projects which started successfully in 1976 - 1980 will be finished in the near future" (SITEK 1980). The following account on the period August 1980 - March 1984 gives evidence on the endeavours of Commission VI to comply with this outlook.

According to the ISPRS Statute, the COMMISSION BOARD shall conduct the work of a Commission. Aside of the President and the Secretary, Dipl.Ing. H.Kantelhardt, all Working Group Chairmen (names are given in chapter 4) have been invited to serve in the Commission Board in addition to the following colleagues whose particular field is denoted in brackets:

- + A.Denis N.Fernando, Sri Lanka (professional aspects with emphasis on developing countries);
- + H.ten Haken, Netherlands (bibliography);
- + Prof.Dr.Z.Sitek, Poland (any business of the Commission in his capacity as outgone President);
- + M.M.Thompson, USA (publications policy);
- + Prof.A. van der Weele, Netherlands (earthwide considerations of education; professional aspects considered symbiotically on developing and developed countries).

Commission VI is assigned by Statute ISPRS to cover eight fields: Economics, History, Professional Aspects, Education, Periodicals, International Exchange of Information, Bibliography, Terminology. The President Commission VI feels an obligation to report hereunder on what has been done in anyone of these fields.

This report is arranged so as to comply with the demand of a member of our Commission Board: "The President's Report should firstly give an account on activities 1980 - 1984, secondly what the President expects to be achieved at the Congress, and thirdly what is his philosophy concerning activities to be continued, discontinued, or started by Commission VI during the next four years period".

2 Philosophy for organizing Commission VI 1980 - 1984

Some specific features inherent to Commission VI must be taken into account when organizing the work:

+ Quite a number of photogrammetrists and remote sensing specialists have an employment or an engagement in one of the topics of Commissions I - V and VII. Take as an example an individual doing research work on image quality of sensors. He will devote himself to this subject independant on whether or not he is a member of the respective Working Group. He will continue even if ISPRS would not exist.

In contrast, hardly anybody has a main employment on a topic of Commission VI. Hence, promoting a subject of our Commission necessitates weekend engagement on an honorary basis.

+ A typical feature with quite some impact on the work of Commission VI is that numerous photogrammetrists and remote sensing specialists appreciate the necessity to promote the topics assigned to Commission VI, however with the attitude that they have many more important subjects to tackle, and that they hope other colleagues, instead, will engage to solve the tasks of Commission VI.

An outcome of these specific features is that it is more difficult for Commission VI, compared to other ISPRS Commissions, to find colleagues being prepared to do substantive work.

The actual work within a Commission of ISPRS is done by Working Groups, and a Chairman is responsible that something will be achieved. He can choose a small group of specialists to become members of his WG. Experience proves it is fairly easy to get the agreement of individuals for becoming a member, yet it is often difficult to find members being prepared to really do some work. Anyhow, the bulk of the work rests with the Chairman. Therefore, Commission VI has been organized so as to have many Chairmen. To this end, any subject of our assignment has been subdivided in as many portions as is feasible so that any part can be tackled by an individual Working Group. This policy should result in more efficiency.

ISPRS is an international Society. That requires, to my understanding, that colleagues from countries scattered around the globe be given the chance to actively participate in our endeavours. To comply with this policy, 46 individuals (without counting WG members) from 27 countries in all continents had been invited to engage in Commission VI. Further, and envisaging that the ISPRS Congress 1980 and some previous Symposia had been convened in the FR Germany, considerable attempts were made to hold the Symposium 1982 of our Commission not in my country but in Zimbabwe, Africa. Much to my regret, this idea could not be materialized.

A final point is that Commission VI has a servicing function, as our assignments on bibliography, terminology, multilingual dictionary etc are tackled for the benefit of other Commissions. Successfully solving these tasks necessitates close co-operation with all other Commissions. I think we did our best to comply with this policy.

3 Symposium Commission VI, Mainz 1982

The inter-Congress Symposium of our Commission was held 22-25 September 1982 in Mainz. Welcoming addresses were presented by, inter alia, the Presidents of ISPRS and DGPF, and by the Sister Organizations FIG, IAG, ICA and OEEPE. 45 photogrammetrists and remote sensing specialists from 21 countries of all continents participated. 56 contributions from authors originating from 16 countries were presented in 16 sessions. Focal point topics were 'Information Retrieval' and 'Standards of Competence for Education' with three sessions each. Highlight of the Symposium was a demonstration of online retrieval via satellite communication to three host computers using the excellent technical facilities of the Second German Television System. Many discussions on all assignments and a concluding session of the Commission Board on a Rhine river boat settled policies for Commission VI up to the Congress 1984.

The Proceedings of the Symposium contain 346 densely packed pages with substantive minutes on all discussions.

4 Activities in the assignments of Commission VI

4.1 Economics

Economics of photogrammetry and remote sensing is quite a complex subject. The only mode to achieve something substantive seems to be tackling the problem as is done is done by a Working Group of the European Organization for Experimental Research (OEEPE) chaired by Prof.Jerie, Netherlands. Commission VI does not intend to duplicate efforts but sincerely hopes that this WG will produce results soon. We invited Prof.Jerie to deliver a report on the state of affairs.

An attempt was made to implement WG VI - 5 for evaluating cost effectiveness of modern methods of remote sensing compared to classical photointerpretation based on case studies. However, the vote of the Commission Board was not in the affirmative for this Working Group.

4.2 History

Dr.Blachut, Canada, and a team of most distinguished scholars are pledged in Working Group VI - 2 to prepare the book entitled: "Photogrammetry - Historical Review of Methods and Instruments". This unique work, having been initiated 1976, was scheduled to be published 1984.

On 22 May 1982, the state of content and of authors was:

Chapter 1, T.J.Blachut: Beginnings of photogrammetry until the introduction of the airplane

Chapter 2, F.L.Corten: Aerial photography, airborne aids, and navigational procedures

Chapter 3, R.Burkhardt: Analogue methods and instruments

Chapter 4, •L.Solaini, M.Cunietti, B.Astori and Z.Jaksic: Analytical methods and instruments

Chapter 5, H.Bonneval: Non - cartographic photogrammetry

Chapter 6, C.E.Olsen: Photointerpretation and remote sensing

Chapter 7, F.Doyle: Satellite photogrammetry

Chapter 8, K.Rinner: Significance and future role of photogrammetry

Chapter 9, B. Dubuisson: Synoptic tables

On 5 December 1983, Dr.Blachut submitted his resignation as Chief Editor. Three chapters seem to be completed. The available texts will be delivered to the President Commission VI.

4.3 Professional aspects

4.3.1 Inventory of manpower and educational facilities

Commission VI initiated in 1972 to establish an earthwide inventory of manpower in surveying and mapping including educational facilities. This most
valuable undertaking has successfully been accomplished by Prof.Dr.A. Brandenberger, Canada, as Chairman of WG VI - 1, whilst making use of a computer at
Laval University in Quebec. A report on this achievement has been published
(BRANDENBERGER 1980).

The Commission Board renewed 1981 the mandate of Prof.Brandenberger whilst endorsing for WG VI - 1 the task definition:

"Continuously updating the earthwide inventory of manpower and of education and research facilities".

Prof.Brandenberger planned 1981 to expand into an International Documentation Center Surveying and Mapping including Remote Sensing (S&M) with the objectives

- + to collect earthwide information on
 - professional S&M organizations,
 - S&M statistics on work completed, manpower and expenditures involved,
 - S&M education;
- + to reply to specific information requests on a global basis or for specific countries; and

- + to perform specific tasks and studies on request of participating bodies, thus
- + to become an international S&M clearinghouse.

As such a Documentation Center can serve all of the profession, Prof.Brandenberger proposed to make it a joint venture of the Sister Organizations (BRANDENBERGER 1982).

The President Commission VI has been much in favour of these ideas and promoted the endeavours. Keeping in mind that the proposal requires continuation after the retirement, he requested Prof.Brandenberger in January 1981 to draft a Statute for the Center including Specifications on details such as access to the databank, both intended as a basis for the deliberations with the Sister Organizations.

At their Joint Board Meeting in Sofia in June 1983, the Sister Societies appointed an ad hoc group with one Council Member each of ISPRS, FIG, ICA and ISM to study continuation of the Laval Databank as a joint venture. One point of concern seems to be that access is difficult as no adequate retrieval software is available.

Quite some input for the Laval Databank originates from many co-workers of ISPRS Working Group VI - 1. They have collected data for 12 years. Consequently, ISPRS must be considered as co-proprietor of the databank.

A United Nations Meeting of Experts on Remote Sensing Information Systems will be held in May 1984 in Feldafing, FR Germany. The President Commission VI is member of the program committee. He has proposed Prof.Brandenberger as Chairman of the sessions on training and research.

4.3.2 Professional strategy

After quite some preparatory work (see HOTHMER 1982, pp 310-334), Mr. Denis A.Fernando of Sri Lanka, in pursuance with a recommendation of the Commission Board, was appointed on 24 December 1982 as Rapporteur for the emphasis field VI - 12 with the task definition:

"Developing a suitable strategy for adequate recognition of our profession in terms of its responsibilities and its capabilities towards the welfare of people".

Mr.Fernando has prepared a paper for the Congress Rio de Janeiro.

At the SE Asian ISPRS Conference in Malaysia in May 1983, some countries reported that they do not have a national society in our field. The discussions resolved that this is disadvantageous. To counteract, Dr.Jilawai of Thailand agreed to prepare a background paper for the Congress on "Objectives and Scope of National Societies for Photogrammetry and Remote Sensing". An invitation to comply with this agreement was mailed to him on 10 June 1983. A reminder was sent on 8 October 1983. Unfortunately, I have not received a response.

4.3.3 Technical co-operation for development

The Commission Board endorsed formation of Working Group VI - 7 with the task definition:

- "1. Preparing relevant information on policies and procedures regarding multilateral and available bilateral technical co-operation in surveying and mapping including remote sensing, aimed at benefitting colleagues in developing countries;
 - 2. Exploring feasibilities for partnerships to support developing nations and elaborating on solutions to meet respective requirements ".

Detailed information on both tasks is printed in the Proceedings of our Symposium pp 336-340 (HOTHMER 1982). The feasibility and necessity of task one can be underlined by quoting a United Nations publication:

"At international meetings, representatives from developing countries often indicate that the various programmes of economic and technical co-operation undertaken multilaterally or bilaterally have become confusing and difficult to evaluate in their potential contribution to individual developing countries. To assist devloping countries in the evaluation of the various programmes and proposals, a systematic survey of these and of major bilateral co-operation schemes would be highly desirable".

Task one of WG VI - 7 exactly fills this gap for our field.

Dr.P.O.Fagerholm, formerly UNDP Project Manager, had been appointed WG Chairman in October 1980. He requested specialists from Africa and Europe to engage as co-workers. After a promising start of the Working Group, Dr.Fagerholm retired from government service and withdrew in April 1982 also from WG VI - 7.

At the Symposium Mainz 1982 we discussed in quite some length whether WG VI - 7 should be continued and, in the affirmative, whether the task definition should be altered. The Commission Board resolved to continue with the given task definition, and to appoint Dr. Themadu, Nigeria, as Chairman, and to request Dr. Fagerholm to continue his engagement as Vice Chairman. Two letter have been sent to Dr. Fagerholm, yet without any response. Dr. Themadu confirmed his assignment on 11 January 1983. He distributed a questionnaire in February 1983. As the members of the Working Group did not receive any notice, the President Commission VI mailed out a memorandum on 26 October 1983 to individuals being concerned with technical co-operation inviting them, inter alia, to propose individuals being prepared to engage on the task definition. The response was nearly nil. Therefore, we have to take up the matter at the Congress.

4.4 Education

4.4.1 Symposium Graz

A Joint Symposium on "Education in Geodesy" of the Sister Societies FIG, IAG, ICA, ISM and ISPRS has been held on initiative of IAG Commission IX in Graz, Austria, 27-29 September 1982 with the most valuable objective to identify common grounds. 50 papers were presented, and 60 professionals participated. Messr. Adamec, Brandenberger, Hothmer and Paresi presented papers on behalf of ISPRS Commission VI. Four resolutions were adopted, inter alia recommending formation of an 'International Coordinating Committee on Education in Surveying and Mapping'. There were no follow-up actions whatsoever. The proceedings have been published by RINNER 1983.

4.4.2 Standards for education

There are some reasons for this topic:

- + Activities of ISPRS are supposed to be future minded. Education is an investment into the future. The well being of any scientific field depends on adequate quality of education. A standard serves to maintain quality.
- + UNESCO, being responsible for education within the United Nations System, has published a book on 'International Standard Classification of Education'. Many fields are treated in this fat volume, yet not a single phrase can be found on photogrammetry and remote sensing. ISPRS should endeavour to improve this unfavourable situation.
- + UNESCO is also engaged in 'Recognition of Studies, Diplomas and Degrees'.

 Availability of standards for education in our field would be a great help for the endeavours of UNESCO to the benefit of photogrammetrists and remote sensing specialists.

Three full sessions at the Symposium 1982 of our Commission were devoted to this topic, and basic papers from 24 authors of 12 countries from all continents were presented. The Commission Board endorsed establishing Working Group VI - 10 with the task definition:

- "1. Working out details of instructional Standards for Education in photogrammetry and remote sensing, and corresponding minimum syllabi for each professional and technical level together with pre-requisite studies for the proposed curricula.
 - 2. Assisting the geo-scientific professions using photogrammetry and remote sensing in the choice of syllabi when such advice is requested.
 - 3. Aiming to complete the initial work three months before the Congress 1984, and to ask the Board of Commission VI for comments on the proposed standards and syllabi.
 - 4. Taking care to update the standards and syllabi periodically for adapting to new developments. "

Prof.A.Adamec, Australia, as Chairman WG VI - 10, C.Paresi as Vice Chairman for Photogrammetry, and Prof.C.Voûte, both Netherlands, as Vice Chairman for Remote Sensing, confirmed their appointments in December 1983. In pursuance with task three, a draft of Standards for Education has been circulated.

4.4.3 Promotion of education

The Commission Board endorsed formation of WG VI - 8 with the task definition:

- "1. Promoting education in photogrammetry and remote sensing wheresoever feasible, inter alia on drawing conclusions from the earthwide inventory of WG VI 1.
 - 2. Listing monetary and personnel resources for benefitting educational institutions.
 - 3. Exploring requirements for visiting professorships, and developing solutions to meet these needs.
 - 4. Exploring feasibilities for partnerships between educational institutes, and developing solutions to meet respective needs."

After consultation with Prof.Brandenberger, to whom we owe gratitude for having done so much for education within Commission VI for about a decade, Prof. Dr. Sanjib Ghosh, Canada, was appointed Chairman WG VI - 8 on 31 January 1981. He confirmed on 11 February 1981.

The Chairman organized successfully Regional Conferences on Photogrammetry and Remote Sensing Education, one for Africa (being the first ISPRS meeting in this continent) in Nigeria 15 - 18 August 1982, and another one for South East Asia in Malaysia 16 - 19 May 1983. We will certainly hear some more details on activities on the task definitions in the report of WG VI - 8.

4.4.4 Collecting syllabi

The Commission Board endorsed formation of WG VI - 9 with the task definition:

"Collecting syllabi (including texts of exercises and listing of available equipment) and relevant publications on education of photogrammetry and remote sensing covering the past ten years and using the official ISPRS languages; placing this collection at the disposal of anybody so desiring. "

Prof.N. Oprescu, Romenia, was appointed Chairman of WG VI - 9 on 22 April 1981. There was no response in spite of much effort.

Prof.Badekas, Greece, made himself available on short notice to fill the gap. This is gratefully acknowledged. He was appointed Chairman WG VI - 9 on 2 February 1982 and confirmed on 22 February 1982. He presented a paper at our Symposium. I did not receive any further notice.

4.5 Periodicals and International Exchange of Information

The Commission Board endorsed WG VI - 6 with the task definition:

- 1 1. Giving consideration to the possible implementation of Regional International Periodicals (RIP) on Photogrammetry and Remote Sensing.
 - 2. Studying and promoting feasible approaches for more efficiency in international communication. "

Prof.Dr.J.Hothmer was appointed Chairman of WG VI - 6. He delivered a paper on "Scientific Communication in Surveying and Mapping Facing the Year 2000" at the Centennial Convention of the Canadian Institute of Surveying in April 1982. He organized a session at the Symposium Mainz 1982 of our Commission comprising a contribution from UNESCO. Relations have been established with the Commission of the European Communities and with the European Association of Remote Sensing Laboratories EARSeL. Very good co-operation has been maintained with the ISPRS Publications Policy Committee (THOMPSON 1984). The Sister Societies FIG, IAG, ICA and ISM have been invited for an Inter-Society Symposium 1985 on 'Scientific - Technical Communication'. An outline has been circulated in September 1983 to prepare for the Congress 1984 anticipating to have, inter alia, a speaker from USA on electronic journals. More details including the state of implementing Regional International Periodicals for Africa, America, Asia and Europe are presented in the report of the WG.

A subject of continuous concern was PHOTOGRAMMETRIA, the official journal of ISPRS. Much work was involved to revitalize the periodical. I refer to a separate paper on this topic. I hope the Congress concurs that we are now on a promising road.

Particular care has been taken for editing the Proceedings of our Symposium. Some specific features are:

- + Editing was done so as to have a most substantive content. The size of most figures have been changed for producing an efficient lay-out of any page.
- + Professional bibliographic quotations based on UNESCO recommendations have been added to any paper.
- + Much effort was put into editing the minutes of all discussion periods.
- + A photo and biographic data for any author and chairman has been included.

 This has never been achieved before in the ISPRS Archive.

President ISPRS Doyle suggested that a publication describing ISPRS organizations and programs would be quite useful. Accordingly, the Chairman Publications Policy Committee prepared a 16-page brochure with a permanent section containing information on ISPRS historical background, objectives, membership, organization, technical Commissions, publications, awards, and finances (THOMPSON 1984).

4.6 Bibliography

The Commission Board approved establishing WG VI - 4 with H.ten Haken, Netherland, as Chairman. He delivered a most valuable paper at the Symposium (ten HAAKEN 1982).

Preparation of three sessions at the Symposium Mainz 1982 has been done by the Commission President. We had ten papers on computerized information retrieval including most striking online demonstrations via satellite communication to three hosts. The Commission Board endorsed on 25 September 1982 that Prof.Dr. J. Hothmer continues as Chairman WG VI - 4 with the task definition:

- . " 1. An Information Retrieval System ISPRS IRS be established.
 - 2. Access to ISPRS IRS be both, online and by postcard communication.
 - 3. Access to ISPRS IRS be guaranteed to all ISPRS Members.
 - 4. Access to ISPRS IRS be also free-of-charge, particularly to colleagues not disposing on foreign currency (specifically developing countries).
 - 5. The ISPRS IRS Database include documentation on literature and on factual data.
 - 6. The Multilingual Dictionary be part of the software for retrieval.
 - 7. Co-operation be offered to Sister Societies FIG, IAG, ICA and ISM to create and update the Database.
 - 8. A host country be identified for ISPRS IRS. "

The Specifications ISPRS - IRS had been available in June 1983 and were discussed widely with all interested parties. At their Joint Board Meeting in Sofia in June 1983, the Sister Societies FIG, IAG, ICA, ISM and ISPRS agreed to co-operate and appointed this writer as Convener ISPRS - IRS. Financing of the ISPRS - IRS Office, being responsible for the Database, has been initiated on 15 November 1983 as a joint venture of European countries. At the moment of writing, everything is in full swing and well in line with the task definition. I refer to the report of WG VI - 4 for more details.

The Convener ISPRS - IRS is supposed to present a paper at the United Nations Meeting of Experts on Remote Sensing Information Systems to be convened in May 1984 in Feldafing, FR Germany.

4.7 Terminology

4.7.1 ISPRS Multilingual Dictionary (MLD)

Chairmanship of this Working Group was offered to Ing.Général Géograph Henri Bonneval of France. In view of his retirement state he did not accept and proposed G. Lindig.

The Commission Board endorsed WG VI - 3 with Dr.G.Lindig, FR Germany, as Chairman with the task definition:

"Preparing and publishing a multilingual dictionary, based on international co-operation, with terms and definition covering photogrammetry and remote sensing."

Dr. Lindig presented at the Symposium of our Commission a very good paper with a sound concept for assembling and updating the MLD. His MLD Office prepares terms and definitions as basic material. This will be sent to the Language Groups. Any LG accomplishes its translation and is itself responsible for publishing (offset, or xerox copying, or direct computer outprints) their Language Volume of the MLD. The MLD Office produces and publishes a reference booklet.

Colleagues speaking 13 different languages anticipated to establish their Language Group. At the moment of writing, the work is in full swing. We will hear more details from the report of WG VI - 3.

Unfortunately, the American Society of Photogrammetry prefers not to co-operate within the ISPRS MLD but to produce their own Glossary.

4.7.2 Symbols

The Commission Board endorsed for WG VI - 11 the task definition:

"Preparing in co-operation with Sister Societies an international set of photogrammetry and remote sensing symbols, and to submit them to the XV Congress 1984."

Dr.J.Pietschner, Germany DR, was appointed Chairman WG VI - 11 on 29 May 1981. His government confirmed the assignment on 10 July / 10 December 1981. I did not receive any other notice.

5 Preparations for the Congress Rio de Janeiro

According to the ISPRS Statute, "the results of research and development shall be presented for discussion at Congress sessions", and "reports on technical and scientific progress shall be presented at Congress sessions". Results on the assignments of Commission VI are mainly accomplished by our Working Groups. The Statute requires that "the terms of reference and duration of a Working Group shall be strictly limited and clearly defined".

As a consequence, we need at the Congress sufficient time for any Working Group. Our primary duty at the sessions is, thus, to

- + listen to the report of each Working Group on accomplishments within the task definition.
- + discuss termination or renewing of any Working Group,
- + discuss, in case of renewing, clearly formulated task definitions.

In pursuance with the Congress regulations, all WG Chairmen have been requested at the Symposium in September 1982 (see Proceedings page 343) to communicate to the President Commission VI their requirements for session periods. The responses were transmitted to the Congress Secretariat early in 1983.

A circular has been mailed in October 1983 to all Commission Rapporteurs and WG Chairmen requesting their view on detailed use of the available session periods. The responses showed now a much bigger demand. As the number of session periods could not be raised anymore, presentation of most papers, unfortunately, had to be transferred to the Poster Sessions.

6 Outlook into the forthcoming quadrennial period

Complying with the proposal of a member of our Commission Board, I am presenting underneath personal ideas which do not necessarily represent the official views of Commission VI.

I experienced that recognition of Commission VI within ISPRS needs to be improved. In pursuance with the ISPRS Statute there are two prerequisites from our side to accomplish this goal:

- + The Commission Board needs to formulate most substantive and clear task definitions as a basis for constructive results;
- + Working Groups and Rapporteurs must stick very tightly to these task definitions.

Envisaging that Commission VI has a servicing function (see para two), active co-operation with Commissions I-V and VII must be an every-day concern of both parties.

Hereunder, annotations are presented regarding the assignments of our Commission (number in brackets refer to chapter 4).

Economics (4.1)

I do not see much chance for substantive contributions from within Commission VI. This subject should better be transferred to the assignment of other Commissions. That requires an amendment of the Bye-Laws of the Statute.

History (4.2)

The book must be finished as soon as possible. Candidates for Chief Editor are Dr.F.Doyle and Prof.Dr.Konecny. As it is an ISPRS publication, the text needs to be approved by ISPRS. The General Assembly should appoint a Committee which approves the text on behalf of ISPRS. Members of the Committee should be distinguished colleagues disposing on sufficient time (retired scholars) to evaluate the completed text on relative short notice. I can imagine on two alternatives:

- + Three co-authors of the book, or
- + three persons not being engaged in the text (e.g. M.Thompson-USA, W.Hofmann-FR Germany, A.v.d.Weele-Netherland, Z.Sitek-Poland).

Documentation on manpower and education (4.3.1)

Quite a few colleagues argue the Brandenberger Databank is not thoroughly established and his conclusions (BRANDENBERGER 1982) are, therefore, weak. This may be true. Nevertheless, there is nothing better and many professionals use his findings. Therefore, WG VI - 1 should continue with the same task definition as long as this will be endorsed by the Council ISPRS (§ 27 BL).

Professional Strategy (4.3.2)

- + According to the ISPRS Statute, § 26 BL, the tasks of Commissions are of technical and scientific scope, and professional strategy does not fall in this category. Therefore, the ISPRS Council has been requested on 4 Feb 1984 to judge whether the engagement of Commission VI on this topic is in agreement with Statute. Whenever the decision of Council should not be in the affirmative, then Commission VI should discontinue with the emphasis field VI 12.
- + National Societies in our field can be a means to promote technical and scientific progress. Therefore, stimulation to form national Societies should be taken up more thoroughly as subject of Commission VI.

Technical Co-operation (4.3.3)

Continuation of WG VI - 7 requires allocating experienced individuals being prepared to work intensively on the task definition.

Standards for education (4.4.2)

Stimulation for this topic originates from hydrographic surveyors. They required eight years to publish their standards. ISPRS started 1983. I anticipate, therefore, that WG VI - 10 has to continue far beyond 1984.

Promotion of education (4.4.3)

The President Commission VI presented at the conference of WG VI-8 in Kuala Lumpur in May 1983 a paper on the capabilities of ISPRS to promote education (HOTHMER 1983), proposing, inter alia and in pursuance with the task definition, that the Chairman WG VI - 8 visits after that conference those countries having a request for visiting professors or for establishing partnerships between universities. The Chairman reported there was no request from countries. Consequently, we may have to look for another task definition for WG VI - 8.

Doubtless, these first Regional Educational Conferences for Africa and Asia have been a positive venture, and we owe gratitude to Prof.Ghosh for his initiative. Thinking on follow-up conferences, we should care for substantive outputs. The Graz Inter-Society Symposium 1982 (see chapter 4.4.1) has shown how difficult it is to have constructive results at educational meetings. It is, therefore, no surprise that a most distinguished and prominent photogrammetrist and remote sensing specialist wrote before the Graz Symposium, I quote: "I hope that people in government and commercial practice as well as educators can be attracted to participate. I think there is nothing more deadly than a series of papers on education by educators for educators. They accomplish little besides talking to themselves".

A very sound concept for a similar idea is the "Third World Strategy" of the International Cartographic Association (see ICA 1983). This Society organizes seminars of some two weeks duration on particular topics in different parts of our globe with lectures by prominent specialists communicating latest achievements to professors and professionals of the countries of the region. - Commission VI ISPRS may wish to consider doing something similar.

I have received 1983 nine most instructive papers on the state of education in our field in Australia by C.A.FULLER et al (unfortunately without bibliographic references). He makes a really valuable point on educating the educators. He presents a case for the need of educators to spend regular periods in industry to get a better feeling for the surveying discipline's current educational requirements. It becomes apparent to him when speaking to the educators that

they know a great deal about modern technology, especially that which is being developed, but have not followed it through to its practical application. - Commission VI may wish to consider engaging in this topic.

Collection of syllabi (4.4.4)

WG VI - 9 should be discontinued as it was intended, inter alia, as preparatory work for WG VI - 10 on standards of education.

Periodicals and international exchange of information (4.5)

After eight years of activities in these fields, there is, at present, not much left to be done. A Rapporteur should keep an eye on the topics. Considering to revitalize WG VI - 6 may be a subject for 1992.

Bibliography (4.6)

Continue WG VI - 4 with the same task definition

Terminology (4.7)

- + Continue WG VI 3 with the same task definition.
- + There seems to be hardly any demand for a set of symbols as international recognition is doubtful. Hence, renewing WG VI 11 does not make much sense.

7 Concluding remark

I request to excuse repeating a somewhat philosophical point:

When I was a little boy I loved to swim in rivers and lakes. In contrast, the young generation of our days suffers from pollution, is afraid of atomic energy, fears to be out of jobs due to automation, envisages that oil resources having been built up in millions of years will now be consumed within some 50 years, shivers when recognizing the ever increasing population on our globe without seeing at all the possibility of raising the food production accordingly. I feel a serious obligation to contribute my part for making life worth to be lived in the foreseeable future. That is why I engaged so much for the tasks of Commission VI. I belong to the daddy and to the grandfather generation. May I invite my fellow daddies and my fellow grandfathers in the audience to share the endeavours contributing through our discipline adequately to the development of human society - for the benefit of the younger generation.

Whenever the younger generation should feel that Commission VI accomplished already a little bit, then credit must be given to all Working Group Chairmen, to all members of Working Groups, and to other members of the Commission Board.

Dear colleagues and friends, it was really a pleasure working together with you for the past four years. I say wholeheartedly to all of you

THANK YOU

DANKESCHÖN

MERCI BEAUCOUP

8 Literature references

Brandenberger, A. 1980: Study on the world's surveying and mapping manpower and training facilities. World Cartography, volume XVI, pp 3-72, United Nations ST/ESA/SER L/16, New York 1980

- Brandenberger, A. 1982: International documentation center on surveying and mapping including remote sensing. In: International Archive of Photogrammetry, 24-VI, pp 159-164, Mainz 1982
- Haken, H.ten: An investigation of available databases in the field of photogrammetry and remote sensing. In: ibid, pp 82-91
- Hothmer, J.ed. 1982: Proceedings of the Symposium on facing the future of scientific communication, education and professional aspects including research and development. International Archive of Photogrammetry, 24-VI, 346 pages, Mainz 1982
- Hothmer, J.: Capabilities of ISPRS to promote education in South East Asian countries. SE Asian regional conference on photogrammetry and remote sensing education, Kuala Lumpur 1983
- ICA: Third world strategy. Tenth UN Regional Cartographic Conference for Asia and the Pacific, E/CONF.75/L.56, Bangkok 1983
- Rinner, K.: Proceedings of the international Symposium 'Education in Geodesy'.

 Mitteilungen der geodätischen Institute der Technischen Universität

 Graz, Folge 42, Graz 1983
- Sitek, Z.: Report of Commission VI. In: International Archive of Photogrammetry, 23-B6, pp 186-195, Hamburg 1980
- Thompson, M.: Report of the Publications Policy Committee ISPRS. In: International Archive of Photogrammetry, 25 A, Rio de Janeiro 1984