







### **REPORT OF THE**

### **EXECUTIVE SEMINAR**

## RECOGNITION OF CROSS-BORDER CAPACITY BUILDING IN EARTH OBSERVATION

1 and 2 November 2007 ITC Enschede

### Summary

Within the framework of capacity building and institutional development in the Earth Observation (EO) and Geo-Information (GI) sectors, a strong thrust towards establishment and use of international cooperative networks for education provision and exchange is noticed. In addition, other than traditional face-to-face modalities of knowledge transfer, such as distance education, are in high demand and are gaining ground as major methods for capacity building. This is mainly driven by general globalization, developments in ICT, earth observation and geo-data access, mutual awareness of global environmental issues and benefits of sharing expertise. These collaboration initiatives are regularly confronted with legal obstacles related to the recognition of diplomas/degrees issued for education offered jointly by education providers from different countries. The same applies to diplomas and degrees related to distance education.

This issue has been also of major concern to Group on Earth Observation (GEO) members the International Society for Photogrammetry and Remote Sensing (ISPRS), in particular Commission VI (Working Groups 1 and 3) and ITC. Together they have therefore organised an Executive Seminar on this subject on 1-2 November 2007 at ITC in Enschede, the Netherlands

The seminar aimed at formulating potential solutions to address recognition and accreditation problems experienced in cross-border education activities in earth observation and geoinformation education. Providers of (international and cross-border) capacity building such as representatives of the ITC initiated GI-NET network and the Directors of the Regional Training Centres affiliated to the UN Office for Outer Space Affairs discussed their experiences with experts in recognition (credential valuation and accreditation) and governance (quality assurance) of higher education qualifications, and professionals from the EO and GI sectors.

The seminar was highly successful and has led to a number of conclusions:

- It has revealed a lack of awareness among providers as well as policy makers in earth observation sectors about recognition problems related to cross-border collaboration in capacity building.
- In addition it was observed that national legislation is indeed usually indecisive or unclear about regulations regarding cross-border education.
- Accreditation agencies that presented at the seminar made clear that they expect that providing institutions take responsibility for making proper arrangements for quality control of the cross-border collaboration, combined with an early involvement of accreditation agencies.
- The participants concluded that accreditation should remain a national matter to be dealt with by national governmental agencies. But discipline oriented international accreditation agencies (like ABET) can solve many problems related to accreditation of cross-border education, provided that the outcome is recognised by the national accreditation agencies.
- A special international professional body is needed for the recognition of qualifications, including defining the set of standards. For the earth observation sector this should not be GEO, ISPRS or FIG. But these organisations can play an important supportive role (e.g. creating awareness in the member institutes).

The following specific recommendations are made to GEO and ISPRS members and providers of cross-border education in Earth Observation on actions to create awareness and to stimulate recognition of foreign degrees and accreditation of cross-border education.

### Transparency and recognition of qualifications:

Recommendations for providers to increase transparency of qualifications for the outside world and between institutions:

1. Work on institutional guidelines for cross-border capacity building, including sensitivity towards each others' rules and practices. This would include (but is not limited to) MoU, cross-culture issues, understanding of processes in partner institutes, etc

- 2. Identify international good practices in partnership.
- Develop tools for transparency in academic qualifications in the form of Diploma Supplement, according to guidelines and format that are developed by the EU. Examples and guidelines are available from:
  - http://ec.europa.eu/education/policies/rec\_qual/recognition/diploma\_en.html.
- 4. Generic components of the Diploma Supplement should be put on the website. This includes information on accreditation, reference to relevant websites, etc
- 5. Engage in discussions with partner institutes to clarify issues of transparency.
- 6. Partner institutions should provide adequate and recognizable benchmarks for assessing learning outcomes in geo-education. This can be approached by discipline.
- 7. Define a process to agree on benchmarks so that learning outcomes and equivalence can be compared.

### Accreditation of programs

All participants should give the following recommendations to relevant accreditation agencies and other bodies:

Recommendations for accrediting agencies:

- Accreditation is a national matter to be dealt with by national governmental agencies. But there should be an international body that could do accreditation of cross-border programs. Such an international body should be part of European associations (and other consortia) so that national accreditation agencies accept the outcome (like ABET being part of ECA).
- 2. Accreditation by such an international accreditation body will solve the issue for less common models of international education and for the Regional Centres (that do not fall under national agencies) as well.
- 3. The group also says that the process to agree on international benchmarks has to speed up. GEO could take the initiative in the GEO field.
- 4. Eventually the scope should be broadened to cover also interdisciplinary areas, emerging fields, etc

### Creation of awareness among stakeholders

Recommendations to create awareness among stakeholders with respect to accreditation and recognition:

- 1. We have to become aware ourselves first (who is responsible in our own institute, what are the internal rules, what national laws and regulations are already available, etc.)
- For providers:
   Get in touch with other providers to see how they are solving the issues.
   Communicate with other stakeholder groups, e.g. accreditation and recognition bodies in your country by inviting them and show them what you are doing.
- For ISPRS: Recommend to the council of ISPRS to make a resolution to get the international recognition issues on the agenda of member organizations and countries.
- 4. For GEO:

Advise the GEO secretariat to bring up the awareness issue in their next meeting. And to design concepts and mechanisms for recognition of cross-border education.

5. For Regional Centres:

Directors of the Regional Centres affiliated to UNOOSA should remind UNOOSA to work on recognition of diplomas of the Regional Centres.

### **Report of the sessions**

### Opening

### Opening by Drs. S. Beerens, Director External Affairs / ITC

The executive seminar is opened by Drs. Beerens of the ITC Directorate and on behalf of GEO (Group on Earth Observation System of Systems) and the International Society of Photogrammetry and Remote Sensing (from Commission IV Education and Outreach (WG 1 and WG3)).

Introduction of speakers and participants (universities and Regional Training Centres established under UN umbrella).

Mr. Beerens gives an introduction of ITC as institute (founding and mission) and explains the development of ITC's mission into cross-border activities. ITC started to support organizations through capacity building, initially in the framework of overseas development assistance, but increasingly developing into joint educational activities.

A brief overview is presented of ITC's experiences with cross-border capacity building (related to the policy and ITC's missions, but also on issues related to management, quality control and recognition).

Goal and Objectives of the seminar and the expected output are presented.

### Mr. Imraan Saloojee, GEO Secretariat

Mr. Imraan Saloojee explains how GEO came into being and what it is doing. GEO was established as an intergovernmental body during the conference in Johannesburg in 2003, and the secretariat was established in 2005. GEO has currently 72 member countries and the EU.

The *Group on Earth Observations* (GEO) is leading a worldwide effort to build a Global Earth Observation System of Systems (GEOSS) over the next 10 years.

GEOSS will work with and build upon existing national, regional, and international systems to provide comprehensive, coordinated earth observations from thousands of instruments worldwide; transforming the data they collect into vital information for society.

This system is meant to benefit society in a broad sense, and the ultimate aim is to answer society's need for better and more informed decision making, making use of earth observation techniques and spatial information.

GEO Website: http://www.earthobservations.org/index.html

# Session 1 Experiences with cross-border capacity building in earth observation - bottlenecks for providers

Chair:	Fred Paats (ITC)
Date:	Thursday 1 November
Time:	09:20 - 12:30

**Core question** that is addressed during Session 1:

"What are the bottlenecks that providers of cross-border capacity building in earth observation experience in national and international recognition and how do they handle them?"

### Presentations:

Dr. P. Haddawy

### AIT Experiences in Quality Assurance of International Education

Vice President for Academic Affairs Asian Institute of Technology (AIT)

Dr. Haddawy introduces the Asian Institute of Technology and explains that it is moving very fast from an individual university to partnerships and networks for cross border capacity building. However, the systems for recognition and quality assurance are lagging behind and are currently not equipped to deal with these types of education and have problems handling international (cross-border) qualifications.

The process of application and evaluating is automated (incl. tracking system). This system also includes decision support tools to standardize and make things more transparent.

At the moment, the recognition of AIT qualifications largely depends on the good reputation of the institute but this will have to change. Accreditation will become a necessity, but in the current situation it is not easy to find out who to turn to so AIT is exploring its own way forward. Member countries can be requested to facilitate the accreditation of AIT programs in their own country, or accreditation can be sought from professional bodies such as ABET for engineering and technology programs (ABET is now setting up franchising agencies that can do their accreditation regionally). EPAS (EFMD Program Accreditation System) is working for business management programs, but could be an example as well.

UNU and UNESCO recognize that e-learning provides opportunities for new models of higher education to emerge (more distributed and decentralized), and they should develop strategies for ensuring quality for these programs.

### Accreditation of joint education and international recognition of diplomas -

ITC experiences

Ms. I. ten Dam

Education Specialist, Bureau Education Affairs International Institute for Geo-Information Science and Earth Observation (ITC)

The presentation reflects on ITC's experiences across the world (including the European context) in cross-border capacity building (in ITC jargon this is called JEP) and tries to answer the question what the main bottlenecks are in its successful implementation and recognition.

### Challenges that ITC faces:

Before students come to ITC:

- 1. For prospective students: What is the status of ITC and what is the value of the ITC degrees? Is ITC a university; are the programs accredited, what is the recognition of distance education courses. This leads to the bottleneck identified: It is difficult for ITC to explain for every country: how do ITC and ITC's degrees relate to the system and degrees in that country.
- 2. For ITC: What is the level of incoming students? The level and content of degrees and other qualifications of incoming students are not clear.

When students return home:

3. Recognition of the ITC degrees in the home countries of the students. Accreditation in the Netherlands does not automatically lead to recognition world-wide

Accreditation of ITC's courses:

4. Accreditation of ITC's courses and degrees in the Netherlands is compulsory, and this is done by NVAO. This is a program accreditation (degrees in Enschede only) and not an institute accreditation. And the accreditation system does not include non-degree programs, the joint courses and distance courses.

ITC guarantees the quality of the joint, distance and short courses that can not be accredited in the Netherlands as follows:

The short and distance courses are parts of the accredited longer degree courses. ITC claims that in that way the quality of the components is guaranteed.

In joint courses the quality assurance is based on exemptions (i.e. not credit transfer) that are given for components of the courses given at ITC. The exemption policy and implementation will be assessed as part of the accreditation of the ITC programs.

### Overview of bottlenecks identified:

- 1. Lack of transparency of content and level of degrees worldwide
- 2. Equivalence of ITC degrees and diplomas to those in home countries are difficult to describe
- 3. Accreditation in the Netherlands does not automatically lead to recognition worldwide
- 4. Joint degree courses can not be accredited in NL
- 5. Joint courses without an equivalent in ITC can not lead to an ITC degree
- 6. May ITC give exemption for parts taught by the partner up to 100%
- 7. Joint degrees and double logo degrees are not possible in NL
- 8. Non-degree and distance courses can not be accredited

Washington Accord http://www.washingtonaccord.org

### UNAM experiences with cross-border education recognition

Dr. J. Laguna Deputy Director Academic Cooperation Postgraduate Program, National Autonomous University of Mexico

The UNAM is part of the IberoAmerican Network of Graduate Programs (REDIBEP) that aims to develop consistent quality standards across IberoAmerica, to facilitate consistent development of sciences, to develop mutual research interests and programs, and to enable inter-university mobility of staff and students.

A number of shared graduate programs has been established between consortia of three or more universities that are part of the network. In this context there are no joint degrees, but the participating universities acknowledge the work done in the partner university. The system is based on flexibility, promptness, quality recognition (of work done in partner universities) and reciprocity.

There is a program on integrated landscape management with ITC; the curriculum was partly copied from ITC.

### Bottlenecks identified:

Bureaucracy and red tape Need for reciprocity

Website: http://www.posgrado.unam.mx/indexeng.html

# Workshop 1 What are the main bottlenecks in Recognition and Accreditation for providers of cross-border education activities?

Moderator: Dr. Nynke Jo Smit Institute of Social Studies (ISS)

A number of bottlenecks has been identified from the presentations that were made. In small groups the discussion focuses on further exchange of ideas and on the identification of additional bottlenecks. Results are as follows:

Summary of the outcomes of the group work:

- 1. Lack of awareness among decision makers in many countries of problems related to valuation and recognition of foreign qualifications and cross-border education. Fast improvement of conditions for cross-border education and recognition of foreign degrees is not expected.
- Lack of transparency; lack of shared standards for degrees
   Examples mentioned are the differences in minimum entry level, in minimum duration of the
   degree programmes and in standards for content and level.
   When standards are decided at national level, agreement between countries is already very
   difficult. Even more complicated is agreement with countries where these decisions are
   decentralised and are taken at university level (academic freedom of universities).
- Valuation of foreign qualification of incoming students Lack of information on laws, education systems, accreditation systems, etc. makes recognition of foreign qualifications very difficult. The differences between the Francophone and UK system are big. The variation between countries is enormous.
- Problem to get your qualifications recognized abroad The recognition procedures differ per country. Recognition by reputation is no longer sufficient. There is a lack of trust between countries, cultural resistance and fixation on own criteria.

How to convince others of the value of your course? Less often used components that could be used: (inter)national reputation of faculty, facilities, feedback from industry, and record of acceptance of your courses/qualifications by high standard institutions (Harvard, MIT, etc.).

Use your alumni and professional organisations in the receiving country to convince the government of that country of your quality.

Need for an international valuation body.

- No legal framework in most countries for joint courses In most countries accreditation of cross-border courses is not possible. Legal possibilities for joint versus double/multiple degrees do not match.
- 6. No legal framework for distance courses and non-degree courses Accreditation of these courses is not possible in most countries. Prospective students do not have objective information about the quality of these courses.
- 7. Costs of accreditation, both in time and money, are very high. Going for accreditation in receiving countries is no option.

## Session 2 Solutions and Guidelines for Cross-Border Capacity Building

Chair:Mr. H. Haggren (ISPRS WG VI/1)Date:Thursday 1 November 2007Time:14:00 - 17:00

**Core question** that is addressed during Session 2:

"What solutions and guidelines for accreditation of cross-border capacity building and recognition of qualifications have already been developed?"

Mr. Haggren introduces the fact that new curricula in Finland that are implemented in connection with similar courses in Europe, are facing broad problems in cross-border capacity building.

### Presentations:

### Summary of results of the workshop questionnaire

Drs. S. Beerens Director External Affairs (ITC)

Mr. Beerens makes a presentation of the results of the questionnaire that was circulated prior to the workshop. A number of common problems and bottlenecks are identified. It is also clear that that not everybody is facing the same problems, depending on regional and national conditions. And in a number of cases certain situations are not perceived as problems either (lack of national legal framework can also be an advantage).

### Challenges and efforts in cross-border capacity building initiatives in East Africa

Prof. J. Mwatelah Deputy Executive Director African Institute for Capacity Building (AICAD)

Prof. Mwatelah presents his personal observations on cross-border capacity building in Sub-Saharan Africa and presents a number of examples of regional initiatives in Kenya and Tanzania (including the African Virtual University).

In most Eastern African Countries Commissions for Higher Education exist, that have a mandate for quality assurance and accreditation. In most cases the Commissions also issue permits to operate to HE institutions.

Prof. Mwatelah closes his presentation with a number of statements on the practice of crossborder capacity building, including pointers on quality control systems and policies for accreditation.

Websites of relevant national and regional organizations:

- Association of African Universities (AAU, Accra, Ghana): http://www.aau.org
- Commissions for Higher Education in East Africa Tanzania: http://www.tcu.or.tz
  - Uganda: http://www.unche.or.ug Kenya: http://che.or.ke )
- African Virtual University (AVU) Program: http://www.avu.org
- Inter-University Council for East Africa: http://www.iucea.org
- National Council for Technical Education Tanzania (NACTE): http://www.nacte.go.tz

### Recognition of Foreign Education in India – Equivalence of Qualifications

Prof. D. Dongaonkar Secretary General

Association of Indian Universities (AIU)

Prof. Dongaonkar speaks on the equivalence of qualifications, which forms the basis for comparison and acceptance of foreign programs in India. On the basis of a number of selected parameters a comparison is made between foreign programs and comparable programs that are offered in India. When the resulting comparison shows that programs are comparable foreign programs can be equated to corresponding degrees of Indian Universities (allowing for a certain degree of variation). But programs need to be of similar nature, especially in terms of duration. A number of questions are raised on differences that are observed with degrees offered by universities in developed countries.

AlU only assesses the equivalence of degrees, which is not the same as recognition. Recognition of programs can only be offered by the University Grants Commission and by professional bodies. Financial support to students is dependent on equivalence and subsequent recognition of programs.

Website Association of Indian Universities: http://www.aiuweb.org

### OECD/UNESCO Guidelines for Quality Provision in Cross-Border Higher Education

Dr. C. Mannaerts Associate Professor, Department of Water Resources International Institute for Geo-Information Science and Earth Observation (ITC)

Dr. Mannaerts replaces Dr. Ahanhanzo of UNESCO who could not participate due to illness. Dr. Mannaerts presents the background and a short overview of the OECD/UNESCO guidelines for quality provision in cross-border higher education for the six main stakeholder groups:

- 1. Higher education institutions / providers
- 2. Student bodies
- 3. Quality assurance and accreditation bodies
- 4. Academic recognition / credential evaluation bodies
- 5. Employers / professional bodies
- 6. Governments

The guidelines set out how these six stakeholder groups in both receiving and providing countries can share responsibilities, while respecting the diversity of Higher Education systems.

References:

Guidelines OECD/UNESCO: http://www.oecd.org/document/52/0,3343,en\_2649\_35845581\_29343796\_1\_1\_1\_1,00.html

OECD website:

http://www.oecd.org/dataoecd/27/51/35779480.pdf http://www.oecdbookshop.org/oecd/display.asp?sf1=identifiers&st1=962004071P1

## Workshop 2 "What solutions and guidelines for accreditation of cross-border capacity building and recognition of qualifications have already been developed?"

Moderator: Dr. Nynke Jo Smit Institute of Social Studies (ISS)

The participants work in four groups, each group on a different task.

### Group 1:

Task: Having heard all this information about standardization and guidelines: do you see a role for GEO and/or ISPRS as a supranational (professional) agency for accreditation and recognition?

Group 1 agrees that accreditation should remain a national matter to be dealt with by national government bodies. A special international (multi-national) professional body is required for international recognition of qualifications. This should not be GEO, ISPRS or FIG. These organisations can play a role, by for example creating awareness in the member institutes.

### Group 2:

Task: For which bottlenecks mentioned are the OECD/UNESCO guidelines helpful to provide short-term solutions?

The group decides to focus on the providers. Since all group members come from providing institutes they can influence the implementation of these guidelines.

All guidelines make sense. The most useful ones for the short term are:

- sharing good practices
- development and maintaining networks and partnerships to facilitate recognition
- follow Code of Good Practice (such as UNESCO guidelines)
- provide Diploma supplement
- put same information on the website for prospective students
- provide information about accreditation, quality assurance and recognition in other countries on the website as well.

### Group 3:

Task: For which bottlenecks mentioned are the OECD/UNESCO guidelines helpful to provide long-term and lasting solutions?

The group decides to focus on guidelines for providers.

- All OECD/UNESCO guidelines apply to all bottlenecks and are more than just wishful thinking
- Bi-lateral and multi-lateral agreements are important. There is a need for facilitation, e.g. by UNESCO or professional organizations.
- The standards should focus also on need/demand/priority for education rather than quality alone.
- International quality standards can only be reached with cultural sensitivity and openness.
- The standards should be based on agreement between national authorities and (international) providing institutions to increase commitment.

### Group 4:

Task: The OECD/UNESCO guidelines target 6 different groups of stakeholders. There is a long list of bottlenecks; for which stakeholders are these important?

The group has made a matrix of the 6 stakeholder groups and the main bottlenecks. The group concludes that the guidelines address all bottlenecks identified and that all guidelines are useful. Implementation of the guidelines, however, will not be easy.

# Session 3 Approaches to Accreditation of Cross-Border Education in the Netherlands

Chair:Mr.Imraan Saloojee (GEO Secretariat)Date:Friday 2 November 2007Time:09:00 - 12:30

Core question that is addressed during Session 3:

"What (other) approaches to accreditation of cross-border education and international recognition of qualifications exist in the Netherlands?"

### Presentations:

### Accreditation and Cross-Border Education in Europe

Mr. A. Aerden International Policy Advisor Netherlands and Flanders Accreditation Organization (NVAO)

Mr. Aerden of the Netherlands-Flemish Accreditation Organization (NVAO) introduces the role that the NVAO plays in accreditation of Higher Education programs in the Netherlands and Flanders (the Dutch speaking part of Belgium). In his presentation he stresses a number of points.

### Importance of quality assurance

The main reason for carrying out accreditation is that you want to meet your own expectations (not in the last place with respect to your reputation), but you also want to monitor what is happening in your own organization.

Expectations of stakeholders (students, governments) have to be met. Higher Education operates in a competitive market (both nationally and internationally) and only good programmes will make it.

NVAO will accredit distance education as well in the (near) future.

Next to formal accreditation systems (accreditation, professional accreditation) also more informal ones exist like rankings in newspapers and rankings by student bodies. All play an increasingly important role.

### Experiences

The Dutch education system is very open with a lot of mobility and international cooperation. NVAO deals with national a well as foreign providers and safeguarding the status of Dutch degrees is one of the most important issues for NVAO.

The importance of a diploma supplement is discussed and it is pointed out that many questions concerning the quality of programs can be clarified in such a document.

The triangle of State, Academia and the International market (see presentation) is introduced to explain the field in which the accreditation is taking place.

Website NVAO: http://www.nvao.net

# Experiences with Accreditation by the Accreditation Board for Engineering and Technology (ABET)

Dr. Irma Croese Head Education and Student Affairs Technical University of Delft (TUD): Faculty of Aerospace Engineering

Only TUD offers an academic program in Aerospace Engineering in The Netherlands. No comparison with other academic programs is currently possible in the Netherlands (The TUD program is the only one). Therefore ABET was chosen to make a comparison with similar programs offered in US universities. The outcome was positive; the TUD program is seen as equivalent to programs in the US. Still TUD might not choose for ABET accreditation again. A bottleneck is that the ABET accreditation procedure does not fully meet the requirements of NVAO and the outcome of the ABET accreditation is not automatically recognized by NVAO in the Netherlands. Streamlining the ABET and NVAO procedures and criteria is not easy.

ABET website: http://www.abet.org QANU website: http://www.qanu.nl VSNU website: http://www.vsnu.nl/web/show/id=87838/langid=42

# Workshop 3 Do the approaches to accrediting cross-border education in the Netherlands lead to reformulation of bottlenecks and solutions?

Moderator: Dr. Nynke Jo Smit Institute of Social Studies (ISS)

The participants worked in the same groups as in workshop 2. Task is to review and reformulate the bottlenecks and solutions.

### Group 1: role for GEO and/or ISPRS

The Group sees a need for an international body that should:

- create awareness of the cross-border recognition issue at intergovernmental level
- design proper concepts and recognition mechanisms with appropriate authorities.
- facilitate the implementation of these mechanisms.

The group is not sure whether this body should be GEO or ISPRS or a new group.

The group gets the question: Why is this now relevant? Why now, why not three years ago or next year?

That is because there are now urgent questions and issues in almost every providing institute. (At ITC e.g. in relation to joint courses)

Mr. Axel Aerden of NVAO responds: increase transparency in what you are doing. Make clear that you are recognized nationally, and how can people find out, check, see, etc. There is a lot of responsibility with the institutions concerned (e.g. make use of diploma supplement, put info on the website, etc.).

### Group 2: short-term solutions

A discipline oriented international accreditation (like ABET) can solve a lot of problems, provided that the outcome is recognized by the national accreditation agencies

In case of multi-disciplinary programs, the dominant discipline or the discipline that asks for accreditation could be leading. It is suggested that the professional body should define the set of standards, not the discipline itself. This is important for multi-disciplinary programs but can also be useful for mono-disciplinary accreditation.

Such a disciplinary, international accreditation should not limit flexibility, development of new programs, tailor-made programs and temporary joint programs.

Question: Can accreditation organizations deal with multidisciplinary programs? Answer by Mr. Axel Aerden of NVAO: that is no problem. We do already accredit multi-disciplinary programs. New and tailored fields are more problematic. These ask for tailor-made approaches, but this is possible for NVAO.

### Question to NVAO: Does NVAO hinder development?

No, but academic institutions should not think along this line. They will face a panel of peers and NVAO is not on the panel. So they have to convince peers rather than NVAO. They can share approaches and use the accreditation to get valuable advice from peers how to improve further. This basically means that HE institutes should not limit themselves out of fear for accreditation but should develop the program as they like and be able to convince their peers.

### Group 3: long-term solutions

Sensitivity issue: the group is worried about one sentence in the ABET presentation: NVAO recognizes the ABET accreditation outcome "if they do it in their way". This does not show the willingness of NVAO to make mutual recognition possible and will lead to unbalanced discussions. There should be clear rules for reciprocity, guaranteeing equity in partnership. If these do not exist then it will be difficult to succeed.

The quote came from the attempt of TUD to merge procedures of ABET and QANU, they did not want to diverge from their own rules and regulations.

Mr. Aerden of NVAO: this would not be our quote. What is often laid down in bi-lateral or multilateral recognition agreements between accreditation organisations is that we do not need the same procedures, methodologies and criteria. But the outcomes of an accreditation done by ABET and one done by NVAO should be the same. This will be the case when you have international experts in your panels.

Group 3 also emphasizes the importance of:

- diploma supplement
- working with learning outcomes in stead of objectives in (inter)national accreditation: this makes it easier to make comparisons

### Group 4: six stakeholder groups

The ultimate goal for all stakeholder groups is quality of education.

All stakeholders will have to work towards that, although each stakeholder group has his own interest. Providers need to put a good program in the market and students want to get good education. Accreditation bodies should be able to link the expectations of all stakeholders to the program and put a quality stamp on the program.

Mr. Aerden of NVAO: NVAO agrees and this is indeed our task. We talk to all stakeholders (including alumni, staff, students).

What accreditation organizations do not do well yet is that the reports focus on governments. It is not written for students or professional bodies. This is an issue that NVAO is discussing; how can we make the outcomes readable for all stakeholders. And even more difficult: how can we make it readable for the international stakeholders?

## Session 4 Conclusions and Recommendations for (inter)national Recognition of Cross-Border Capacity Building in Earth Observation

Chair:	Ms. Nynke Jo Smit (Institute of Social Sciences)
Date:	Friday 2 November 2007
Time:	14:00 – 17:30

# Workshop 4 Is there a need for international recognition of cross-border capacity building in earth observation?

All participants agreed that this is very much needed.

The participants could choose on which topic they would like to work on the formulation of recommendations:

- transparency and recognition of qualifications
- accreditation of programmes
- creation of awareness among stakeholders

Three groups were formed that came with the following recommendations.

### Transparency and recognition of qualifications

Recommendations on short term priorities or improvements.

Transparency can be described for two areas:

- Transparency for the outside world, i.e. the general public, potential students, etc
- Transparency between participating institutions

Recommendations mainly for providers:

- 1. Work on institutional guidelines for cross-border capacity building, including sensitivity towards each others' rules and practices. This would include (but is not limited to) MoU, cross-culture issues, understanding of processes in partner institutes, etc.
- 2. Identify international good practices in partnerships. This is easy to recognize but very complicated to describe. But it is important to keep in the back of our mind when engaging into international partnerships.
- 3. Develop tools for transparency in academic qualifications in the form of a Diploma Supplement, according to guidelines and format that are developed by the EU. Examples and guidelines are available from:

http://ec.europa.eu/education/policies/rec\_qual/recognition/diploma\_en.html.

Include description of objectives, content, methodologies etc to publish in a transparent way what the programs set out to achieve.

- 4. Generic components of the Diploma Supplement should be put on the website. This includes information on accreditation, reference to websites, etc.
- 5. Engage in discussions with partner institutes to clarify issues of transparency.
- 6. Partner institutions should provide adequate and recognizable benchmarks for assessing learning outcomes in geo-education. This can be approached by discipline and it could be linked to assessment criteria as well.
- 7. Define a process to agree on benchmarks so that learning outcomes and equivalence can be compared.

### Accreditation of programs

All participants should give the following recommendations to relevant accreditation agencies and other bodies.

Recommendations for accrediting agencies:

- 1. Accreditation is a national matter to be dealt with by national governmental agencies. But there should be an international body that could do accreditation of cross-border programs. Such an international body should be part of European associations (and other consortia) so that national accreditation agencies accept the outcome (like ABET being part of ECA).
- 2. Accreditation by such an international accreditation body will solve the issue for less common models of international education and for the Regional Centres (that do not fall under national agencies) as well.
- 3. The group also says that the process to agree on international benchmarks has to speed up. GEO could take the initiative in the GEO field.
- 4. Eventually the scope should be broadened to cover also interdisciplinary areas, emerging fields, etc

### Creation of awareness among stakeholders

Recommendations to create awareness among stakeholders with respect to accreditation and recognition:

- 1. We have to become aware ourselves first (who is responsible in our own institute, what are the internal rules, what national laws and regulations are already available, etc.)
- For providers: Get in touch with other providers to see how they are solving the issues. Communicate with other stakeholder groups, e.g. accreditation and recognition bodies in your country by inviting them and show them what you are doing.
- For ISPRS: Recommend to the council of ISPRS to make a resolution to get the international recognition issues on the agenda of member organizations and countries.
- 4. For GEO:

Advise the GEO secretariat to bring up the awareness issue in their next meeting. And to design concepts and mechanisms for recognition of cross-border education.

5. For Regional Centres:

Directors of the Regional Centres affiliated to UNOOSA should remind UNOOSA to work on recognition of diplomas of the Regional Centres