

# Vienna Process

*Draft version – 08.04.2006*

Report and summary: Splinter meeting of leaders in environmental education

Vienna – April 06<sup>th</sup> 2006

## **Introduction:**

This report is the summary of suggestions which have been developed by representatives of educational projects in Earth and space science during the *Educational Symposia* of the EGU Assembly 2006 in Vienna and, in particular, by the participants of a special splinter meeting of leaders in education and outreach projects.\*

This group, which is open for extension, agreed to start a process, during which education and outreach work in Earth and space science shall be improved. This process is called in the following the *Vienna Process*.

\*List of participants in Annex I

## **Objective:**

The Vienna process shall emphasize the importance and foster the extension and improvement of education and outreach in Earth and space science through better communication, exchange of information and resources, strategy development and concrete measures and tools. The process will be driven by the group listed in Annex I and all representatives of international projects in environmental\*\* education and outreach who are interested to join the initiative.

\*\*Environment shall be defined here as the physical, chemical and biological environment around us which is investigated in Earth and space science.

## **Task area A: Communication**

### **A 1: Regular splinter meeting**

**A splinter meeting of leaders in environmental education and outreach shall be organised regularly in the future.**

The EGU General Assembly is regarded as a good frame for such a splinter meeting also in the future. The future conveners of Educational Symposia should agree among each other on a well structured organisation of the sessions.

Details: One approach could be to divide the sessions into

- e-Learning for schools
- hands-on approaches for schools
- education and training for PhD students

However, also the general exchange between all active persons in education and outreach on all levels should be promoted, in particular for common topics like learning methodologies, technical questions, training and motivation of scientists for educational efforts.

### **A2: International workshop on education and outreach**

**A joint workshop on education and outreach shall be organised with representatives from diverse organisations and projects active in this field. The focus of the workshop shall be on the presentation of work, structure and future plans in the respective efforts and the development of concrete cooperation plans.**

Details: Eva Schuepbach and Norma Crosby suggest to apply for funding for such a workshop for example at the European Science Foundation ESF. It should be considered to organise such a workshop regularly.

### **A3: “Help desk” education and outreach for scientists**

**A small international team of experienced persons in education and outreach should form a long-term Help Desk in order to support scientists in educational efforts.**

Details: The idea of the help desk is to keep the overview of existing efforts, to organise their cooperation and to advise scientists during funding applications how to set up the education and outreach branches of their projects in order to achieve an optimal synergy in the work carried out in the scientific and educational community.

The basic frame for such a help desk should be prepared in order to apply for funding in the 7<sup>th</sup> framework program of the EU or at other suitable funding agencies.

## **Task area B: Tools**

### **B1: Project overview website**

**An overview website will be generated on the international projects represented in the Vienna process and further projects whose representatives would like to contribute to it.**

The website shall give an overview of

- what has been realised
- what is at present under construction
- what is planned for the future

Details: The website could be organised as a table of key words or sub-project titles with a link to a “read more” part. The text should be written by the representatives of the projects themselves and can be uploaded by Elmar Uherek to the “International Environmental Education” website\*. The website shall include only major international projects in order to keep it handy. Smaller project should be listed in a commented link list as suggested in B2.

\*The “International Environmental Education” website is at present published on the server [www.atmosphere.mpg.de](http://www.atmosphere.mpg.de) physically located at Max Planck Institute for chemistry in Mainz, which hosts also the websites of the ESPERE climate encyclopaedia, the ACCENT school magazine and QUANTIFY education.

## B2: Commented link list

**A commented link list shall be generated pointing to websites (a) which give an overview of education and outreach projects or (b) publish the content developed in education and outreach projects.**

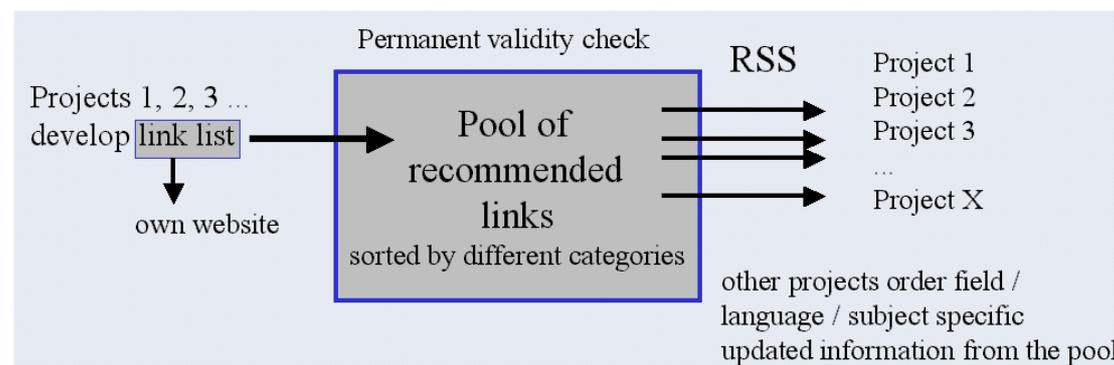
In the long term the link list should be set up in a way so that all partners and other supporters can add to it. The master list is regularly updated (to present knowledge not automatically possible) and parts of it can be ordered by interested institutions for each category.

Details (category):

The link list should be multidimensional depending on the work field and needs of the users of the link list. Example: A categorization by school subjects would be useful for the teachers, a categorization by scientific fields for the scientists. Potential categories are:

- a) language
- b) scientific field
- c) school subject
- d) target group / age group
- e) ???

Details (technology): Technical tools can be used to facilitate the submission of information to the list and to allow automated submission of updates to the interested users. Björn Haßler mentioned the RSS technology used for journalists. Michela Maione mentioned the “news sneazer” of ACCENT.org.

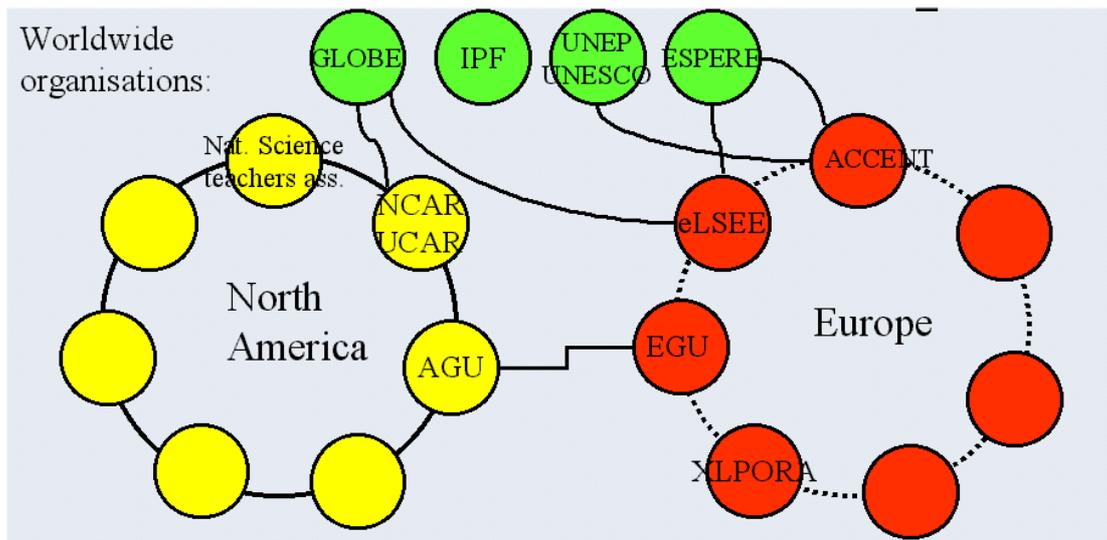


!!Probably comparable project overview lists or content overview lists as suggested in B1 and B2 are already available!! For example from UNESCO. Resources in the Internet have to be checked.

## B3 Dissemination list

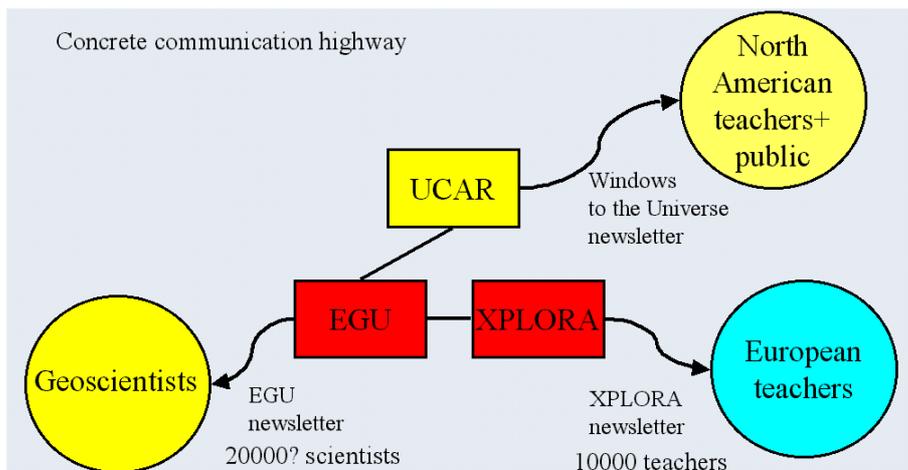
**For dissemination a list of mailing lists (in particular addressing teachers) should be generated and disseminated among the Vienna process group and other partners beyond.**

A dissemination ring is established in the United States. A comparable ring should be established in Europe and be in exchange with the US ring. But each dissemination pathway should keep independence.



Details (handling of mailing lists): It is not recommended to add subscribers from diverse mid size lists to one larger. This would be regarded as “selling of e-mails and spamming”. The providers of information should send the news to the participants in the information ring and each administrator of a mailing list may decide if it is relevant and useful for his/her subscribers.

Example for one communication highway which could be established:



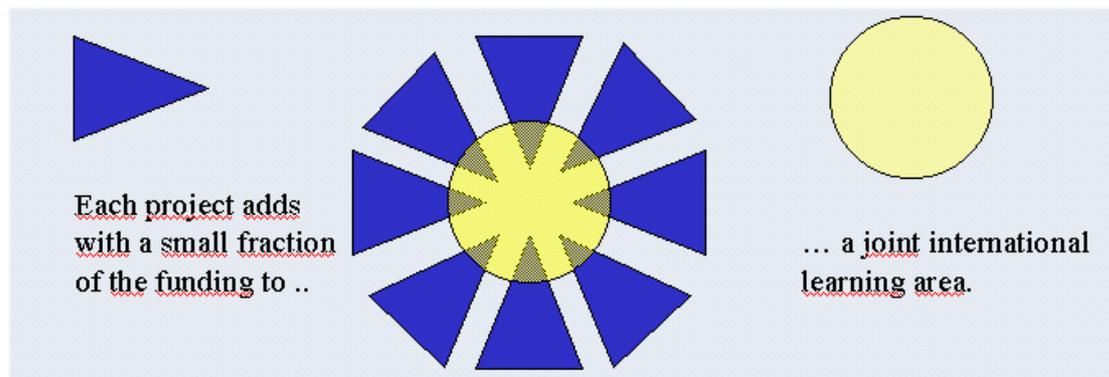
## Task area C: Strategies

### **C1: Build up of an environmental learning area**

**In the Vienna process the participants strive at the development of an environmental learning area in which each institution contributes to a certain part of a larger network of resources or activities (websites, other publications, hands-on approaches). The resources should be interlinked and complement each other in the best possible way.**

In the learning area each project coordinator agrees in cooperation with other project coordinators on a contribution to the total. It is of particular importance that during applications for funding the education and outreach activities are

designed in a way that they are on the one hand project specific but make on the other hand a reasonable contribution to this learning area.



### **C2: Best practise guidelines and standards**

**Organisers of education and outreach efforts should agree on certain standards and develop together best practise guidelines how projects and publications should be structured.**

Details: Standards have already been discussed in some learning areas (e.g. national grid of learning in United Kingdom) and include for example:

- Publication and modification dates for all digital resources
- Source code suitable for all browser types and alt-texts behind images for all Internet resources
- ...

It can be useful to use open source content management and course management platforms in order to facilitate transfer between different projects.

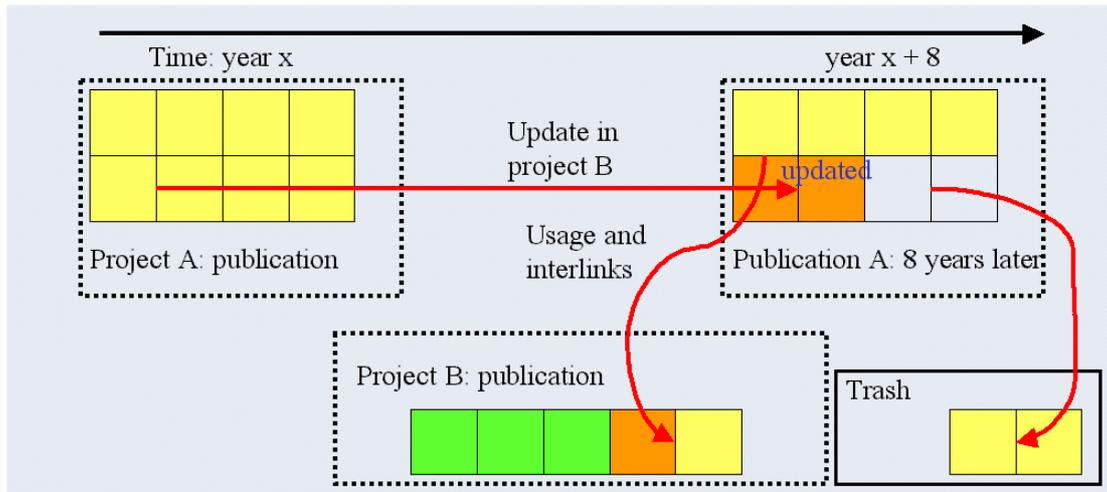
Teachers should be involved in the development process in scientific projects.

### **C3: Sustainability of resources**

**The participants of the Vienna process strive at efficiency and the sustainability of (long term) resources. Sustainability means that the full life cycle of a publication is considered: development, usage, update, removal.**

Project partners should either keep responsible for this full life cycle or, if not possible within the life time of the project, develop clear and realistic plans how to hand over the responsibility to a long living institution or the organisers of another project. The ideal solution is that follow-up projects for successful approaches get funded.

Details (updated and long term hosting): Björn Haßler and Elmar Uherek developed several ideas about a system of small units or small learning modules, which can be recycled, removed or handed over to a long living administering organisation if follow-up funding is not achieved. Potential organisations are the European Environment Agency (EEA), European Geosciences Union (EGU) or UNESCO. But this requires that the respective organisation agrees to take responsibility and show commitment in the long-term (i.e. 20 – 25 years). Another, more complicated solution could be the hand-over of resources from one finished project to another still running project as shown below.



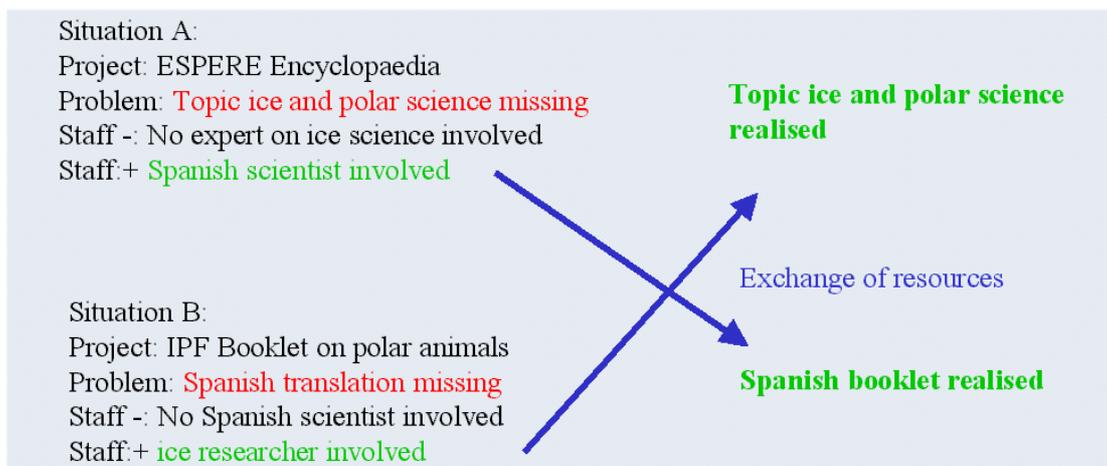
A handling as shown above for exchange of modules between projects could partially solve the problem of updating existing resources and removing outdated parts. On the other hand problems of copyright, different opinions of different authors and clear allocation of funding to certain tasks and persons in each project need to be discussed and make this solution rather complicated. C3 remains a topic for further discussion.

#### C4: Exchange of know-how and resources

**Project co-workers who see overlaps, complementary project parts or potentials for exchange of know-how and resources between different projects in the Vienna process should make best use of the possible cooperation to the benefit of both projects involved.**

Details (exchange of know-how and resources): The potential for cooperation and exchange of know-how and resources has to be explored in regular communication and to be analysed from case to case. The case below shows a realistic scenario which could have been realised.

The flexibility within the project to realise such cooperation has to be discussed for each project and may depend on the flexibility allowed by work-plans and funding agencies. Workshops as described in A2 are essential to find out about the general options for cooperation.



### **C5: Translation Committee**

**There is wide agreement among all project leaders that, if addressing schools in educational projects, there is an essential need for translation. This problem is not sufficiently solved in present projects. The group of the Vienna process should establish a translation committee inquiring the best options to solve this problem and discussing it with funding agencies.**

Details (translation): Depending on the project translation can be funded, partially funded or be completely based on the work of volunteers. Some institutions (e.g. JRC Ispra) have a translation facility, while for most others the translation problem is a major obstacle in the project. A joint translation committee could make suggestions for the best possible approach depending on the frame given in the respective project.

## Annex I:

### Participants in the splinter meeting in Vienna

#### **Representatives standing for one organisation:**

Carlo Laj - Gif/FR - EGU Committee on Education - [Carlo.Laj@isce.cnrs-gif.fr](mailto:Carlo.Laj@isce.cnrs-gif.fr)

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#### **ACCENT:**

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#### **Carboschools/Carboeurope/Carboceans education:**

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#### **ESPERE Association:**

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#### **Conveners of EGU educational sessions:**

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#### **Persons contacted before the splinter meeting during ES sessions.**

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