

Dear colleagues

In my message of 5 November I promised to you an update about the Commission on Education and Training (CET) after the general Commission Chairs' meeting in Vienna, which was held last month. As we are reaching the end of December, it is time that this update was sent to you.

Meeting of Executive Committee, and Commission and Working Group chairs (8-9 Nov 2015)

The meeting was useful to assess the agenda of the new Executive Committee (EC), to confirm links with other Commissions, and to note individual Commissions' plans for the 2015-2019 period.

A. The CET Commission responded to specific requests as follows (more detailed discussion on these follows at the end of this message):

- a) *What is the most urgent task for 2016?* We feel that the web pages of the Commission need to be regenerated and maintained.
- b) *What is the flagship project for 2015-2019?* The development and application of the proposed Body of Knowledge, to be presented at ICC Washington 2017, and fine-tuned after that, is the major deliverable.
- c) *What is the contribution to the International Map Year?* A register of courses, to include updates to formal awarded qualifications, along with informal courses, will be useful for IMY, allowing those who find an interest in cartography can be guided to learn more about the subject.
- d) *What joint activities within ICA do you envisage?* The CET Commission meeting in 2016 will be a joint meeting with the Commission on Atlases, to be held in Zurich in September 2016. The 2018 meeting will involve collaboration with another Commission (possibly OpenSource Geospatial Technologies).
- e) *Can your Commission contribute to an ICA initiative mapping the UN Sustainable Development Goals?* It could be possible to map the distribution of educational courses around the world for inclusion in the proposed poster.

B. Further dialogue with other Commission Chairs some revealed further education-related activities (this is a selection):

- i. The Commission on Map Production intends developing a MOOC (Massive Open Online Course) on 'Modern Cartography'.
- ii. The Commission on OpenSource Geospatial Technologies encourages the open distribution of data, software and resources (including educational material) created by all other Commissions.
- iii. The Commission on Planetary Cartography will hold a summer school in Moscow in 2016.

C. The EC presented their list of ICA instruments which can assist Commissions in doing their work:

a 'Strategic Plan' (2011-2019); a Directory (2015-2019); international cartographic conferences (Washington 2017, Tokyo 2019); publications, including a strong link with Springer publishers; the Research Agenda; research scholarships; external contacts with the Joint Board of Geospatial Information Societies (JBGIS), the GeoUnions (geospatially-interested members of ICSU), the United Nations Group on Geographic Information Management (UN-GGIM); collaborative environment for Commission Chairs to co-operate and for Commission members to contribute to and develop research work; media, including ICA's presence on web domains and the social media avenues which

ICA uses; publicity vehicles including ICA News and monthly GIM International pages; limited funds to allow Commissions to do their work.

Commission on Education and Training update

The current Commission activities to discuss follow on from Section A above.

- a) Maintaining and developing the Commission web site: an offer from the Commission vice-chair, Dr Stefan Peters, to undertake this work should be accepted. The Commission budget can be used for such administrative work, and Stefan will be able to offer some small monetary reward to his student helpers. We shall adopt the ICA Commissions template, and agree on the fine structure and content in the next few months. One of the main functions of the website, which we hope will be implemented soon, will be to create an 'open forum' where Commission members can present their ideas on our activities to the rest of the Commission, encouraging a collaborative approach to discussion on issues which we face.
- b) The flagship project, the 'Body of Knowledge' (BoK) has attracted some comment – and Commission members are encouraged to join our discussion further. My answers to some of the points already raised:
 - the BoK is designed to advertise the subject of cartography to higher education curriculum planners. It should also inform current cartographic educators who wish to maintain and update their courses, educators who teach related subjects (especially in geosciences), and accrediting bodies and industry who need to know the capabilities of a professional cartographer. A fundamental purpose of the BoK is to define the 'territory' of cartography, and establish its identity in relation to other disciplines.
 - the issue of accreditation is important: procedures differ from one nation to another. We need to ensure that the BoK is well-presented, to persuade accrediting agencies of its rigour and validity. Some experiences from other BoK must be examined to assist in this exercise, and the views of government/industry (who will be the end users of the outputs from the BoK scheme) must be considered.
 - the development of the BoK must be led by a number of people from diverse backgrounds. We shall start with contributions from any Commission members; specific invited experts will be consulted also; drafts will be open for wide consultation.
 - there are successful, closely related, BoK, e.g. the UCGIS GIST Body of Knowledge, and its associated European GIN2K. The Commission has already had representation with the UCGIS, and is planning to engage with the GIN2K. A major decision to be made by the Commission is the extent to which we promote cartography in these existing BoK, compared to developing our own BoK. The ICA Executive Committee are in favour of us creating our own BoK, distinct from the BoK in other subjects such as GIS and geography.
 - the content of the BoK will result in the definition of the scope of the subject of cartography; and (using the GIST BoK as a model) the presentation of a set of sub-disciplines, exercises, skill sets, knowledge outcomes etc. This will involve defining 'core' components, a logical framework for knowledge accumulation, and relationships with other disciplines.
 - the schedule will be to offer a first draft of the BoK at the Washington 2017 ICC, with comments open for a significant period after, and the final version to be submitted at the next General Assembly in Tokyo, 2019.

- we need to implement a realistic plan for maintaining and updating the BoK: it is expected that this will be a major responsibility of the future CET.

There will be other questions, I'm sure, and there will be further comments. I do hope that the CET website will include a forum for developing ideas collaboratively.

- c) The directory of educational courses, which has been part of the website of the Commission for many years, needs updating. This would be a useful contribution to IMY. The Commission could contact each national representative to ICA during 2016 to ensure that the most reliable information is obtained and incorporated into the website.
- d) ICA Commissions are expected to meet annually, usually at ICCs (occasionally at pre-conference workshops) and sometimes in joint meetings. For CET, the 2016 meeting will be at ETH Zurich in September, organised primarily by the Commission on Atlases: the title will be "Atlas Concepts for the Future", and will address the role of the atlases in education. If you have experiences and interest in this subject please consider presenting a paper at this event: a special issue of the International Journal of Cartography will be one outcome. In 2017 we will meet in Washington, with a pre-conference workshop mainly focussed on the BoK project. We should make use of our Commission presence in SouthEast Asia to perhaps hold a meeting in Malaysia, Singapore or Thailand in 2018. The Commission on OpenSource Geospatial Technologies has experience with us in jointly presenting a workshop (in 2014, Wuhan): a similar event could be envisaged for 2018.
- e) The UN Sustainability Development Goals have been created, 17 in total. The ICA EC wishes to 'map' each of these goals to show how ICA can contribute to these Goals. 17 posters will be created, with each Commission contributing to the design and production of these, following the template. CET will have some input into Goal 4 (Education) and Goal 16 (Peace and Justice): Goal 4 will be led by the Cartography and Children Commission, Goal 16 by the Planetary Cartography Commission. CET members with suggestions of how to create these posters are encouraged to contribute ideas quickly (the deadline is 31 January 2016).

Please reply to this e-mail with any ideas, suggestions, comments, experiences and offers of assistance. The Commission sends best wishes to you for 2016.

David Fairbairn / Stefan Peters