

**Recommendation for Committee Decision**

**Prepared by:** Working Group C

**Date of Submission** 13 November 2014

**Issue Title:** Capacity Building and GNSS outreach activities in South East Asia

**Background/Brief Description of the Issue:**

The Collaboration Centre for Research and Development on Satellite Navigation Technology in South East Asia (NAVIS) Centre was set up by the Hanoi University of Science and Technology, Istituto Superiore Mario Boella (ISMB), Politecnico di Torino and Universitat Politècnica de Catalunya with the support of the European Commission and the European GNSS Agency (GSA) with the aim to strengthen the dissemination activities on GNSS and its applications, in particular, in South East Asia.

**Discussion/Analyses:**

In the last three years, the NAVIS Centre has successfully enlarged its links and activities in South East Asia by conducting joint research activities, participating to governmental committee and organizing workshops, also in cooperation with Multi-GNSS Asia (MGA) and other organizations from South East Asia, Europe, Australia and Japan. Working Group C recognizes the successful set-up of the NAVIS Centre and its participation in the MGA initiative.

**Recommendation of Committee Action:**

*ICG Working Group C recommends that the Office for Outer Space Affairs in cooperation with the ICG membership, and the educational centres and organizations, such as the NAVIS Centre and GEospatial and Space Technology consortium for Innovative Social Services (GESTISS), and international initiatives, such as MGA and its members, organize workshops and technical seminars in the field of GNSS and its applications in South East Asia region. The participation of BeiDou/GNSS Application Demonstration and Experience Campaign (BADEC) is also encouraged.*

## Recommendation for Committee Decision

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| <b>Prepared by:</b>       | Working Group C   |
| <b>Date of Submission</b> | 13 November 2014  |
| <b>Issue Title:</b>       | Outreach material and contribution to the UN-affiliated regional centres for science and technology acting as information centres for the ICG |

### Background/Brief Description of the Issue:

Different efforts have been made by organizations in the Working Group to promote education in GNSS and outreach activities. The presentations made by the members of the Working Group highlighted the possibility for cooperation on different levels within the different institutions.

Within the framework of the Working Group C of ICG, negotiations with the regional centres are on-going in order to utilize them as “hubs” for training and information dissemination on global applications of GNSS and their benefits for humanity. ICG Information Centres aim to foster a more structured approach to information exchange in order to fulfil the reciprocal expectations of a network between ICG and regional centres. By using the existing infrastructure of the regional centres, ICG (more specifically GNSS service providers) may save significant effort and resources by taking advantage of the operational regional centres for information dissemination. The regional centres can then expand their range of training programmes and services and thus open new opportunities to connect to other GNSS providers (or future providers).

### Discussion/Analyses:

Discussions built upon Action C2 of the Revised Workplan for Working Group C, and in particular, the distance learning programmes, web-based courses and tutorials, interactive programmes for middle/high schools, multimedia software and demonstration data sets to enrich the training and research programmes recommended as part of the workplan. The work of the Moscow State University of Geodesy and Cartography (MIIGAIK), Tokyo University of Marine Science & Technology (TUMSAT), and Beihang University was highlighted. Members also discussed how industry could contribute to educational programmes.

### Recommendation of Committee Action:

*Working Group C recommends that providers disseminate educational material to the UN-affiliated regional centres for science and technology acting as ICG information centres. This will be done through the ICG Executive Secretariat. Active provider participation in the regional centres and their work is encouraged. The Working Group also encourages industry involvement in the activities of the regional centres.*

**Recommendation for Committee Decision**

**Prepared by:** Working Group C

**Date of Submission:** 13 November 2014

**Issue Title:** Proposed template for cooperation between existing or developing Provider and GNSS user information centers for ICG Member Consideration

**Background/Brief Description of the Issue:**

Past work of the ICG Provider's Forum and working Group A seeks to improve cooperation and information sharing between GNSS Providers' user service centers. The European GNSS Service Center and the U.S. Coast Guard NAVCEN (the GPS civil user service center) have been working together since the beginning of the year to develop a procedure to jointly administer inquiries that come into the centers from users. Additionally, NAVCEN and the BeiDou Test and Assessment Research Center (TARC) have been engaged in discussions of the same sort.

**Discussion/Analyses:**

The ability to quickly answer user inquiries is critical to instilling confidence in the GNSS being used. Problems encountered with equipment and disruption reports need to be quickly referred to subject matter experts and law enforcement authorities for disposition. A template has been developed that attempts to identify the manner in which certain types of questions can be forwarded back and forth between service centers to the benefit of the user, and establish the existing or developing center as the representative for their GNSS system. Web page templates were proposed for each GNSS with links and contact information for all use information centers.

**Recommendation of Committee Action:**

*To improve cooperation between existing and developing provider user information centres, Working Group C recommends that all the Provider and GNSS user information centres consider development and adoption of a process for referring inquiries to each other where appropriate.*