



Inland ENC Harmonization Group

10th Annual Meeting

November 14th – 16th 2012

Iquitos, Peru



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10th Annual Meeting**

**Amazon Hydrographic Service of the Peruvian Navy
Iquitos, Perú**

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Participants

Name	Affiliation
Jorge ABAD	University of Pittsburgh/SHNA
Lee ALEXANDER	University of New Hampshire, US
BAEK, Yong	KHOA, South Korea
Gael BILLET	Periskal cvba
Bernd BIRKLHUBER	Ministry of Transport, AT
Juan CARBALLINI	CARIS
Tom DePUYT	ESRI
FEI, Weijun	Waterborne Transport Research Institute, CN
GONG, Yanping	Waterborne Transport Research Institute, CN
Luis GUTIERREZ	SHNA Perú
Wieland HAUPT	Fachstelle fuer Geoinformation Sued, DE
HU Ming	Ministry of Transport, China
Pieta KLUYTENAAR	Serendipity, on behalf of Ministry of Transport, NL
Denise LaDUE	US Army Corps of Engineers, US
Flavia MANDARINO	DHN, BR
Hugo MONTORO	Servicio de Hidrografía y Navegación de la Amazonía
Helena ROWLAND	LOC
Carlos E. TEJADA	HYPACK, Inc.
Angel TERRY	Jeppesen Marine
J. TORRES	INOCAR-ECUADOR
XIE Manying	Ministry of Transport, China
ZHANG Lu	Waterborne Transportation Institute of MOT, China

Minutes of the meeting

(IEHG_2012.pdf)

1. Welcome, Introductions of Participants, organizational details

Denise LaDue and Bernd Birkhuber welcomed the participants and thanked Hugo Montoro and Helena Rowland for the organization of the meeting.

2. Presentation on Inland ENCs and IEHG

The following presentations were given under this agenda point:

Inland ENCs and IEHG (Inland_ENC.pdf, slides 1-17)	Bernd Birkhuber
Legal and organizational background in U.S. (USACE_Status_report_2012.pdf)	Denise LaDue
Europe and Russia (Status_report_Europe_2012.pdf)	Bernd Birkhuber
Brazil (Inland_ENC_BR_2012.pdf)	Flavia Mandarino
China (IEHG2012_China.pdf)	Gong Yanping
Peru (Peru_at_IEHG_2012.pdf)	Hugo Montoro

IEHG discussed the update intervals and the distribution of inland ENC's. The update intervals are very much depending on the local circumstances. Bigger intervals are acceptable on regulated rivers with a hard riverbed that does not change. On many inland waterways it is necessary to produce an update after major floods, because high water levels are causing changes in the riverbed (or even of the shoreline). The distribution of Inland ENC's can be done by offering a pull service on a website or by installing a push service for registered users. While many countries are publishing Inland ENC's in the open .000 format on the internet, many users prefer a distribution via their application providers, because the companies deliver self-extracting installation files which ensure that the files are stored in the correct directory.

As some of the terms used in IENC production are not entirely clear and might be interpreted differently in different regions, the meeting discussed the need to create an extension to the IHO S-32 dictionary for IENC terminology

Action point: Flavia Mandarino and Hugo Montoro are invited to submit a proposal for an initial list.

3. Presentation of Inland ENC applications by private companies

The following presentations were given under this agenda point:

CARIS - Hydrographic Production Database for Inland ENC and Inland Paper Chart production (CARIS_IEHG10.pdf)	Juan Carballini
Esri Nautical Solution: Inland ENC and Paper Chart Production (Esri_ArcGISforMaritime_IEHG_10_Iquitos_Peru.pdf)	Tom DePuyt
Periskal (IEHG_2012_Periskal.pdf)	Gael Billet
Hypack (HYPACK_ENC_EDITOR.pdf)	Carlos Tejada

4. Working methods of IEHG

The composition/membership of IEHG which includes both Members and Participants and the organization in regions as well as the procedures were presented by the chair (IEHG_2012.pdf, slides 9-15).

5. Election of the Core Group of IEHG

Denise LaDue and Bernd Birkhuber were confirmed as Co-Chairs.
Flavia Mandarino and Fei Weijun were confirmed as Vice Chairs.
Lee Alexander, Pieta Kluytenaar, Angel Terry and Yong Baek were confirmed as Technical Coordinators.

The meeting checked the Terms of Reference and came to the conclusion that an amendment is not necessary.

Denise LaDue and Pieta Kluytenaar were confirmed as the representatives of IEHG in the Domain Control Body and the Executive Control Body of S-100.

The meeting checked the Introduction of the Encoding Guide for Inland ENC's and came to the conclusion that an amendment is not necessary.

6. Information on experiences with Inland ENC's by participating private companies

There were no critical remarks from the participating private companies.

7. Annual Report to HSSC about IEHG

IEHG is recognized as a NGO with observer status by IHO and is therefore presenting a report on the status of Inland ENC standardization and implementation each year to HSSC. IEHG has presented a report at the HSSC meeting in September and will produce a report for the next HSSC meeting in autumn 2013. It is too early to prepare the report now.

8. Status of development of S-99, S-100 and S-101 and future alignment of Inland ENC Product Specification with these standards

Denise LaDue informed the meeting about the planned changes in the structure of S-100 (only one register instead of a HYDRO and a supplementary register) and S-99 (see HSSC4_05_1D_S_100_Product_Specification_Identifiers.pdf). The meeting came to the conclusion that the changes might be beneficial with regard to the status of Inland ENCs.

The Inland ENC domain within S-100 has been updated.

S-101 is still not finalized. The meeting came to the conclusion that it is too early to start with the drafting of a new Product Specification for Inland ENCs, but decided to start the discussions about the basics for this future Product Specification and the alignment with S-101 (e.g the use of complex attributes).

Action point: the IEHG members who are involved in the IHO meetings regarding S-101 development are invited to start discussions on the forum about important topics for the alignment of the Product Specification for Inland ENCs with S-101. All members of IEHG are invited to participate actively.

The meeting discussed who might have sufficient knowledge of UML for future development. None of the participants had the knowledge.

Action point: all members of IEHG are invited to investigate who has knowledge of UML.

Denise LaDue informed about the discussion at HSSC regarding the naming of Product Specifications (see HSSC4_05_1D_S_100_Product_Specification_Identifiers.pdf). The meeting decided to wait for the decision of IHO.

9. S-57 to S-100 converter development

Tom De Puyt informed the meeting about the S-57 to S-100 converter the inland specific tests by Laszlo Redly (see S_101_Converter_Version_1_6_8.zip).

Action point: all members of IEHG are invited to perform tests with the converter and their Inland ENCs and to deliver feedback to Tom De Puyt.

10. Updates to the Encoding Guide and Product Spec

All the Change Requests which have been submitted since the last IEHG meeting in Chongqing were presented. The meeting was able to come to unanimous decisions regarding most of the open Change Requests. The updated CRs will be published on the discussion forum for formal adoption. A few CRs which were only affecting Europe (e.g. a European definition of the term “navigable water”) were deferred to the meeting of the European Inland ECDIS expert group. For the results of the discussions see CR_collected_2012.pdf and Overview_CRs_2012.pdf).

Action point: Bernd Birkhuber will inform the European Inland ECDIS expert group about the open points for European waterways and submit CRs based on the decisions of that meeting.

The meeting discussed whether it is necessary to define a different minimum content of Inland ENCs for the Amazon river basin, but did not come to a conclusion.

Action point: the South American countries are invited to investigate whether a different definition of minimum content is necessary for the Amazon river basin and to submit a proposal (if necessary).

11. Update intervals and processes

The meeting discussed when the next version of the Encoding Guide and the next edition of the Product Specification and the Feature Catalogue should be published. A high percentage of the adopted CRs is only affecting the Encoding Guide. China announced to submit CRs (which would affect the Feature Catalogue) in the coming year.

The meeting decided to publish a version 2.3.5 of the Encoding Guide which can be used with the existing edition 2.3 of the Product Specification and the Feature Catalogue and does therefore not require new software. The meeting set the deadline for CRs which will be taken into account for this new version with 14th December 2012. The CRs will be adopted (or rejected) by end of January and the new version 2.3.5 of the EG will be published in February 2013.

Action points: all members are invited to participate actively in the finalization of the discussions on the CRs on the forum. Denise LaDue offered to prepare the new version 2.3.5 of the Encoding Guide in February 2013.

12. Portrayal domain and specification for Inland ENCs

Up to now IEHG has only dealt with the harmonization of Inland ENCs. There were different standards for the display of these charts in the various regions (e.g. the “Inland ECDIS standard” in Europe), because inland vessels do not travel from one region to another.

At the 8th meeting IEHG decided to set up an Inland portrayal domain within the S-100 registry, because one of the goals of IEHG is to ensure that maritime vessels are able to use Inland ENCs when they are using inland waterways. The development of this new domain has to be based on the portrayal domain for maritime ENCs.

The DIPWG working group of IHO is still working on the development of the portrayal domain and the portrayal specification. The development will most probably take longer than the development of the S-101 Product Specification. The meeting decided to wait for the further developments at IHO before IEHG starts with the development of own specifications.

13. Proposals for quality standards for Inland ENCs

Wieland Haupt presented the status of the development of an edition 2.3 of the Recommended Validation Checks for Inland ENCs (see [Rec_IENC_Validation_Checks_Iquitos.pdf](#) and [IES21_IES23_engl.pdf](#)). The meeting was able to clarify some open questions.

Action point: Wieland Haupt will finalize the document together with the task force and submit it on the Discussion Forum for adoption. Software companies are invited to implement the Recommended Validation Checks in their chart production tools and chart producers are invited to provide feedback if they find errors in the document.

Pieta Kluytenaar presented the xls-sheet with the minimum content of Inland ENCs (see [IENC_min_content_v2_4.xls](#)). The document is also containing the accuracy requirements for European inland waterways and update requirements. The meeting decided to post the document on the [ienc.openencdis.org](#) website, but only as an information document. The Encoding Guide is the official source for the minimum content and the xls-sheet will not be updated if nobody is able to provide funding for the development of a tool for the production of the sheet from the database of the USACE.

Action point: Bernd Birkhuber will post the document under the papers section on the ienc.openecdis.org website.

Bernd Birkhuber informed the meeting about the developments at IHO regarding accuracy information in Inland ENCs (see slide 31 of IEHG_2012.pdf). The meeting decided to wait for the decisions of IHO.

14. Use of USAGE and SCAMIN in Inland ENCs

The meeting discussed the optimal SCAMIN values for different waterways and came to the conclusion that the values in the Encoding Guide are only recommendations. Pieta Kluytenaar is considering to draft a Change Request with more detailed instructions.

15. Updates of the Information documents on Inland ENCs

Action point: All members of IEHG are invited to submit proposals for amendments of the information document on Inland ENCs (Inland ENC.ppt on ienc.openecdis.org).

Lee Alexander announced to revise a draft for an article for HYDRO International.

16. Future operation of:

the ienc.openecdis.org website

Bernd Birkhuber informed the meeting that the hosting of the website is guaranteed for the next two years.

discussion forum for Inland ENCs

Denise LaDue informed the meeting that the USACE is continuing to operate the discussion forum and invited the participants to submit proposals for improvements.

IENC domain (as part of S-100 Registry)

Denise LaDue and Pieta Kluytenaar informed the meeting that the operation of the IENC domain is guaranteed.

17. Any other business

The meeting discussed how to encourage more countries/regions to join IEHG. Angel Terry will continue to inform South American countries about IEHG. Lee Alexander and Angel Terry will contact Alberto Costa Neves regarding support via Capacity Building. Lee Alexander mentioned that Nigeria might become interested in joining IEHG.

A group of volunteers discussed the procedures how to accommodate the specifics of the Chinese inland waterways (see [China_Plan_for_IENC.pdf](#))

18. Next meeting

According to the principle of rotation the next meeting should be in North America. Denise LaDue announced that she is checking the possibility to have the meeting in Jersey City (at the Hudson River, opposite from Manhattan). The meeting discussed possible dates and agreed to take the Smart Rivers Conference and the HSSC meeting into account.

Action point: Denise LaDue will inform IEHG about the location of the next meeting and she will fix the date together with the Core Group.