



Inland ENC Harmonization Group

9th Annual Meeting

October 18th – 20th 2011

Chongqing, Peoples Republic of China



China Waterborne Transport
Research Institute



**Inland ENC Harmonization Group
9th Annual Meeting**

**October 18th 2011: Open workshop Inland ENCs
October 19th – 20th 2011: Internal IEHG meeting**

Location:

Kingworld Hotel
9 Jinyuan Road
Jiangbei District
Chongqing
China

URL: <http://www.empark.com.cn/english/cq02/index.asp>
Tel.: +8623-86338888
Fax: +8623-86339999

Local Contact: Ms. Yu Xiujuan
mobile phone : +86-13501109380
Email: yuxj1@wti.ac.cn

Agenda

Open workshop

- | | |
|--|---|
| 1. Welcome, Introductions of Participants, organizational details | Bernd Birkhuber,
Weijun Fei, all |
| 2. Presentation on Inland ENC and IEHG | Bernd Birkhuber |
| Legal and organizational background in
U.S.
Europe and Russia
Brazil | Denise LaDue
Bernd Birkhuber
Flavia Mandarin |
| 3. Presentation of Inland ENC applications by private companies
'CARIS - Hydrographic Production Database for Inland ENC and
Inland Paper Chart production
Esri Nautical Solution: Inland ENC and Paper Chart Production
Production and Application of IENCs | Juan Carballini
Tom DePuyt
Eric Rottmann |
| 4. Working methods of IEHG | Bernd Birkhuber |
| 5. Presentations by the new participants about their
river/inland waterway network, navigation and cartography:
Introduction of Inland Waterways and its ENC in China
Peru
Venezuela | Weijun Fei
Lee Alexander
Felipe Rodriguez and
Magaly Hernandez |
| 6. Research and development in the area of Inland ENC | Lee Alexander |

Internal IEHG meeting

- | | |
|---|---|
| 1. Welcome, Introductions of Participants, organizational details | Bernd Birkhuber
Weijun Fei, all |
| 2. Election of the Core Group of IEHG | all |
| Election of the chairs | all |
| Amendment of the Terms of Reference | Bernd Birkhuber |
| Election of the representatives of IEHG in the Domain Control Body and the Executive Control Body of S-100 | all |
| Update of the Introduction of the Encoding Guide for Inland ENC | Bernd Birkhuber |
| 3. Information on experiences with Inland ENCs by participating private companies (critical remarks welcome): | |
| CARIS | Juan Carballini |
| ESRI | Tom DePuyt? |
| IIC Technologies | Chris Hudson? |
| SevenCs | Eric Rottmann
Swetlana Fiedler |
| 4. Annual Report to HSSC about IEHG | Lee Alexander |
| 5. Status of development of S-99, S-100 and S-101 and future alignment of Inland ENC Product Specification with these standards | Lee Alexander, Denise LaDue, Eric Rottmann, all |
| 6. S-57 to S-100 converter development | Tom De Puyt |
| 7. Updates to the Encoding Guide and Product Spec | all |
| 8. Update intervals and processes | all |
| 9. Portrayal domain and specification for Inland ENCs | all |
| 10. Proposals for quality standards for Inland ENCs | |
| recommended validation checks for Inland ENCs (based on S-58) | Bernd Birkhuber |
| minimum content of Inland ENCs | Pieta Kluytenaar |
| minimum accuracy requirements (results of IRIS II) | Bernd Birkhuber |
| accuracy information in Inland ENCs | Pieta Kluytenaar |
| proposal for the indication of quality regarding depth information | Wieland Haupt |
| 11. Change Requests regarding the standardized XML-format for water level messages | Bernd Birkhuber |

- | | |
|---|---|
| 12. Use of USAGE and SCAMIN in Inland ENC | Pieta Kluytenaar |
| 13. Updates of the Information documents on Inland ENCs
(Inland ENC.doc and Inland ENC.ppt)
Article for HYDRO International | Lee Alexander
Bernd Birkhuber
Lee Alexander |
| 14. Future operation of: | |
| the ienc.openecdis.org website | Bernd Birkhuber |
| discussion forum for Inland ENCs | Denise LaDue |
| IENC Register (as part of S-100 Registry) | Denise LaDue
Pieta Kluytenaar |
| 15. Any other business | all |
| - How to encourage more countries/regions to join IEHG | |
| - South America | |
| - East Asia | |
| 16. Next meeting | |

Time schedule:

The following time schedule is just an example, based on the time schedule of our last meeting

[October 18th 2011

09:00 - 11:00 morning session
11:00 - 11:20 coffee break
11:20 - 13:00 midday session
13:00 - 14:00 lunch break
14:00 - 15:30 afternoon session
15:30 - 15:50 coffee break
15:50 - 17:30 continuation of afternoon session

October 19th 2011

09:00 - 11:00 morning session
11:00 - 11:20 coffee break
11:20 - 13:00 midday session
13:00 - 14:00 lunch break
14:00 - 15:30 afternoon session
15:30 - 15:50 coffee break
15:50 - 17:30 continuation of afternoon session

October 20th 2011

09:00 - 11:00 morning session
11:00 - 11:20 coffee break
11:20 - 13:00 midday session
13:00 - 14:00 lunch break
14:00 - 15:30 afternoon session
15:30 - 15:50 coffee break
15:50 - 17:00 continuation of afternoon session
17:00 end of the meeting]

Participants of 9th IEHG meeting:

- | | | |
|-----|--------------------------------|--|
| 1. | Lee Alexander | University of New Hampshire, US |
| 2. | Yong Baek | KHOA, KR |
| 3. | Bernd Birkhuber | Ministry of Transport, Innovation and Technology, AT |
| 4. | Juan Carballini | CARIS |
| 5. | Tom De Puyt | ESRI, US |
| 6. | Weijun Fei | Waterborne Transportation Institute of MoT, CN |
| 7. | Swetlana Fiedler | 7 Cs, DE |
| 8. | Gigab Ha | KESTI, KR |
| 9. | Wieland Haupt | Fachstelle für Geoinformation Süd, DE |
| 10. | Chris Hudson (?) | IIC Technologies, US |
| 11. | Pieta Kluytenaar | Serendipity, NL |
| 12. | Denise LaDue | US Army Corps of Engineers, US |
| 13. | Felipe Alberto Rodriguez Lopez | Hydrography and Navigation Service, VE |
| 14. | Flavia Mandarino | DHN, BR |
| 15. | Hugo Montoro | DHN, Peru |
| 16. | Magaly Hernandez | Hydrography and Navigation Service, VE |
| 17. | Eric Rottmann | 7 Cs, DE |
| 18. | Angel Terry (?) | Jeppesen Canada Ltd., CA |

Annex

Ad Agenda point 2 of the IEHG meeting

Election of chairs

According to the Terms of Reference of IEHG the group is electing chairpersons, vice-chairs and technical coordinators by simple majority vote. The Core Group consists of

- 1) Chair – Two persons (co-chairs) each from a different region. Only representatives of waterway authorities can become chairpersons.
- 2) One vice-chair from each region, which is not already a chair.
- 3) Technical Coordinators - One technical coordinator for each region.

Currently the Chairs are Denise LaDue (North America) and Bernd Birkhuber (Europe), the Vice Chairs are Flavia Mandarino (South America) and Fei Weijun (Asia).

The technical coordinators are Lee Alexander (North America), Yong Baek (Asia), Pieta Kluytenaar (Europe), Vladimir Sekachev (Russia) and Angel Terry (South America).

The meeting should confirm the current Core Group members or elect new members. Each region can elect its technical coordinator and its candidate for chair/vice chair. The whole group is electing the two chairs from the group of the candidates.

Amendment of the Terms of Reference

IHO has adopted S-99 the “Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry”. The term “Domain Control Body” is used by S-99 for a body which is composed of representatives of all domains in a register. The Terms of Reference of IEHG are using this term with a different meaning at the moment and should be aligned with S-99 to prevent misunderstandings.

The ToR of IEHG are containing a procedure for the adoption of Change Requests and a procedure for amendments of the IENC Domain in the S-100 Registry. But the relation between these two processes is not clear. Must a CR be adopted before the amendment is registered in the domain? Or is it the other way around or are the processes parallel?

Election of the representatives of IEHG in the Domain Control Body and the Executive Control Body of S-100

IEHG is the owner of the Inland ENC domain in the S-100 registry and has to nominate representatives for the Domain Control Body and the Executive Control Body of S-100 in accordance with S-99. Currently Denise LaDue and Pieta Kluytenaar are the representatives. IEHG should confirm the current representatives or elect new representatives.

Update of the Introduction of the Encoding Guide for Inland ENCs

The Introduction section of the Encoding Guide for Inland ENCs is containing a short history of IEHG. The fact that South Korea, Venezuela and Peru have joined IEHG should be mentioned there. The last part of the Introduction is dealing with the amendment procedures.

Ad Agenda point 4 of the IEHG meeting

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.

Ad Agenda point 5 of the IEHG meeting

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

IEHG is planning to align the Product Specification for Inland ENCs (which is currently based on S-57 edition 3.1) with S-101 as soon as the maritime Product Specification is finalized. The meeting might discuss when the drafting of the new version should be started and who might be involved in the drafting of the documents. It would be most welcome if someone who is directly involved in the development of S-101 would be able to contribute to the work.

Ad Agenda point 7 of the IEHG meeting

Updates to the Encoding Guide and Product Specification

Change Requests for the Encoding Guide or the Product Specification should be transmitted at least six weeks before the meeting (i.e. before 2nd September 2011). If everybody agrees with the Change Requests they are adopted before the meeting. If there are objections the Change Requests can be discussed at the meeting. The meeting will try to find solutions for those CRs. The proposals of the meeting will be distributed via the discussion forum and will be adopted within a period of six weeks after the meeting.

There is also a proposal for an improved version of the form for change requests. The proposal has already been discussed via the forum. The meeting should agree on a new form for change requests.

Ad Agenda point 8 of the IEHG meeting

Update intervals and processes

The procedure for the adoption of Change Requests is defined in the Terms of Reference of IEHG.

There are two kinds of changes (they are described in the introduction of the Encoding Guide for Inland ENCs):

1. Changes which are only affecting the Encoding Guide;
2. Changes which are also affecting the Feature Catalogue, the Product Specification (and – in the future – the portrayal).

Changes of the Product Specification and the Feature Catalogue are leading to new editions (e.g. 2.3), changes which are only amendments of the Encoding Guide lead to new versions of an existing edition (e.g. 2.3.4). The experience of the last years has shown that sometimes errors in the Feature Catalogue are only detected after the formal adoption. According to the current procedures we can only replace an edition of the Feature Catalogue with a corrected version of the same edition with the same numbering. The only possibility to identify the latest (corrected) version of the Feature Catalogue is to look at the date of publication. Is this sufficient or would it be better to introduce version numbering for the Feature Catalogue? If we introduce version numbering, do we use a third digit as we are doing it for the Encoding Guide? This might be misleading because there is no direct relation between the version numbering of the Feature Catalogue (a new version may only contain corrections) and the version numbering of the Encoding Guide (a new version can also be based on Change Requests). To give an example: currently edition 2.3 of the Feature Catalogue can be used with the editions 2.3.0, 2.3.1, 2.3.2, 2.3.3 and 2.3.4 of the Encoding Guide. If an error in edition 2.3.0 of the Feature Catalogue is detected and corrected after the publication of version 2.3.2 of the Encoding Guide, it would result in an edition

2.3.1 of the Feature Catalogue. The old version 2.3.0 of the FC should not be used any more (because it contained an error), but version 2.3.1 of the FC could be used with the versions 2.3.0, 2.3.1, 2.3.2, 2.3.3 and 2.3.4 of the Encoding Guide (and not only with version 2.3.1). It might therefore be better to call the corrected versions of the FC edition 2.3 corr1, 2.3 corr2 and so on.

The IEHG might also consider at which point in time it recommends to use a new adopted edition. Edition 2.3 has been published and sent to national and international organisations for formalization and afterwards we have detected several errors. The question is whether e.g. an additional period of 6 weeks after the publication would help to find the errors.

Many errors have been found when the European partners were implementing the changes in the Feature Catalogue in the Presentation Library of the European Inland ECDIS standard. But even if IEHG would wait for the adoption of the European standard, it would not solve the problem, because there was the same situation that some errors were only found after the formal adoption of the standard. One error in the Presentation Library of edition 2.1 of the European standard has only been identified more than three years after the formal adoption.

IEHG should therefore agree on a procedure for the publication of corrections.

Ad Agenda point 9 of the IEHG meeting

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 last 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, which was still under development last year.

IEHG might discuss how to establish cooperation respectively a transfer of knowledge from the working groups of IHO which are dealing with portrayal to IEHG. IEHG might also discuss how to develop a proposal for a portrayal standard and might set up a small task force for this task.

Ad Agenda point 10 of the IEHG meeting

Proposals for quality standards for Inland ENC's

- Recommended validation checks for Inland ENC's (based on S-58)

IEHG has developed a proposal for "recommended validation checks for Inland ENC's" which is based on S-58. The document is based on edition 2.1 of the Product Specification for Inland ENC's. IEHG has decided to set the document into force when practical tests with software that is based on the draft have been successful.

IEHG has not developed a proposal for a new edition of the document in accordance with edition 2.3 until now, because the original proposal for edition 2.1 has not yet been verified.

IEHG might discuss the further proceedings.

- Minimum content of Inland ENC's

The minimum content of an Inland ENC is specified in the Introduction of the Encoding Guide for Inland ENC's. IEHG might discuss whether changes are necessary.

- Minimum accuracy requirements

The Product Specification for Inland ENC's and the Encoding Guide for Inland ENC's do not contain minimum accuracy requirements at the moment. A research and development project of the European Union has developed a proposal which can be presented at the meeting. IEHG might discuss whether such requirements should become part of the Encoding Guide.

- Accuracy information in Inland ENC's

At the last meeting IEHG came to the conclusion that it is quite difficult for the user to find the information on the accuracy of different objects in the Inland ENC. IEHG might discuss how to improve the information.

The German delegation is going to present a proposal for the indication of quality regarding depth information in IENC's which has been developed in a German working group on quality indications.

Ad Agenda point 11 of the IEHG meeting

Use of USAGE and SCAMIN in Inland ENC's

Pieta Kluytenaar has presented some problems and ideas regarding the use of USAGE and SCAMIN in Inland ENC's at the meeting of IEHG in 2010. There might be new developments which should be discussed with a view to possible amendments of the Encoding Guide for Inland ENC's.

Ad Agenda point 12 of the IEHG meeting

Electronic sealing of basic ENC's?

Germany is considering how to protect official IENCs against changes by third parties. An electronic seal which is destroyed in case of changes of the IENC would be a possibility.

Ad Agenda point 13 of the IEHG meeting

The benefit of WMS/WFS regarding Waterway Network in Germany

Germany has GIS compatible waterway network data and is using special software tools to create e.g. the attribute "unlocode" automatically when producing or updating IENCs. The principle of the procedure and the benefits will be presented.

Ad Agenda point 14 of the IEHG meeting

Updates of the Information documents on Inland ENCs (Inland ENC.doc and Inland ENC.ppt)

IEHG has agreed on an information document (Inland ENC.ppt) on Inland ENCs and the Inland ENC Harmonization Group (IEHG) at the last meeting. It was proposed to develop also a text document. The meeting might discuss amendments of the information documents to take the latest developments into account.

Ad Agenda point 15 of the IEHG meeting

Future operation of the ienc.openecdis.org website

The website of IEHG is currently hosted by the company CRUP as part of the PLATINA project of the European Union. The PLATINA project will end in May 2012. It is intended to keep the hosting of the website as part of a follow up project. The meeting might discuss the latest developments and possible improvements of the content of the website.

Future operation of the discussion forum for Inland ENCs

The discussion forum is currently hosted by the USACE. The meeting might discuss possible improvements in the discussion forum.

Future operation of the IENC Domain (as part of S-100 Registry)

IEHG has set up an Inland ENC domain in the supplementary register of the S-100 Registry (see http://registry.iho.int/s100_gi_registry/FeatureConceptDics/fcd_home.php?register_type=2). The meeting might discuss possible improvements.