Inland ECDIS expert group
Task force quality standard for Inland ENC

Minutes of meeting

25-02-2009
Hamburg, 7Cs

10:30-17:00

Participants

Bernd Birklhuber
David D'Aquino
Swetlana Fiedler
Yves Hacha
Peter Kluytenaar
Gert Morlion
Eric Rottmann
Nora Schmorak
Vladimir Sekachev
Ludwig Steinhuber
René Visser

Agenda

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3. S-58 of IHO for maritime ENCs
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   - water level exchange format (change of reference level)
   - edition number of IENCs for new editions of IES

1. Welcome, Organizational details

The chairman thanked SevenCs for the organisation of the meeting

2. Why do we need a quality standard?

The discussion identified several reasons for the development of quality requirements:

- definition of a "good" IENC, that fulfils the minimum requirements; the minimum requirements in the EG are not clear enough
- different interpretations of the EG by different countries should be prevented
- competent authorities should have a basis for checks of IENCs, because they are responsible for the quality and the conformance with the standards
- chart producers and validation software producers need a basis for validation checks for IENCs
- the IENC standards to not define requirements regarding accuracy at the moment

The group came to the conclusion, that additional requirements (e.g. specification of the minimum content or requirements regarding accuracy) should be part of the product specification or the EG itself.

The group came to the conclusion that the checks, whether all objects of the minimum content are encoded and whether the accuracy is sufficient can only be done “manually” and should not be mixed with the consistency checks, that can be done by validation software.

3. S-58 of IHO for maritime ENCs

Eric Rottmann presented the approach of S-58 (recommended validation checks for ENCs). The document is the basis for validation software. These software tools are checking, how an ENC is encoded, but they are not able to check what is encoded.

4. Amendment of S-58 or amendment of Encoding Guide?

The group came to the conclusion, that all requirements regarding the content of IENCs should be part of the Product Specification for Inland ENCs or the Encoding Guide for Inland ENCs. An additional quality standard should not contain new requirements, but only instructions, how to check the conformity of an Inland ENC with the requirements of the existing standard.

The chair informed the group about the opinions of those members of IEHG, that had expressed their preferences before the meeting (Carlos Albuquerque, Denise LaDue, Vladimir Sekachev, Peter Kluytenaar).

The validation checks in S-58 are not only based on the “Use of the Object Catalogue”/EG, but also on the Product Specification. It would therefore not be sufficient to add checking instructions to the individual pages of the EG; it would be necessary to amend the Product Specification for Inland ENCs, too.

The group came to the conclusion, that a document on recommended validation checks for Inland ENCs should be based on S-58 and show the differences (deletions, changes and amendments), to enable software producers to adapt their software. The document could be proposed as a new annex to the Encoding Guide.

5. Distribution of work

The group agreed on the following action points:

- clarification of the minimum content of IENCs: Gert Morlion and René Visser will provide questions regarding the minimum content. A proposal for an amendment of the minimum requirements in the EG will be drafted.
  René Visser and Peter Kluytenaar are working on a list, that is defining for each object, whether it is part of the minimum content, not part of the minimum content or part of the minimum content under certain conditions (e.g. a wreck is part of the minimum content, if it is an obstacle in the fairway, but it is not part of the minimum content, if it is in an area between two groins or it is in a deep section of a river; if it is in e deep section of the river, it is not an obstacle, but it is important to know, that anchoring is not possible there). If it is possible to agree on the conditions, they might be added to the EG.

- proposal for minimum requirements for accuracy: Ludwig Steinhuber, Peter Kluytenaar and David d’Aquino are going to work on a proposal for an amendment of the Encoding Guide regading minimum requirements for accuracy

together with the GIS-Forum Danube. All participants of IEHG will be invited to participate in the respective activities of the GIS-Forum. The discussions will be done via the IENC discussion forum on the OEF as far as possible.

- proposal for accuracy information in Inland ENCs: as a second step in the area of accuracy Ludwig Steinhuber and Peter Kluytenaar are going to work on a proposal for an amendment of the Encoding Guide with regard to the inclusion of accuracy information in Inland ENCs together with the GIS-Forum Danube. All participants of IEHG will be invited to participate in the respective activities of the GIS-Forum. The discussions will be done via the IENC discussion forum on the OEF as far as possible.

- recommended validation checks for Inland ENCs: Eric Rottmann, David d'Aquino, Eivind Mong, Vladimir Sekachev and Swetlana Fiedler are going to work on a proposal for recommended validation checks for Inland ENCs, that is based on S-58. The deviations from S-58 will be clearly marked to enable the producers of validation software to adapt their software.

- additional (manual) verification of completeness and accuracy of Inland ENCs: Gert Morlion and René Visser are going to develop a proposal for additional verifications of the completeness of Inland ENCs (especially with regard to the minimum content) and the accuracy (as soon as there is a proposal for minimum accuracy requirements).

- Notices to Skippers for invalid depth information: the production and distribution of updated depth information (especially after floods and other circumstances that lead to big changes in the riverbed) takes a relatively long time. Yves Hacha and Bernd Birklhuber are going to check, whether it would be possible to develop a standardised Notice to Skippers with the information, that the depth information between river-km x and river-km y is outdated and whether it would be possible to "switch off" the detailed depth information in that area in the Inland ECDIS applications.

The chair is going to open new discussion threads for these topics on the discussion forum. All participants of IEHG will be informed of the new topics, reminded to register themselves at the forum and invited to take part in the discussions and the development of proposals.

The status of the various proposals will be presented at the IEHG meeting in September.

6. Any other business

- correction of lookup tables: the chair presented the correction in the lookup tables that has already been discussed on the forum and asked, if everybody agrees with the proposed correction. As the correction is only affecting comments it is not requiring an new edition of the Inland ECDIS standard.

- water level exchange format (change of reference level): the European Inland ECDIS expert group has adopted a standardized data exchange format for detailed water level information at its last meeting. These water level correction files provide the difference between the reference water level that's the basis for the depth information in the Inland ENCs and the actual water level. The proposed format did not take into account, that the reference water levels on many rivers are updated occasionally (e.g. the reference water level for the river Danube is updated every 10 years according to the recommendations of the

Danube Commission; the changes in such an update are between 1 and 30 cm). It has therefore to be ensured, that water level correction files are only used with IENCs that use the same version of the reference level. The result of a discussion on the forum was a proposal to add a field to the correction file with the publication date of the reference level that is used in the file. The only disadvantage of this approach would be that it would not be possible to publish correction files for outdated IENCs which are still using an older version of a reference level. The group agreed to add a second data field to indicate a period of validity for the related Inland ENCs. The proposal will also be published in the forum.

- edition number of IENCs for new editions of the Inland ENC Product Specification: the group confirmed, that Inland ENCs in accordance with edition 2.0 of the Inland ECDIS standard, which are replacing an edition of Inland ENCs in accordance with edition 1.02 of the Inland ECDIS standard, should be published as a new edition with a higher edition number.
  In principle it is not foreseen to have two different valid editions of Inland ENCs at the same time and to publish updates for both editions. This requires manual selection and decisions by the data distributors and/or end users. But at the moment there are applications in use that are already capable of using edtion 2.0 or even edition 2.1 and applications, that are only able to read edition 1.02.
  The group came to the conclusion, that it would be useful to define a date of application for future editions of the standard. As it takes normally quite a long time from the adoption of a new edition in the expert group until the entry into force of an official regulation, it might be possible to set the date of application at 6 months after the entry into force.

- RIS portal: the European R&D project PLATINA is going to set up a portal for River Information Services that is going to include the websites of the RIS expert groups. It is intended to transfer the information on the European Inland ECDIS expert group from the ienc.openecdis.org website to the new portal and to provide links to the ienc website and vice versa.

- Terms of Reference of European inland ECDIS expert group: the European R&D project PLATINA is going to develop a proposal for a harmonization of the Terms of Reference of the various RIS expert groups. The proposal will be presented to the European Inland ECDIS expert group.

The further work on the identified topics will be done on the forum as far as possible and the status will be presented at the IEHG meeting.