Alignment with S-101

Berlin, 2014 10 06

Inland ENC Harmonization Group

CoRISMa

TEN-T RIS Enabled Corridor Management

Agenda

1. Welcome, organisational details
2. River Information Services (RIS) in Germany
3. The project RIS enabled Corridor Management (CoRISMa)
4. Digital waterways network
5. Alignment with S-101
    a. Portrayal
    b. Feature Catalogue
    c. Main document
6. Next steps and next meeting

Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

Welcome, organizational details

Many thanks to Wieland and Birgitta for the organization of the meeting!

17:45 - 21:00 visit of Berlin's waterways
boarding a passengers' ship at Weidendammer Brücke
guided inner city tour on river Spree (Karin Bischoff)
end of tour downtown at Weidendammer Brücke

Pease copy your presentations to the USB-stick

Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

River Information Services (RIS) in Germany

Nils Braunroth

Stefan Bober

Thomas Wagner

CoRISMa

Anneke Bosma

Digital waterways network

Wieland Haupt

Inland ENC Harmonization Group

CoRISMa

TEN-T RIS Enabled Corridor Management

Alignment with S-101

- S-101 will ensure that maritime ECDIS will be able to display Inland ENCs correctly
- But Inland ENCs have to be aligned with the Universal Hydrographic Data Model of S-100 and the Product Specification for Inland ENCs has to be aligned with S-101, the ENC Product Specification of IHO
- The display of inland specific objects – which was regulated by each region separately up to now – will become part of the international standardization by IEHG
- IEHG has already agreed on the general approach, but it was unclear who is able to draft the new standard

Alignment with S-101: CoRISMA

- Last year IEHG agreed to use the funds of the CoRISMa project for the work on the alignment with S-101
- The CoRISMa project on RIS enabled corridor management is providing funds for the alignment with S-101
- CoRISMa is developing proposals for the alignment, but the decisions have to be made by IEHG
- The documents that are developed by CoRISMa are posted on the IENC discussion forum and every member of IEHG is invited to contribute to the discussions

Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

Alignment with S-101: Portrayal, situation

- IEHG has to agree on portrayal, because it will become part of the Inland ENCs
- This will ensure that maritime applications will be able to display Inland ENCs correctly
- IEHG has decided to
  - Follow S-52/S-101 for “maritime” features
  - Use the European Presentation Library as a basis for discussing the display of Inland specific features
- The Inland ENC Encoding Guide is already containing screenshots of the European symbolization as a guidance
- The standard has to allow different displays of the same objects depending on the region (e.g. notice marks with the same meaning have different designs in different regions)

Alignment with S-101: Portrayal

The discussion document with the European symbols has been posted at the discussion forum

New symbols will be introduced on basis of Change Requests (e.g. for water turbulences and for shore supplies)

Brazilian symbols

Proposals from other regions?

Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

Portrayal: raster or vector?

- The draft of the portrayal section of S-100 edition 2 is containing vector symbols in SVG format
- Pro: defined symbol size independent of the resolution of the display
- Con: same absolute symbol size on all sizes of displays
- Proposal: define optimal size for standard navigation mode display and 1.5 to 2 m viewing distance
- Will it be possible to include the display size in the calculation of the symbol size?
- Will it be possible to use user settings (like for text size)?
- Germany has offered to produce SVG symbols

Portrayal: display priorities

- How will S-101 deal with display priorities within one feature class (e.g. a notice mark with a prohibition should have a higher display priority than a notice mark with an information)?
- Is S-101 going to use Conditional Symbology Instructions?

- S-100 Part 9
- Wieland
- Screenshot 4000 m range

Portrayal: tasks

- Presentation and maybe adoption at IEHG 2014
- Production of the symbols in SVG format
- Symbol size, Conditional Symbology: investigation, discussion and decision
- Establishment of an Inland ENC Portrayal Domain in S-100
- Registration of all inland specific symbols
- (Creation of a Portrayal Catalogue with the PC builder)

Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

Feature Catalogue: situation

- The IENC FC is based on the S-57 FC
- It is containing those elements of the S-57 FC which are needed for IENCs and in addition inland specific elements
- The S-101 FC will not merely be an ISO compatible version of the S-57 FC, but will contain a lot of new elements, even for existing features (e.g. LIGHTS will have a different structure)
- IEHG has decided to follow S-101 as far as possible to ensure compatibility
- IHO will provide a FC builder which will allow to create a FC from the elements registered in S-100

Feature Catalogue: general approach

- IEHG has used the Encoding Guide as the central element of standardization and only the attributes and enumerations mentioned in the EG were included in the FC
  Pro: chart producers cannot use elements which are not described in the EG
  Con: if a country wants to use a S-57 element which is currently not in the EG and the FC, it is necessary to amend the EG and the FC, the international standards, the chart production software and all applications on the vessels
- This is not only affecting features, but also attributes and enumerations
- Example: S-101 provides the attributes color and color pattern for many features, e.g. floating docks, cranes. If we decide that it is not necessary to encode the color of a crane it will not be included in the FC. If someone wants to use color, it would take years to provide the possibility

Feature Catalogue: general approach, alternatives

- We could decide to include the complete S-101 FC in the inland FC
  Con: chart production software would allow to use a lot of elements which are not described in the EG and this could lead to very different use of these elements in different countries
  Pro: more flexible approach and the DCEG of S-101 could ensure a harmonized use of the S-101 elements (but the DCEG is not based on real world entities)
- Would it be possible to use two versions of the FC?
  - FC for end user applications: complete S-101 + inland specific elements
  - FC for chart production: only those elements which are described in the EG
  Pro: no updating of applications on vessels for the introduction of additional S-101 elements, chart producers would not need to use the S-101 DCEG
  Con: 2 versions of the FC to maintain, no guarantee that chart producers won't use the complete FC

Feature Catalogue

Discussion document on S-57 object classes

FC_2.3_corr2_S57_elements_S_101_Features

FC_2.3_corr2_Inland_spec

FC_2.3_corr2_S57_elements_S_101_Attributes

Distribution of work

Deadlines

Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

Feature Catalogue: general approach, decision

- Only elements described in EG
  full harmonization, but restrictive
- Complete S-101 + inland specific elements
  harmonized IENCs only if DCEG is used in addition to EG
- Only the features of S-101 which are described in the EG, but all attributes and enumerations of S-101 + inland specific elements
  no big risk for harmonization, EG describes what should be used, FC what can be used
- Two FCs: a complete FC for the applications on board and a restricted FC for the chart production software

Feature Catalogue: tasks

Discussion document for IEHG presenting the changes in the encoding of features in the final draft of S-101

Proposal for the new elements to be used in the new Feature Catalogue for Inland ENCs

Draft of the new Feature Catalogue for Inland ENCs (depending on a decision of IEHG 2015 on the elements to be used): 2015-12-31

Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

Main document

Current Product Specification for Inland ENCs

Draft S-101 main document

Draft S-100 edition 2 on GML encoding

Do we try to amend the existing Product Specification or do we use S-101 as a basis and add the inland specific points?

Proposal of the CoRISMa partners: use S-101 as a basis and identify the necessary amendments

Main document: tasks

Identify the necessary amendments

Develop a draft of the main document for the IEHG meeting 2015

Inland ENC converter

IHO has developed an Open Source converter for the conversion of S-57 ENCs to S-100 ENCs

Converted ENCs will not make use of the new possibilities of S-101, but will be in line with the new data model

The converter has to be amended for Inland ENCs

CoRISMa is planning to contract a software company for the amendment

Next steps and next meeting

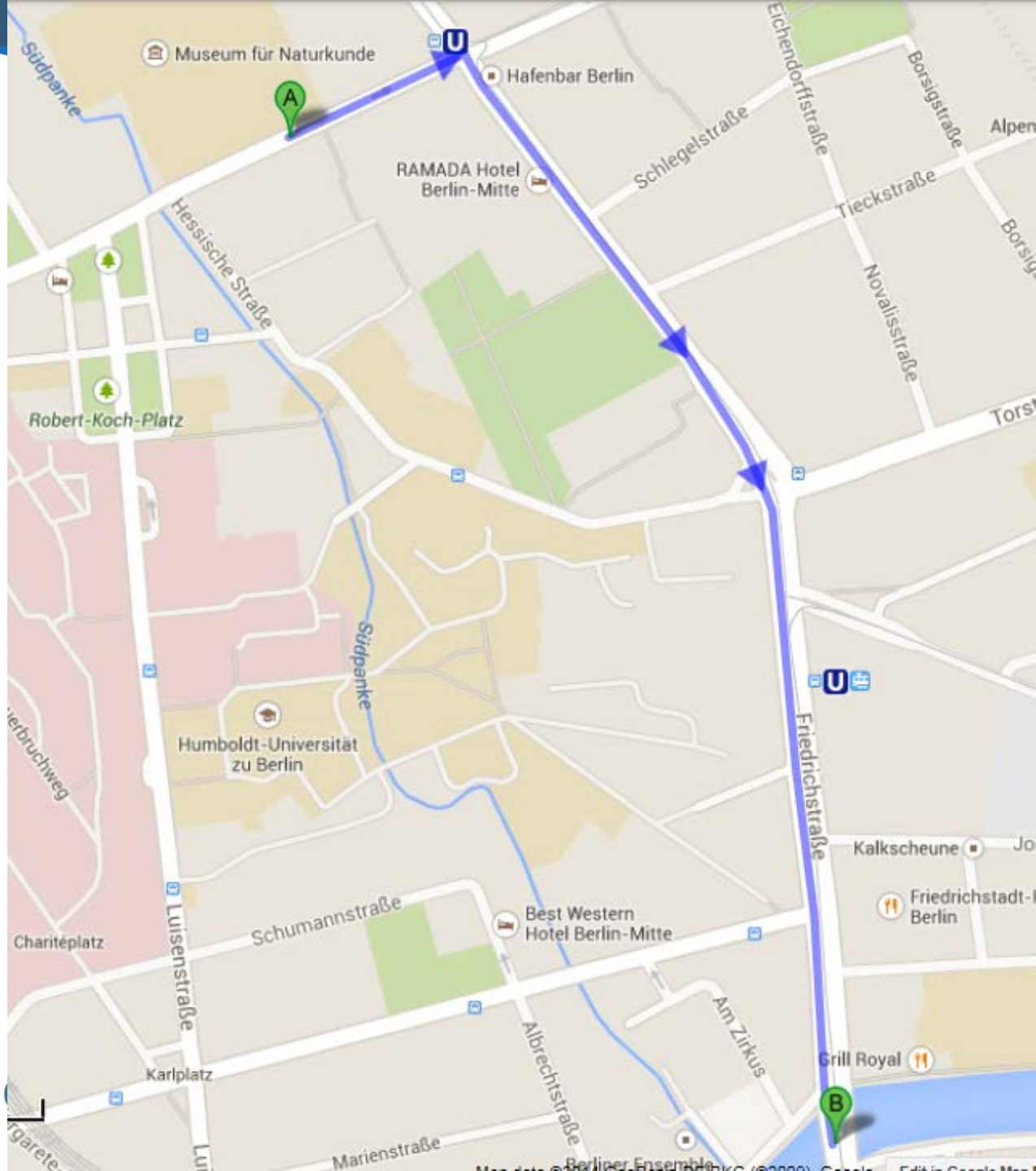
Inland ENC Harmonization Group

CoRISMa
TEN-T RIS Enabled Corridor Management

Turn left when you leave the Ministry or the hotel Mercure,

Turn right on Friedrichsstrasse

Walk 1.1 km (15 min)



Inland ENC Harmonizati

Thank you for participation
and your contributions!