

# Alignment of the Inland ENC Product Specification with S-101 (S-401)



IEHG Meeting 2017  
Niteroi, Brasil

# IENC Product Specification S-401

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- Objectives and status quo
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  - Creating the Inland ENC Feature Catalogue (IENC FC) by “tailoring” and using the Feature Catalogue Builder of IHO
  - Creating the Inland ENC Portrayal Catalogue (S-401) by “tailoring” and using the Portrayal Catalogue Builder
  - Development of tools for creating and maintaining the Inland ENC Encoding Guide (IES Encoding Guide Builder)
  - Development of an Inland ECDIS S-401 test application
  - Documentation of the work and results
- Time schedule

# IENC Product Specification S-401

## **RIS COMEX follows the European project CoRISMa**

- Bernd Birkhuber reported at our last meeting in Nanjing regarding the S-401 results CoRISMa
- An aim of COMES is to finalize this work:
  - The end product will be a draft product specification of the Inland ECDIS Standard (S-401) in accordance with maritime S-101 specification. The vision is:
    - In mouth areas of inland waterways can be used the same navigational equipment as in coastal areas
    - Further developments of the maritime ECDIS standard are generally available for the navigation on inland waterways
    - The registration of maritime and inland objects and attributes in a common IHO database enforces a harmonized data model for maritime and inland ENC

# IENC Product Specification S-401

## Adaptation of the Inland ENC product specification (S-401) to S-101

### ○ Tasks:

- Integration of all adopted Change Requests of IEHG into the draft of the S-401 main document
- Integration of amendments of S-101 into the draft of the S-401 main document
- Development of a draft of the European Inland ECDIS standard based on the S-401 Product Specification for Inland ENCs, including the application related requirements
- The final (word) document has to be transferred into the UML (Enterprise Architect). UML is used by the IHO.

### ○ Status quo:

- We received an actual draft version of S-101 in July and Gert Morlion upgraded our S-401 main document including the adopted Change Requests

# IENC Product Specification S-401

## Creating the Inland ENC Feature Catalogue (IENC FC) by “tailoring” and using the Feature Catalogue Builder of IHO

### ○ Tasks:

- Integration of all adopted Change Requests of IEHG into the draft of the IENC FC, in the word-document
- Integration of further amendments of S-101 into the draft of IENC FC, in the word document
- Registration of all new inland specific features, attributes and ranges of values in the S-100 registry, out of the previous described word documents
- Creation of the S-401 feature catalogue with the feature catalogue builder

### ○ Status quo:

- Status of registration in the IHO registry database is unknown
- As Pieta Kluytenaar retired we need a successor

# IENC Product Specification S-401

## Creating the Inland ENC Portrayal Catalogue (S-401) by “tailoring” and using the Portrayal Catalogue Builder

### ○ Tasks:

- Integration of further amendments of S-101 into the draft of IENC FC (display priorities, display rules, symbols, colours, linetypes...(former lookup tables))
- Registration of all inland specific symbols, colors, line styles, fonts, XSLT instructions etc. in the Inland ENC Portrayal Domain of S-100 registry
- Development of XSLT instructions for notice mark symbols with numbers and conditional symbology instructions (if possible in accordance with IHO)
- Investigation of the possibility to create the “footpoint” of a notice mark symbol with XSLT

### ○ Status quo:

- Status of registration in the IHO registry database is unknown
- As Pieta Kluytenaar retired, we need a successor

# IENC Product Specification S-401

## **SVG symbol library within the scope of IES S-401**

- [S-401symbol library generator](#)
- [S-401-EUR-Symbole\\_RUS\\_AtoNs-mod-041017.xls](#)
- [List\\_of\\_all\\_Inland\\_AtoN\\_symbols-041017.xlsx](#)

# IENC Product Specification S-401

## Development of tools for creating and maintaining the Inland ENC Encoding Guide (IES Encoding Guide Builder)

### ○ Tasks:

- System specification
- One tool is for providing the IES Encoding Guide in an standardized data format (like DocBook). This tool allows the maintenance of the EG with standard application tools.
- Another tool is for checking of the IENC Encoding Guide with the feature catalogue to ensure the accordance with the IES data model.
- Awarding procedure
- Test phase and quality assurance

### ○ Status quo:

- I refer to the topic “The use of DocBook format for the IENC Encoding Guide”



# IENC Product Specification S-401

## Development of an Inland ECDIS S-401 test application

### ○ Tasks:

- An open private-public partnership for testing:
  - Inland ECDIS S-401 on board application
  - Adoption of a chart production environment to S-401

### ○ Status quo:

- To do

# IENC Product Specification S-401

## Time schedule

### ○ In general:

We have dependencies from products and documents which are provided from the International Hydrographic Organization (IHO). Delays or changes of the timeline by IHO can cause delays in our timeline, too.

- Adaptation of the main document (draft): **09/2017 – 08/2018**
- Creating the Inland ENC Feature Catalogue (draft): **09/2017 – 08/2018**
- Complete Inland ENC Portrayal Domain and create the Inland ENC Portrayal Catalogue (draft): **09/2018 – 08/2019**
- Development of the IES Encoding Guide Builder: **04/2017 – 03/2018**
- Development of an Inland ECDIS S-401 test application: **01/2019 – 12/2019**
- Finalization of the documents after feedback of the IEHG: **11/2018 – 12/2019**

# IENC Product Specification S-401

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Thank you for your attention!

[Wieland.haupr@wsv.bund.de](mailto:Wieland.haupr@wsv.bund.de) , Germany 2017