RISECDIS

Inland ECDIS

Inland ECDIS Encoding Guide in DocBook data format

IEHG Meeting 2017

Niteroi, Brasil

IENC EG in DocBook format

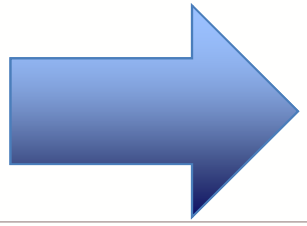
Content

- Motivation for providing the IENC EG in a semantic markup language
- Why DocBook?
- Status quo regarding the transfer of the IENC EG 2.4 into DocBook
- Future prospects

IENC EG in DocBook format

Motivation for providing the IENC EG in a semantic markup language

- Demand for a nationally adapted IENC EG with:
  - International core part (Standard IENC EG)
  - Complemented by regionally adapted encoding rules and pictures
  - National language for parts of the documents
- User-friendliness
  - Text editing supported by pre-defined document structure
- Export functionality for standard document formats (pdf, html, e-pub)
  - Automated document styling (by the use pre-defined stylesheeds)



DocBook

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Why DocBook?

- DocBook is a semantic markup language (XML) for technical documentation
- DocBook enables its users to create document content in a presentation-neutral form that captures the logical structure of the content
  - **set:** Titled collection of one or more books, can be nested with other sets
  - **book:** Titled collection of chapters, articles, and/or parts, with optional glossaries, appendices, etc.
  - **part:** Titled collection of one or more chapters—can be nested with other parts, and may have special introductory text
  - **article:** Titled, unnumbered collection of block-level elements
  - **chapter:** Titled, numbered collection of block-level elements—chapters don't require explicit numbers, a chapter number is the number of previous chapter elements in the XML document plus 1
  - **appendix:** Contained text that represents an appendix
  - **dedication:** Text represents the dedication of the contained structural element
- The DocBook data format contains only the logical structure of the document and no rules for the graphical presentation

IENC EG in DocBook format

Why DocBook?

- Technically, DocBook documents can be handled with all text editors.
- Special DocBook editors, like “XML mind” or “Oxygen” support the document structure by so called **“Snippets”**. These are special masks for supporting the input, e.g. text + lists + pictures.
- Special DocBook editors support also the export of DocBooks in graphically formatted formats, like PDF, HTML, e-pub. In this case specific **“XSL-Stylesheets”** are needed.

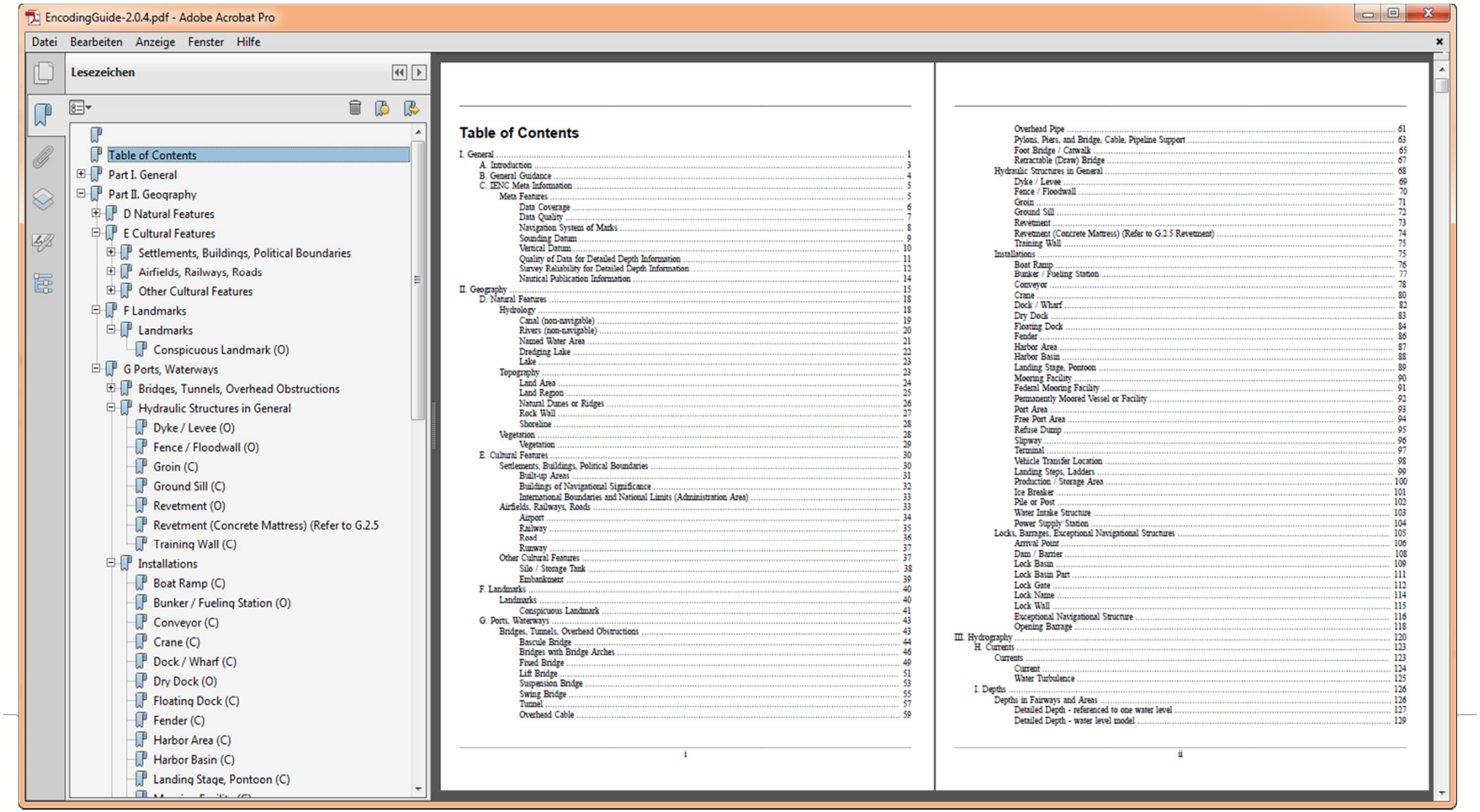
IENC EG in DocBook format

Status quo of transferring the IENC EG 2.4 into DocBook

- First step of realization:
  - The definition of our Encoding Guide document structure in DocBook format
  - „Snippets“, regarding our document structure, for supporting the maintenance of the document
  - The implementation of the content (Inland ECDIS Encoding Guide 2.4)
  - A user’s manual, or instruction videos describing the handling of the “Snippets”
  - (A DocBook editor is needed, like “Oxygen” for the maintenance of the Encoding guide)
  - “XSL-Stylesheets”, which include the rules for the graphical representation in PDF format

IENC EG in DocBook format

Status quo of transferring the IENC EG 2.4 into DocBook



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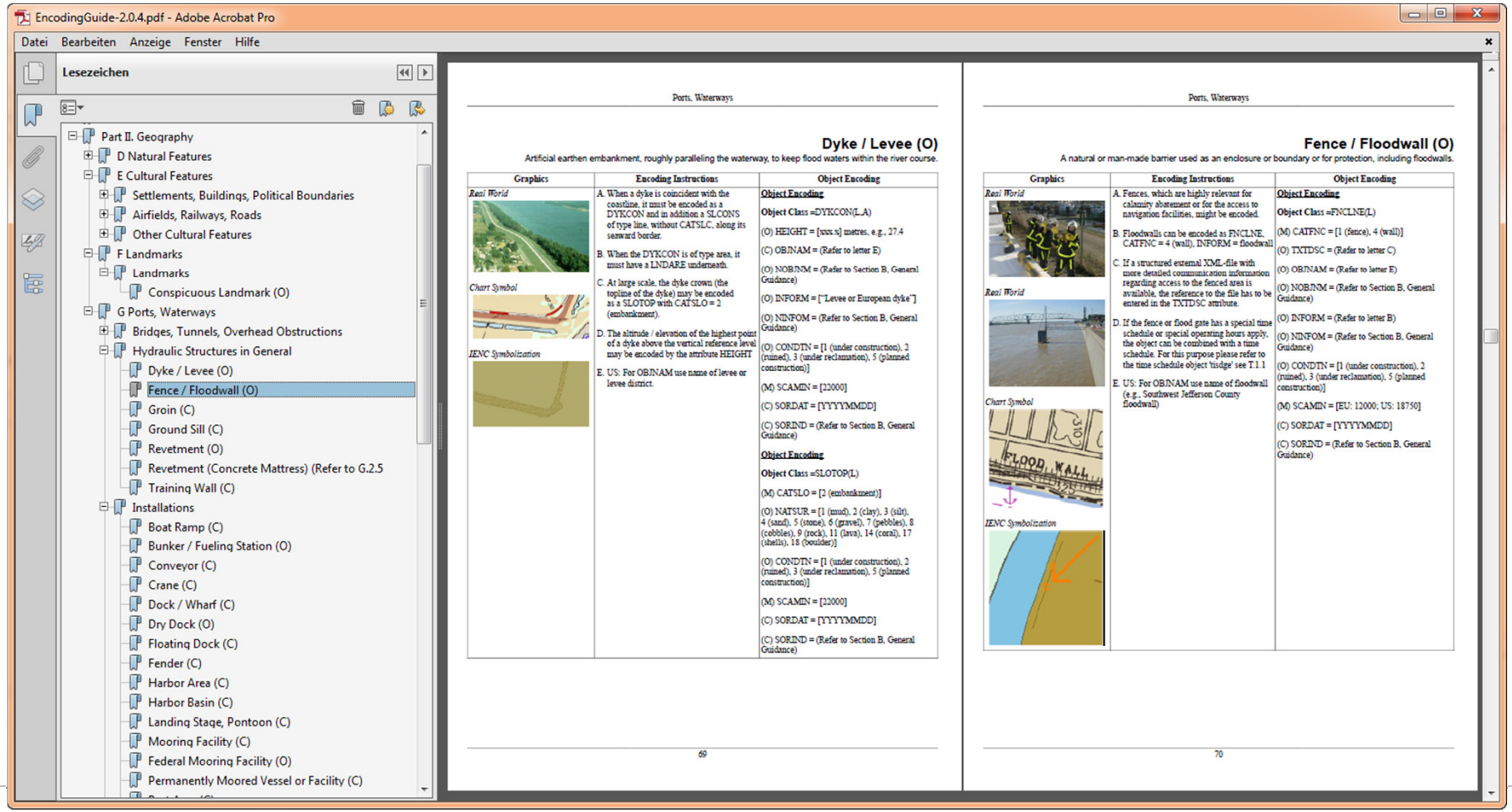
Status quo of transferring the IENC EG 2.4 into DocBook



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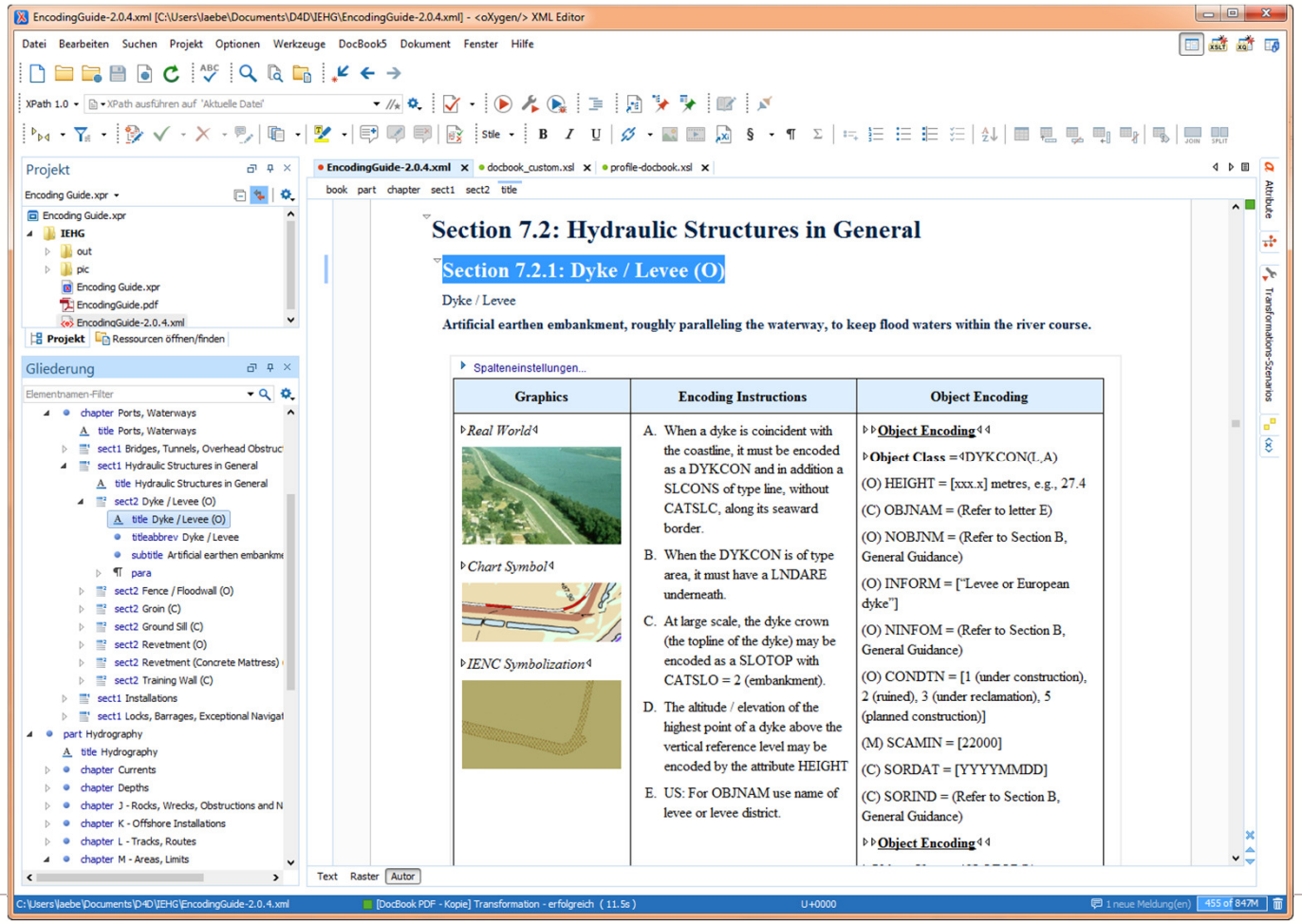

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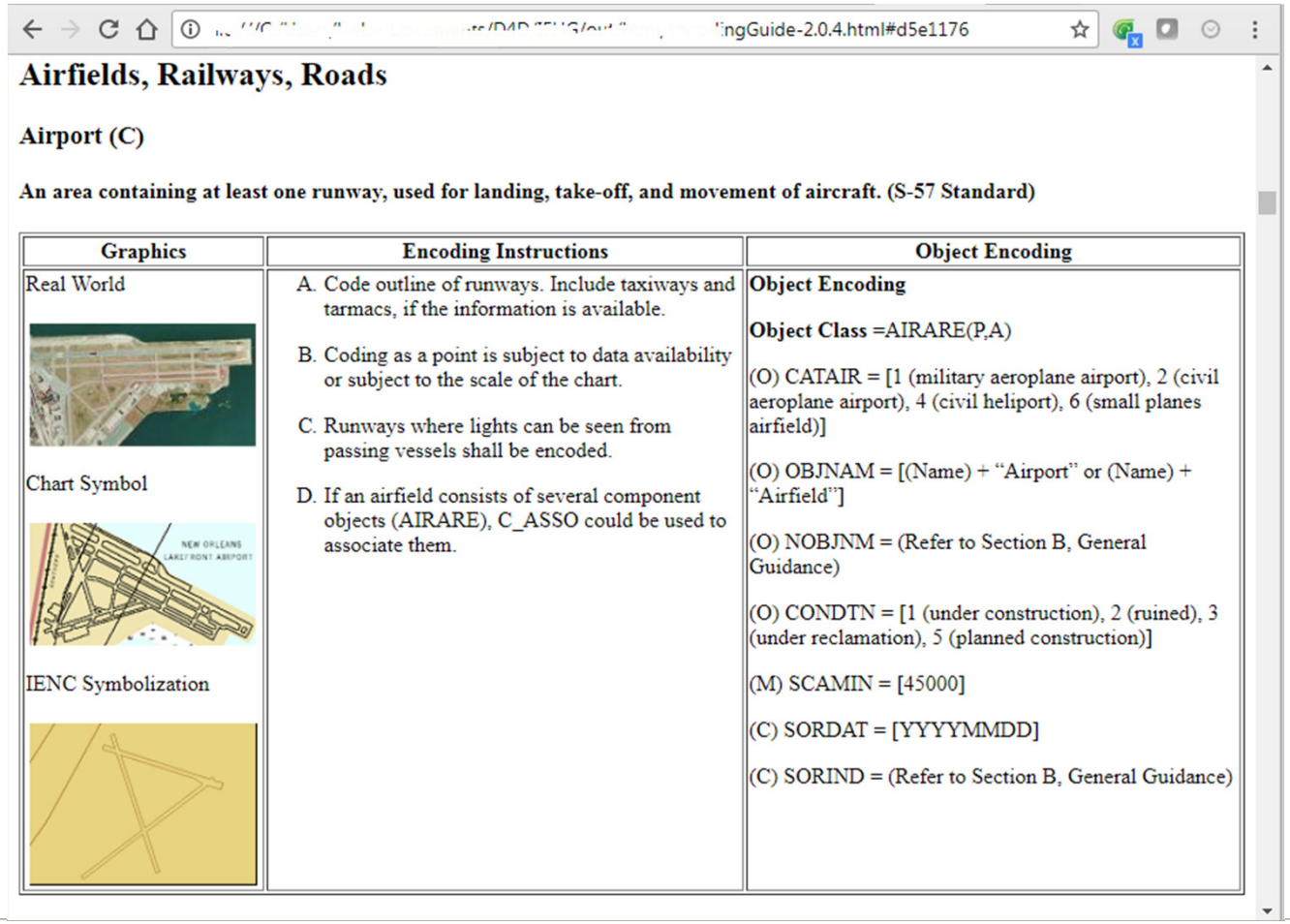

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Airfields, Railways, Roads

Airport (C)

An area containing at least one runway, used for landing, take-off, and movement of aircraft. (S-57 Standard)

Graphics	Encoding Instructions	Object Encoding
Real World Chart Symbol IENC Symbolization 	A. Code outline of runways. Include taxiways and tarmacs, if the information is available. B. Coding as a point is subject to data availability or subject to the scale of the chart. C. Runways where lights can be seen from passing vessels shall be encoded. D. If an airfield consists of several component objects (AIRARE), C_ASSO could be used to associate them.	**Object Encoding** **Object Class** =AIRARE(P,A) (O) CATAIR = [1 (military aeroplane airport), 2 (civil aeroplane airport), 4 (civil heliport), 6 (small planes airfield)] (O) OBJNAM = [(Name) + "Airport" or (Name) + "Airfield"] (O) NOBJNM = (Refer to Section B, General Guidance) (O) CONDTN = [1 (under construction), 2 (ruined), 3 (under reclamation), 5 (planned construction)] (M) SCAMIN = [45000] (C) SORDAT = [YYYYMMDD] (C) SORIND = (Refer to Section B, General Guidance)

IENC EG in DocBook format

Future prospects

- Next step of realization:
  - “XSL-Stylesheets”, which contain the rules for the graphical representation in other formats (HTML, e-pub)
  - A tool for checking the content regarding the conformity with the IENC Feature Catalogue (XML Schema file)
  - National amendments
  - Translation of parts into national languages

- **Can this proceding be used for the core part of IENC Encoding Guide in future?** (discussion)

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Thank you for your attention!

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