# Status of Inland ENCs in Europe

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# European inland waterways







#### Inland ENCs and Inland ECDIS in Europe

- IEHG is currently only dealing with the standardization of Inland ENCs
- The European countries have also developed a common standard for chart viewers
- The standard is based on the maritime S-52 standard for Electronic Chart Display and Information Systems (ECDIS)
- The European "Inland ECDIS standard" contains the Product Specification for Inland ENCs (maintained by IEHG) and the Performance Standard and test procedures for Inland ECDIS applications





## Legal Status of Inland ENCs in Europe

#### Inland ECDIS Standard Edition 2.3

- Adopted and published by the Central Commission for Navigation on the Rhine (CCNR)
- Adopted and published by the Economic Commission for Europe of the United Nations (UNECE)
- The Danube Commission recommends to use always the latest version which is published by UNECE
- The European Union has published this version as a binding Commission Regulation; IENCs have to be produced within 30 months after the publication for all inland waterways of the European Union of class Va and above (suited for vessels/convoys with a length of more than 85 m)

Commission Regulation





### Legal Status of Inland ENCs in Europe

#### Inland ECDIS Standard Edition 2.4

- Has been submitted to UNECE, CCNR and European commission for formal adoption
- The working group SC.3/WP.3 of the Economic Commission for Europe of the United Nations (UNECE) has approved at the meeting in June; the formal adoption is scheduled for the SC.3 Committee meeting in November
- The European Union is planning to publish this version as a binding Commission Regulation in the first half of 2016; IENCs in accordance with edition 2.4 will have to be produced within 30 months after the publication for all inland waterways of the European Union of class Va and above (suited for vessels/convoys with a length of more than 85 m)





### Implementation of Inland ENCs in Europe

- More than 10 000 km of waterways covered
- More than 11 000 vessels equipped with Inland ENCs (6000 commercial vessels)
- Three certified applications for navigation mode (with radar overlay, > 820 in use)
- All applications are compatible with edition 2.0, 2.1 and 2.3
- Adaptation to edition 2.4 in preparation

More Information at: <a href="http://www.ris.eu">http://www.ris.eu</a>





#### Bathymetric Inland ENCs and water levels

- Several European countries have announced to use the new Product Specification for bathymetric Inland ENCs (agenda point 8) in order to provide updates of depth information in a faster and more economic way
- The standardized water level exchange format is used to provide detailed information about the water level in critical sections in order to allow the display of "real" depth information on board





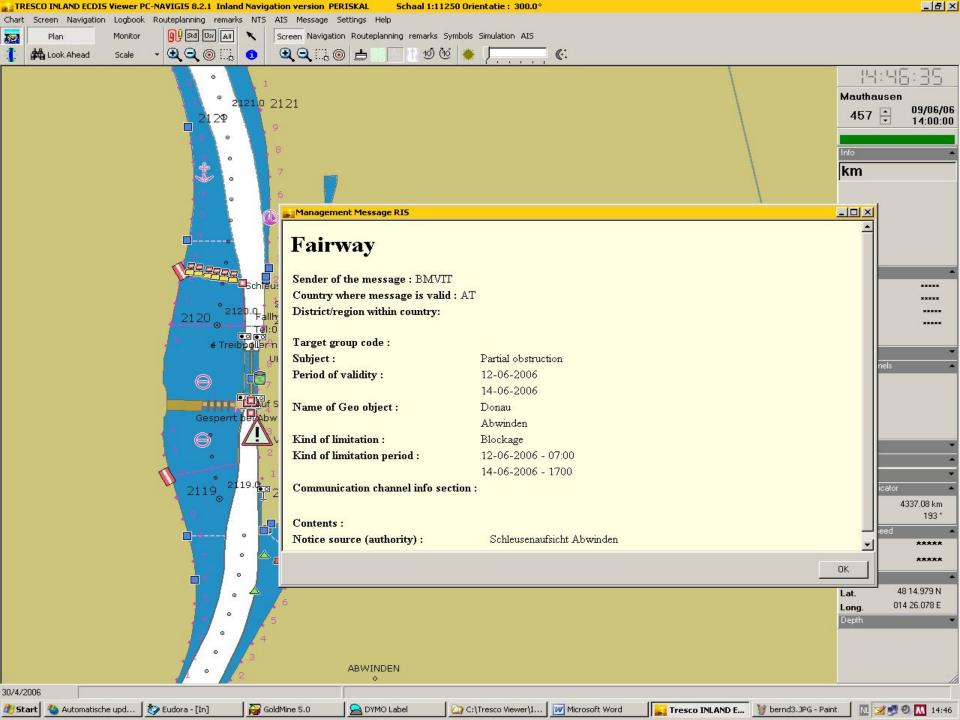
## River Information Services (RIS)

#### Inland ENCs are the basis for River Information Services:

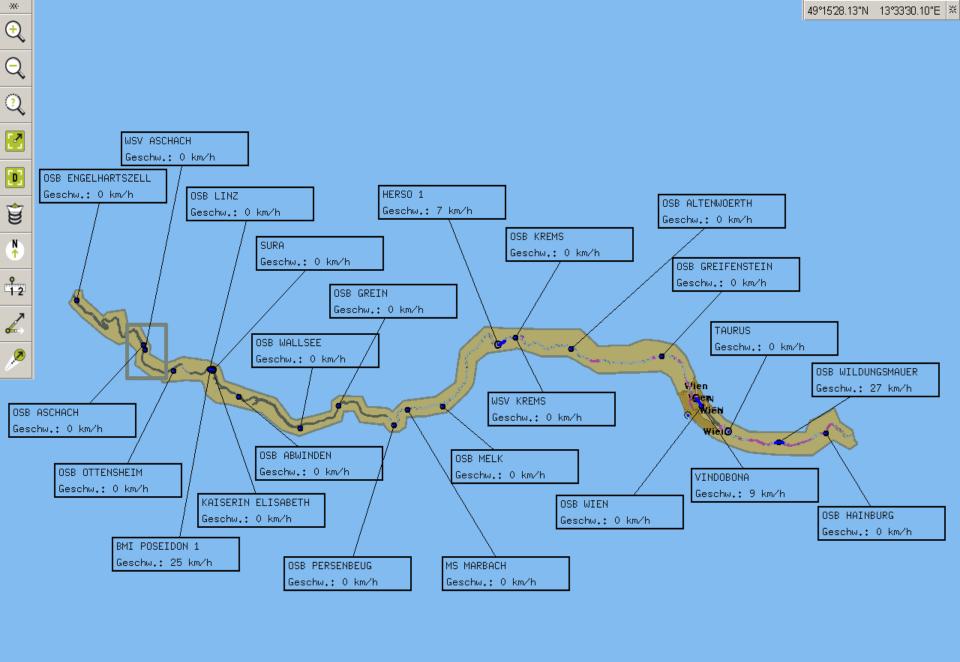
- Standardized Notices to Skippers that can automatically be translated into all European languages can be connected to the affected objects in the charts and can be displayed in Inland ECDIS
- The identification, dimensions, position and speed of other vessels transmitted via Inland AIS can be displayed in Inland ECDIS
- AIS information can be connected with detailed information about the cargo and the persons on board that is provided via electronic reporting













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## River Information Services (RIS)

The use of the already available information for logistic purposes and for corridor management (e.g. lock planning) is currently under development:

- Transhipment sites can use RIS data to optimize the planning of their resources and other modes of transport
- Lock planning can help to reduce fuel consumption and emissions
- The combination of e.g. a berth object in the Inland ENC and the AIS data can be used to evaluate the use of a berth and to create billing information automatically



