

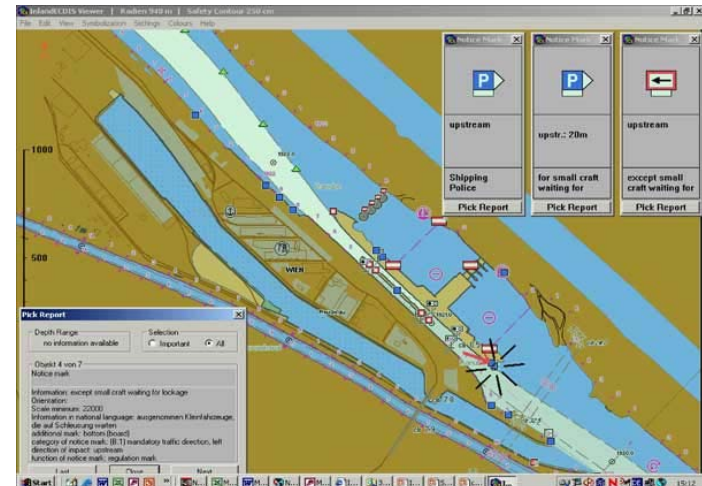


# Electronic Navigational Charts for Inland navigation (Inland ENC) and the



Open Workshop

18 October 2011  
Chongqing



# Agenda

- 09:00 Welcome, introductions of participants, organizational details
- 09:15 Electronic Navigational Charts for Inland navigation  
(Inland ENC)s and the Inland ENC Harmonization Group (IEHG)  
Legal and organizational background in the U.S., Europe, Russia  
and Brazil
- 10:30 Coffee break
- 11:00 Inland ENC applications
- 12:30 Working methods of IEHG
- 13:00 Lunch break
- 14:00 Inland waterway network, hydrography and cartography in China,  
Peru and Venezuela
- 15:30 Coffee break
- 16:00 Research and development in the area of Inland ENC)s
- 17:00 Questions and answers
- 17:30 End of the workshop

# Inland ENCs and the Inland ENC Harmonization Group (IEHG)

Inland ENCs, the Inland ENC Harmonization Group (IEHG),  
its legal and organizational background  
in the US, Europe, Russia and Brazil

IENTCs

USA

Europe and Russia

Brazil

# Coffee break

# Inland ENC applications

CARIS

ESRI

7Cs



# The Inland ENC Harmonization Group



**Objective:** to develop and to maintain a harmonized standard for Inland Electronic Navigational Charts (IENCs) suitable for inland navigation that is based on the standards of IHO for 'maritime' ENC



**Goal:** to agree upon specifications for Inland ENCs that are suitable for all known inland ENC data requirements for safe and efficient navigation in European, North and South American, Russian Federation and Asian inland waterways.



It is further intended that IENC standards meet the basic needs for Inland ENC applications, worldwide



# IEHG - recognition



As the competent international technical group on Inland ENC technical standards development, implementation and maintenance, IEHG is recognized by:

- Europe - European Union and the Central Commission for Navigation on the Rhine
- North America – US Army Corps of Engineers
- Russian Federation - Russian Ministry of Transport
- Brazil, Peru and Venezuela – Hydrography and Navigation Services
- Asia – Ministry of Transport of PRC and KHOA of Republic of Korea
- International Hydrographic Organization (IHO)



Since there are several countries with Inland Navigation that are not Member States of IHO, IEHG does not intend to become a member of IHO.



Instead, IEHG supports, advises and provides input to IHO regarding Inland ENC matters as a recognized NGIO.



## IEHG – recognition (2)



In 2009, IEHG has been recognized by IHO as a Non Governmental International Organization (NGIO) with observer status.



Current members of IEHG are all European countries with inland waterways, the Russian Federation, the United States of America, Brazil, Peoples Republic of China, Republic of Korea, Peru and Venezuela.



# IEHG – composition and organization

Composition - IEHG is a combined government/non-government technical group.

Regions – IEHG regions are comprised of countries within a continent (North America, South America, Asia) or a recognized social-economic region (Europe, Russian Federation).

Organization – By simple majority vote, chairpersons, vice-chairs and technical coordinators are elected.

ToR

# IEHG – membership

All the members of IEHG should have current expertise in the field of Inland ENC.

**Participants** – Anyone who is involved in the production of Inland ENCs or the production of Inland ENC applications and representatives of user groups can participate in IEHG, make proposals and take part in the discussions.

**Members** - Representatives of competent authorities involved in the provision of Inland ENCs are entitled to become members. If proposed by a competent authority, membership can also include expert contributors.

ToR

# IEHG – procedures

**Meeting Schedule** - The IEHG normally meets once per year. If required, there can be an additional meeting or the meeting can be postponed.

**Discussion Forum** - The IEHG uses the internet as a discussion platform in the time between the meetings. Every participant of IEHG is entitled to start a new discussion topic and to take part in discussions about Inland ENC's.

**Task Groups** - The IEHG may decide to form a task group for the drafting of specific proposals.

**Proposal Submission and Review:** see Terms of Reference

# IEHG – formalization of standards

The IEHG submits Inland ENC standards for formalization to:

- 🌐 Interested international organisations like IHO, the European Commission (EC), the Central Commission for Navigation on the Rhine (CCNR), the Danube Commission (DC) and the Economic Commission for Europe of the United Nations (UN/ECE),
- 🌐 National waterway authorities (e.g., United States Army Corps of Engineers (USACE), Russian Ministry of Transport and
- 🌐 National Hydrographic Services (e.g. Directorate of Hydrography and Navigation of the Brazilian Navy (DHN))

ToR

# Lunch break

# New participants

Presentations by the new participants about their  
river/inland waterway network, navigation and cartography

China

Yangtze

Peru

Venezuela

# Coffee break

# Research and development

Research and development in the area of Inland ENC's

Lock approach

River Information Services (RIS)



# Questions and answers

Thank you, Fei Xiangsheng and Yu Nüshi,  
for the organization!  
Thank you all for participation!