

CHRIS15-9.1B

IC-ENC STATUS REPORT

# 15<sup>th</sup> CHRIS MEETING

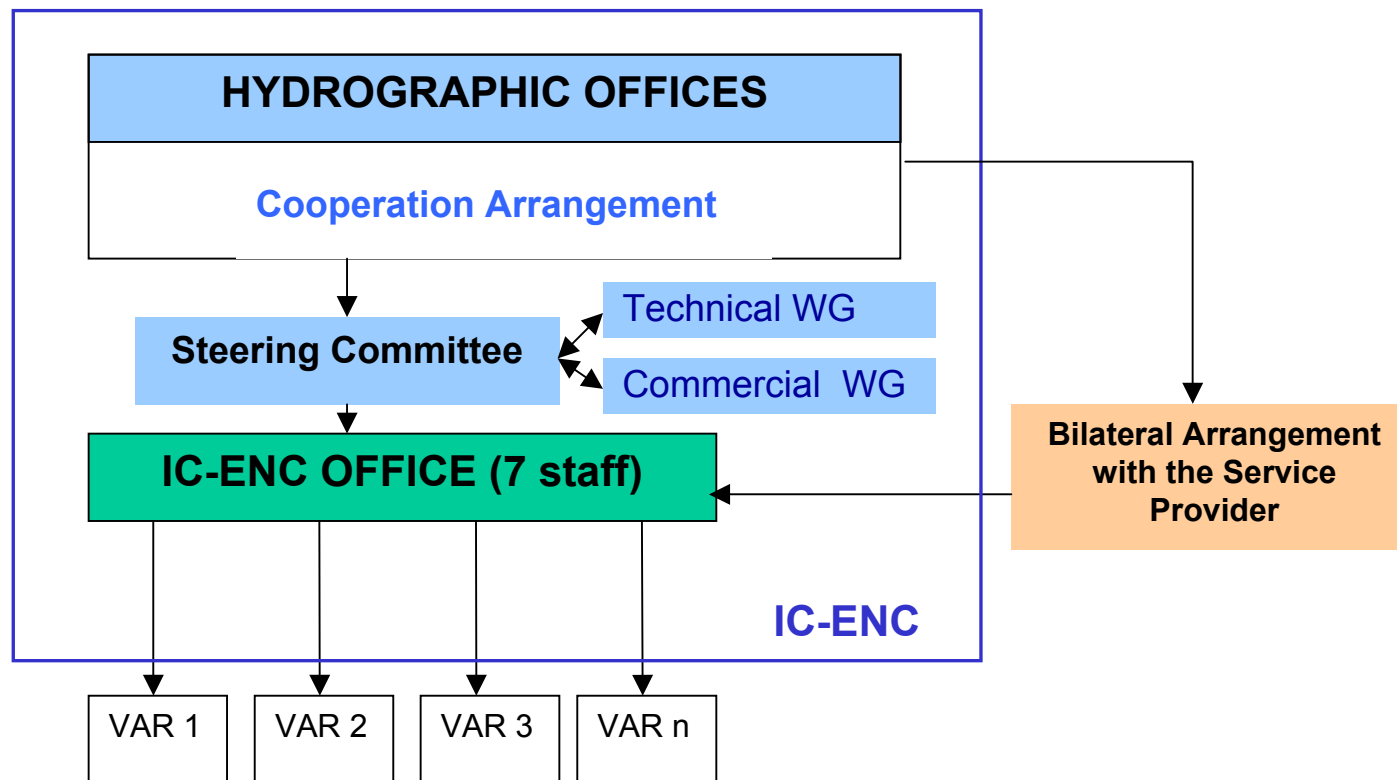
IHB, Monaco, 10-13 June 2003

# THE PRESENT SITUATION

# Description of IC-ENC

- A RENC in accordance with WEND Principles.
- An organisation created and controlled by its members and operated for them by the UKHO.
- A "Not for Profit" organisation.
- A cost-effective distribution system through existing major companies.
- Promotes "One Stop Shopping" & customer choice.
- Simple IT infrastructure.
- Centre of excellence.
- ISO 9001:2000 certified
- Low cost.

# STRUCTURE



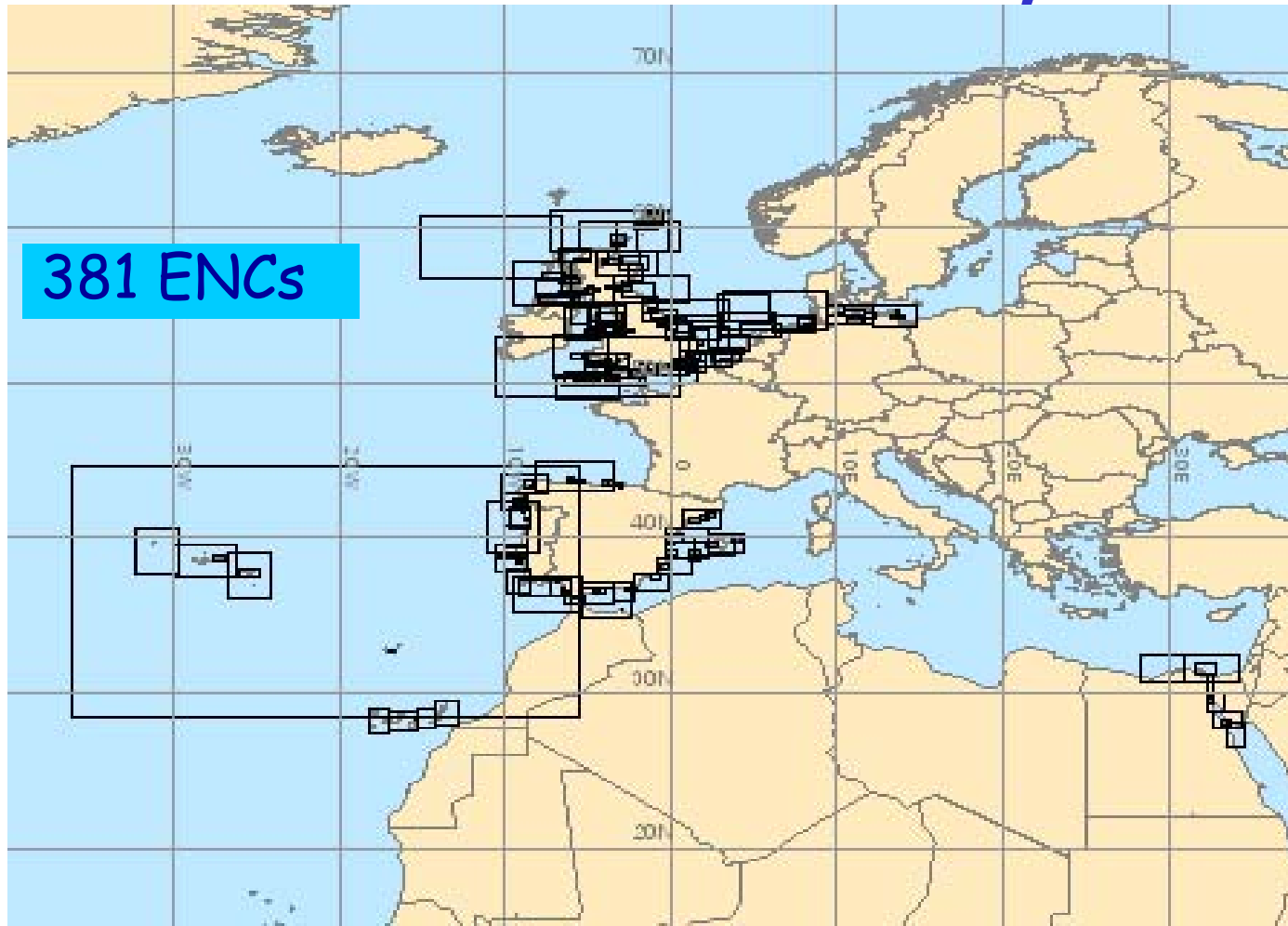
# MAIN FUNCTIONS

- Acquisition of ENC's from Members.
- Quality Assurance of ENC's + updates:
  - Validation tools error message assessment
  - ECDIS loading checks
  - Data consistency / usability checks
- Feedback and support for Members.
- Database management.
- VAR appointment and management.
- Supply of ENC's to VARs.
- Revenue collection.

## Cooperating Nations

- Belgium
- Bahrain
- Germany
- Greece
- Netherlands
- Portugal
- Russia
- South Africa
- Spain
- UK

# Data available on 9 May 2003



# SENC DISTRIBUTION

- IC-ENC has an optional Schedule in the VAR contract allowing for the distribution of ENC's in SENC Formats.
- This schedule places various terms and conditions on VARs wishing to operate SENC delivery in line with the new IHO Technical Resolution.
- This policy is in line with that developed by Primar-Stavanger.



# THE CHALLENGES AHEAD

# A Customer's Perspective

- The Mariner is accustomed to consistent (INT) sets of paper charts and publications available worldwide.
- He is told that ENC's are the "future".
- He is now realising that ENC's are not very user friendly and are difficult to obtain.

# Challenges facing WEND

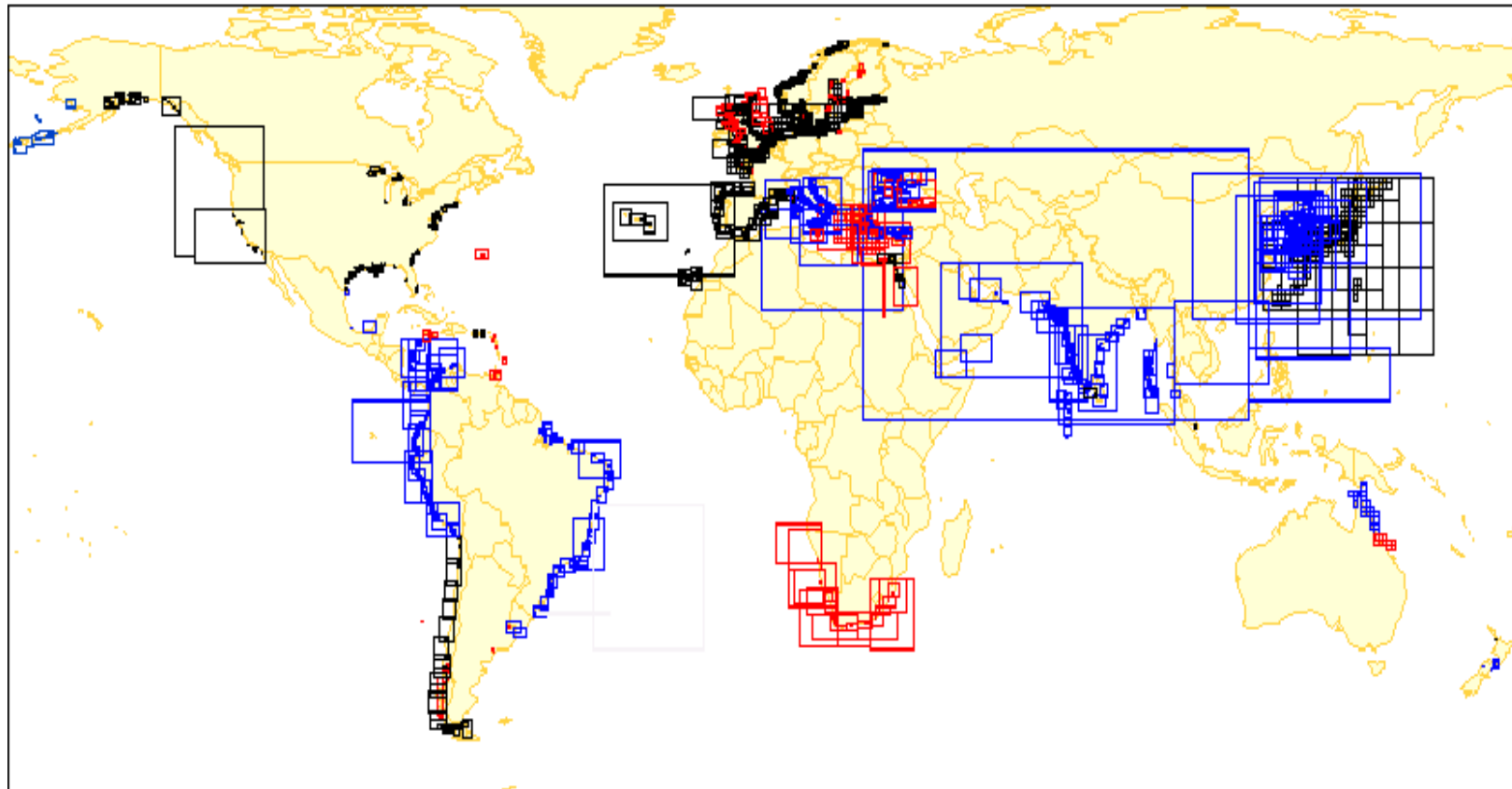
- ENC Coverage.
- User friendly / consistent ENC products:
  - *Common interpretation of S57 by HOs, RENCs, OEMs*
  - *Common QA procedures and policies*
  - *Common approach to product design*
- User friendly / professional ENC services:
  - *Choice of services*
  - *All ENC data available in each service*
  - *Services easily available worldwide from "one stop shops"*

# Challenges facing WEND - 1

- ENC Coverage:

# ENC Coverage

*(Responses to CL 67/2003)*



# Challenges facing WEND - 2

- User friendly / consistent ENC products:
  - *Common interpretation of S57 by HOs, RENCs, OEMs*
  - *Common QA procedures and policies*
  - *Common approach to product design*

# Common QA Methods - S57

- Most HO's and data producers use one or both of the standard Validation tools:
  - 7C's ENC Analyser
  - HydroService's dKart Inspector
- Understanding the "Error" messages produced by these tools is critical in ensuring data consistency.

# Common QA Methods - ECDIS

- All ECDIS have their own inbuilt validation routines, usually with their own unique error messages.
- ECDIS loading checks must therefore be part of any RENC's QA procedures.
- RENCs and HOs will have to have the same level of familiarity with these error messages as they do with those from the Validation tools.
- Therefore RENCs will have to liaise and work with ECDIS manufacturers as well as with HOs.



# Common "Product Design"

- The way ENC's are schemed and encoded affects how they display to the user and so their "perceived" quality.
- Issues to consider include:
  - Compilation Scale.
  - Usage Band assignment.
  - Use of SCAMIN.
  - Contour Intervals.
  - Edge-matching.
  - Use of CATZOC
  - Holes in Coverage.
  - Data gaps and overlaps

# Common "Product Design"

- "SCAMIN is of overwhelming importance for a useful ENC presentation". (M Jonas)
- Problems with SCAMIN, compilation scale and usage bands are interrelated.
- ENC Product Specification must be more prescriptive to ensure ENCs compare favourably with unofficial electronic charts and international paper chart series.

# Challenges facing WEND - 3

- User friendly / professional ENC services:
  - *Choice of services*
  - *All ENC data available in each service*
  - *Services easily available worldwide from "one stop shops"*

# ENCs Available for Sale

- **IC-ENC** - 7 Nation's data through 45 Distributors Worldwide (+ SENC).
- **Primar Stavanger** - 8 Nation's data through 24 Distributors, mostly in Europe. (+SENC).
- **Canada** - NDI Distributors mostly in N America + online.
- **Japan** - Through 14 JHA Distributors worldwide.
- **Korea** - Through 2 National Distributors.
- **Singapore** - Local Distribution.
- **Chile** - Local Distribution (?)

*Note: Some Distributors may sell more than one, but not all, of these services.*

# ENC Availability - Media

- **IC-ENC** - Encrypted - S57 & SENC - CD.
- **Primar-Stavanger** - Encrypted - S57 & SENC - CD and on-line.
- **Canada** - S57 - Encrypted CD.
- **Japan** - S57 - Unencrypted CD.
- **Korea** - S57 - Unencrypted CD.
- **Singapore** - S57 - Unencrypted CD.
- **Chile** - S57 - Unencrypted CD.

# ENC Availability - Updates

- **IC-ENC** - Weekly - cost included.
- **Primar-Stavanger** - Weekly - cost included.
- **Canada** - Monthly - cost included.
- **Japan** - Monthly - extra cost.
- **Korea** - Monthly - annual fee.
- **Singapore** - ?
- **Chile** - ?

# Effect on the Mariner

- 7 Data sets.
- 7 Different CDs.
- 3 Encryption systems (Plus SENC).
- 7 Different updating mechanisms.
- 7 Different pricing models.
  - Also
- 7 Different QA systems.
- No single supplier.
- Incomplete coverage (little at small scale).

# What is the Solution?

- The WEND concept is still relevant, BUT:
- RENCs must operate in the same way:
  - Same treatment of errors & warnings
  - Consistent interpretation of standards
  - Close cooperation with validation tool and ECDIS manufacturers
- Widest possible data distribution:
  - HOs must accept that they cannot do it all themselves.
  - Existing major companies must be used, but in a controlled manner.
  - The User must be given his "One-Stop-Shops"



# ICICLES

- Increased membership of RENCs by HO community is therefore crucial.
- Many HOs wish to retain control over their ENC's, especially when they have national or regional responsibilities.
- Many HOs also like the simplicity and cost effectiveness of the IC-ENC model and have expressed an interest in duplicating it.

# ICICLES

- We need to broaden membership of RENCs which operate in the same way.
- IC-ENC is therefore willing to share its concept and systems to help create regional centres with their own administrations.
- Therefore IC-ENC has developed a new concept to create "Associate Centres" (or Icicles), and is in active discussion with possible partners.



# ICICLES

# ICICLE CONCEPT

- This is seen as a practical implementation of the WEND concept. It promotes consistency, efficiency and partnership.
- Also ensures that the user can be provided with a broad coverage of consistent ENC products produced and distributed in a standardised way.
- IC-ENC will help to set up and train these centres and will share processes, documentation and QA expertise.

ic-enc.org  
International Centre for ENC's