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## WEND-WG work 2012 - 2013

## WEND-WG2 meeting 21 -22 September 2012

The main issues were:

- to consider the outcome of the XVIII IHC and IRCC4
- to agree on actions to amend Annexes of the WEND Principles
- to review the status of ENC coverage, gaps and overlaps
- to consider ENC quality, consistency and updating issues
- to consider Service Provision issues
- to consider the status of WEND-WG

## WEND-WG3 meeting 13 – 14 May 2013

### The main issues were:

- **Guidelines for the WEND Principles (i.e. cartographic boundaries)** [to IRCC5]
- **Guidelines for assessing the risks of overlapping ENC**s [to IRCC5]
- **ENC quality , consistency and updating issues** [to IRCC5]
- **Policy and procedures to verify consistency between ENC**s and the corresponding paper charts
- **Capacity Building Project for short-term Secondments to RENC**s [to CBSC11]
- Development of a policy to address the **withdrawal of ENC**s after they are issued
- **Development of a Performance Monitoring Procedure** [to WEND-WG4]
- **The requirement for an IHB ENC reference (library) collection** [to JTEWG]
- **Development of an IHO RENC/WENC** [Roadmap, to IRCC5]
- **Development of the 2013 WENDWG Work Programme**

Forwarded to BSHC (NHC) my Letter on 14 August 2013

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## Terms of Reference (IRCC Action 4/16)

- TORs revised to align with template for other IHO committees etc
- Membership: representatives from:
  - MS
  - RENC officials (inc operators)
  - RHCs
  - Subject Matter Experts as appropriate
  - IHB (inc secretary)
- Chair & Vice Chair taken from MS
- Election at 1<sup>st</sup> ordinary session after IHC
- Elected by the WG
- *Nominations for Chair & Vice Chair?*



## Guidelines to the WEND Principles (IRCC Action 4/14)

- Excellent work by Drafting Group in achieving consensus
- Revised annex submitted to IRCC for ratification (circulated at this meeting)
- Proposal that IRCC circulate to MS for approval

IHO WEND-WG Chair

Report to IRCC5, June 2013



## Risk Assessment Guidelines

- Addressing the Risk:
  - When within own coverage, a producer nation should clip cells ASAP
  - When more than one producer nation, each should take the initiative to discuss arrangements to clip data.
    - Exchange of data may facilitate comparisons
  - Where elimination of overlaps impossible, data should be examined by each Producer Nation to ensure it is the same.
    - Again exchange of data may facilitate comparisons

IHO WEND-WG Chair

Report to IRCC5, June 2013



# Risk Assessment Guidelines

- UKHO paper: Guidelines on Assessing & Eliminating the Risk of Overlapping ENC Cells with respect to ECDIS behaviour
- Criteria:
  - Geographic location
  - Size of overlap
  - Scale of overlapping cells
  - Shipping route patterns
  - Differences in overlapping data

IHO WEND-WG Chair

Report to IRCC5, June 2013

## Risk Assessment Evaluation Criteria

*Action WENDWG3/08 - UK to make the evaluation criteria available to assist RHCs and Members States in resolving navigationally significant differences between paper charts and ENCs (Deadline: end of June 2013).*

- a. The UKHO compares ENCs received from other producing nations with UKHO's paper charts (and subsequently with other sources of information where available, including paper charts from the other producing nation).
- b. Initially, the UKHO looks for any difference which would justify the issue of a Notice to Mariners.
- c. The UKHO then categorises the differences found according to the potential risk that they present to the mariner.
- d. The criteria for this categorisation are described in the table below.
- e. Priority is given to the resolution of high risk differences which might present a significant navigational safety risk to surface shipping.

Risk	Description
HIGH	Significant offshore features and depths considered dangerous to surface vessels operating at draughts of <31m. Significant changes to major navigational aids (fixed and floating). Changes to routing measures.
MEDIUM	Significant features and depths between 31m and 800m considered dangerous to submarine operations and activities. Features and depths of <31m, but close to shore or other charted dangers.
LOW	Minor changes to depths or navigational aids. Changes to Pilot Boarding Places, Anchorages etc.

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## Cartographic Boundaries

- EAHC submission that MS should clip ENC cell to a cartographic boundary (as per paper charts)
- Overcomes geopolitical & diplomatic issues
- Helps facilitate effective use of seamless trans-boundary hydrographic data to add value for the mariner
- Propose that IRCC encourages RHCs to publish limits of cartographic boundaries within their regions
- Invite IRCC to submit the new definition of cartographic boundaries to the Hydrographic Dictionary Working Group (HDWG)



## Cartographic Boundaries

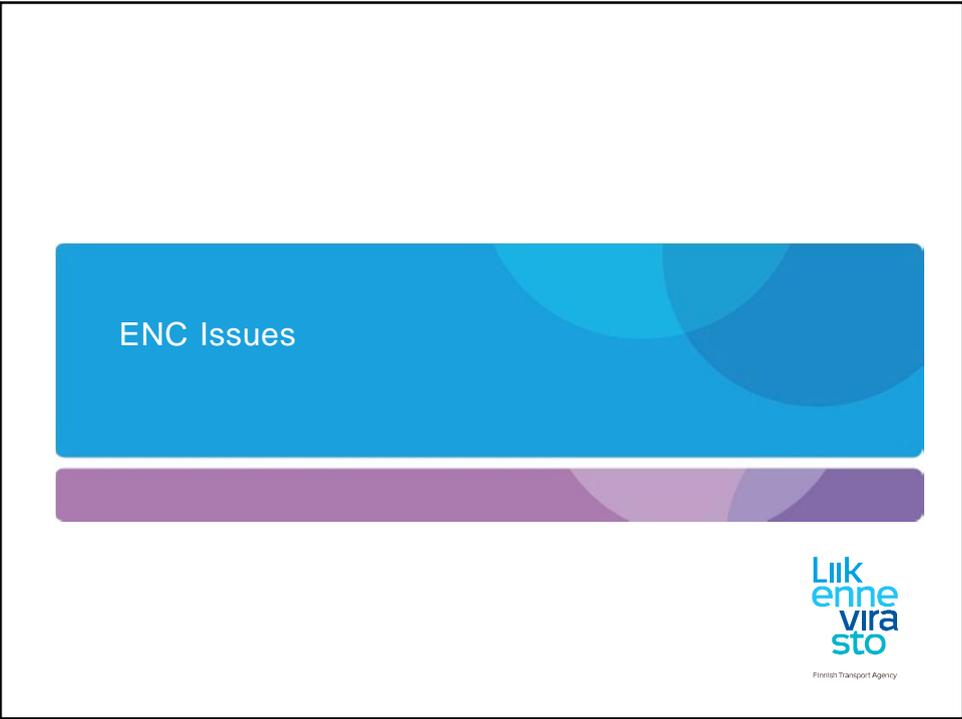
- It is recommended that the proposed definition should be read as follows:

*Cartographic Boundary can be defined as an agreed limit to clip overlapping nautical charts or related data between two neighbouring countries.*

*The boundary shall not be signified or regarded as a political or jurisdictional boundary.*

*It should be as simple as possible so both data compiler and the data user will be provided with most coherent service possible".*

**Action IRCC5/25 to refine the wording (IHB, Dec 2013)**



### Baltic Sea ENC Coverage

- Baltic Sea ENC Coverage already fairly good,
- Some extensions ongoing or planned

PRIMAR Chart Catalogue 4.7

File Help

Map Basket

Lat: 053,84 N Lon: 028,63 E

Show

- All cells
- New cells
- Updated cells

Apply date setting

Show coverage areas

Usage Band

- All
- Overview
- General
- Coastal
- Approach
- Harbour
- Berthing

Selection

Deselect all

Show only selected

Show only not selected

Pan mode: click and drag. No basket file loaded/... Catalogue file created 4.9.2013.

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### Coverage comparison of ENC's with corresponding paper charts for international voyages

	May 2008	May 2009	May 2010	May 2011	May 2013
Small scale ENC's (planning charts)	>90%	~100%	~100%	~100%	~100%
Medium scale ENC's (coastal charts)	60%	77%	84%	88%	89%
Large scale ENC's (top 800 ports)	60%	84%	91%	94%	96%

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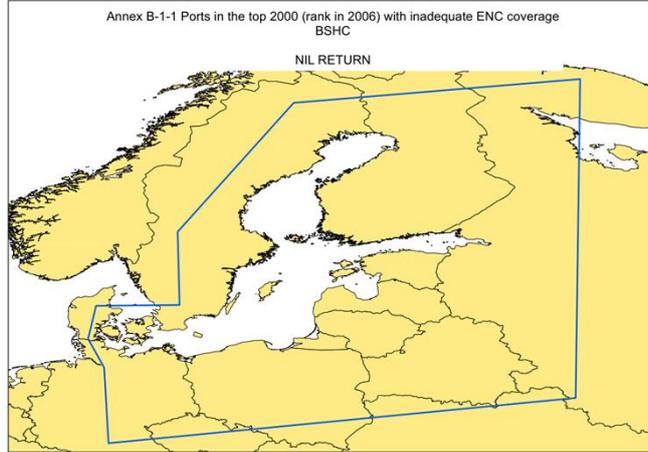
## ENC Issues

UK has drafted a paper examining a range of ENC issues:

- Gaps
- Overlaps
- Poor quality source data
- Potential impact of above
- Paper to be circulated out of committee
  - RHCs and MS to be invited to validate the draft ENC coverage audit and to provide feedback on resolving issues (by 31 Dec 13)

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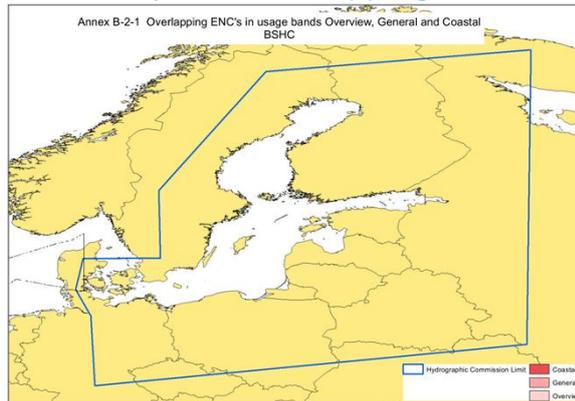
## ENC analysis – Ports with inadequate ENC Coverage



No top 2000 ports with inadequate ENC coverage on BSHC (and NHC) areas



## ENC analysis – Overlappings



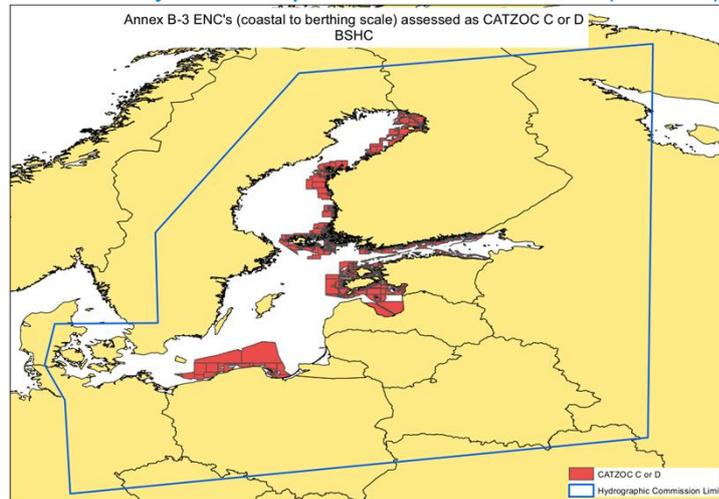
Only few minor overlappings → most are in a process to be eliminated in future editions

Annex B-2-2 Overlapping cells in all usage bands

CELLNAME	CELLNAME_1	CODE	USAGEBA
DK1NCRSO	DE110000	BSHC	1
DK4LGLGS	DE416030	BSHC	4
DK4LGLGS	DE416050	BSHC	4
DK4LILBS	DE416012	BSHC	4
FI29NBAL	EE203064	BSHC	2
LV211251	EE203055	BSHC	2
LV211252	EE203056	BSHC	2
LV331011	EE3E1608	BSHC	3
LV331016	LT382001	BSHC	3
PL3MP153	DK3BORNH	BSHC	3
PL4MAP37	DE416090	BSHC	4
RU3NSKI9	EE3A0403	BSHC	3
RU3NSKI9	EE3E0201	BSHC	3
RU3NTKQ0	RU3NSKO9	BSHC	3
RU4NDJS8	PL4MAP41	BSHC	4
RU400KM9	FI4ELV2	BSHC	4
RU401KN9	FI4ELV2	BSHC	4
SE2BHS1C	DK2KATGN	BSHC	2
SE2BHS1C	DK2KATGS	BSHC	2
SE2BHS1C	DK2SUNDT	BSHC	2
SE2BHS1S	DK2BORNH	BSHC	2
SE2BI9U8	EE203064	BSHC	2
SE3CI9U8	EE3E0014	BSHC	3
SE4CJ4YO	FI4EJ76N	BSHC	4
SE4DHWHE	DK4GSMON	BSHC	4
SE4DHWHE	DK4SUNDT	BSHC	4
SE4DHWHG	DK4GSMON	BSHC	4
SE4DHYPE	DK4SUNDT	BSHC	4
SE4DIXC	DK4KATGS	BSHC	4
SE4DIXE	DK4SUNDT	BSHC	4
SE4D35C	DK4KATGS	BSHC	4
SE4EIG6	FI4EIH6	BSHC	4
SE4EIG7	FI4EIH6	BSHC	4
SE4EIH5	FI4EIH6	BSHC	4
SE4EIH6	FI4EIH6	BSHC	4
SE5HZTE	DK5HLSNS	BSHC	5



### ENC analysis – Population of CATZOC (C or D)



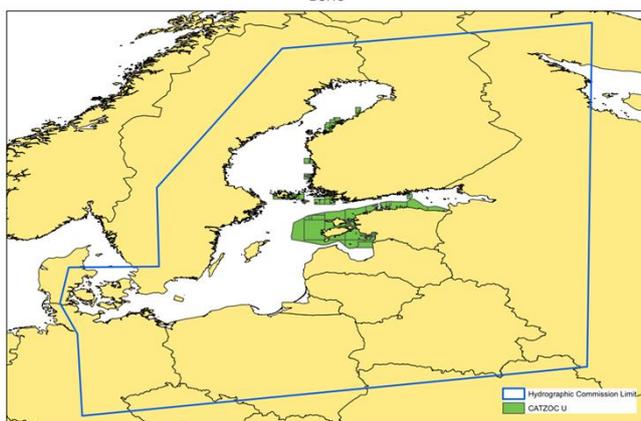
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### ENC analysis – Population of CATZOC (U=Unassessed)

Annex B-4 ENC's (coastal to berthing scale) with CATZOC unassessed  
BSHC



Fin: ENC's (~2002) with lack of reliable source data at that time – to be eliminated in future editions

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## IHB ENC Reference Library

- Requirement to have a single consolidated meta-data catalogue and one consolidated data store
- Authoritative catalogue held by IHB
  - Credibility issue with IMO
- RENCs to provide simple solution to build definitive WEND metadata store
- IHB will reissue CL51/2012 once metadata store established

IHO WEND-WG Chair

Report to IRCC5, June 2013

IHO RENC (WENC)

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## RENC Harmonisation SubGroup (RHSG)

- Formed in October 2011 to supersede the IC-ENC & PRIMAR Co-operation Committee (IPCC) & take forward its activities.
- Met twice (September 2012 and May 2013) & reports to the WENDWG. This delivers visibility of RENC activities & gives a reporting line though to IRCC.
- Participants include representatives from the RENC governing bodies, management & Operators, RENC member nations, non-RENC member nations & IHB.

IHO WEND-WG Chair

Report to IRCC5, June 2013



## RENC Harmonisation SubGroup (RHSG)

- Wide participation encouraged to ensure representation of wide range of views.
- Evolved from simple IC-ENC and PRIMAR co-operation activities.
- Its scope now is :

*To develop the most appropriate RENC structure for the IHO to achieve the WEND vision.*

IHO WEND-WG Chair

Report to IRCC5, June 2013

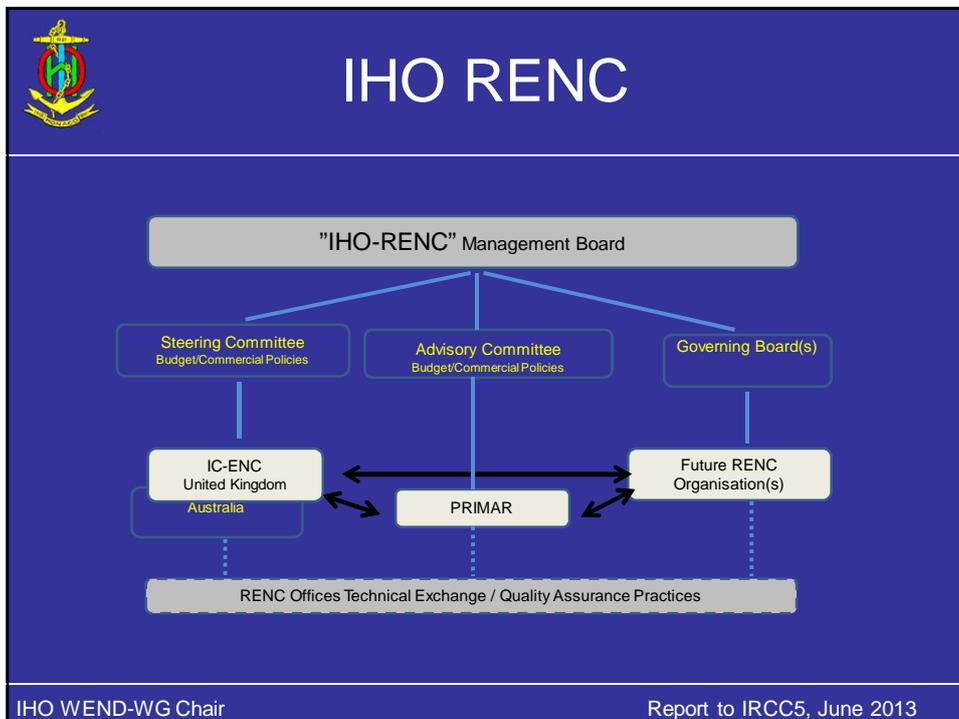


# IHO RENC

**Proposal: New Management Board to be formed to oversee & approve work of the network of existing and future RENC organisations**

- The model is under development, but key aspects include:
  - Focus on achieving improvements in the quality of the WEND ENC database
  - Current and future RENC organisations to fit within the framework
  - Management board & RENC activities to be clearly defined with transparent operating procedures
  - IHB to participate on Management Board, but these activities are to be at no cost to the IHO

IHO WEND-WG Chair
Report to IRCC5, June 2013





# IHO RENC

**June 2013:** Introduce concept to IRCC and seek endorsement of work plan Develop "IHO-RENC" concept through series of meetings of the working group and review by correspondence from WENDWG3 participants

**July 2013:** Publication of "IHO-RENC" concept paper to IRCC participants for comment via correspondence

**Sept 2013:** Potential for full publication via IHO Circular Letter

**Jan 2014:** Completion of EIHC proposal on the IHO-RENC, to be formally submitted through IRCC

**IRCC has endorsed this work plan.**

IHO WEND-WG Chair

Report to IRCC5, June 2013

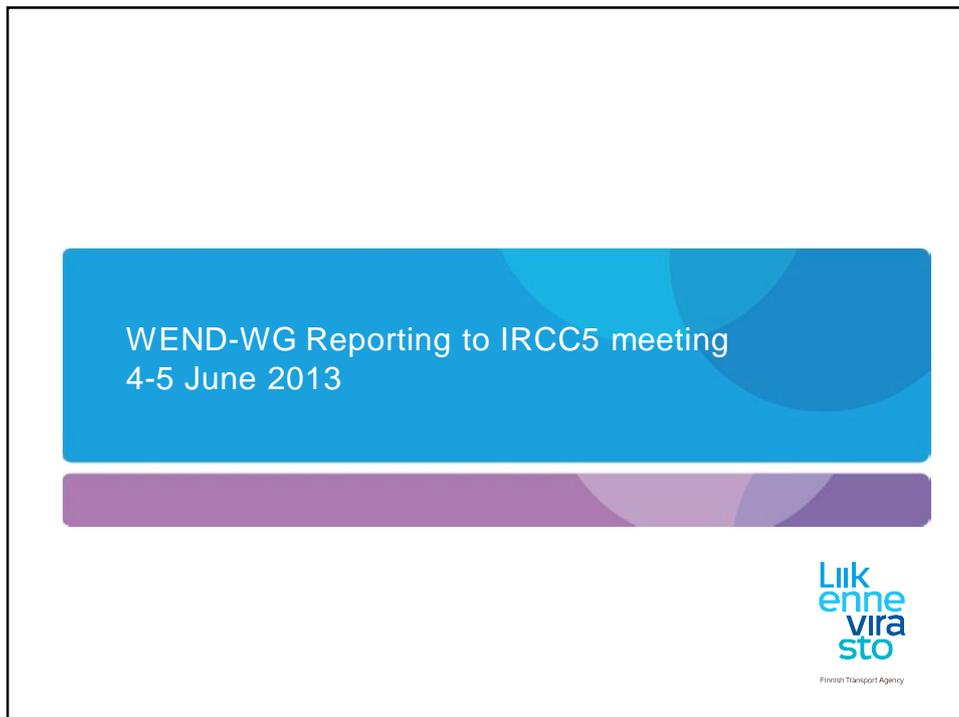
## Concept Highlights

### Management Board composition:

- IHB
- Host offices
- Elected Chairs of the RENC governing structures
- Elected Member States (3)
- Chair of WENDWG

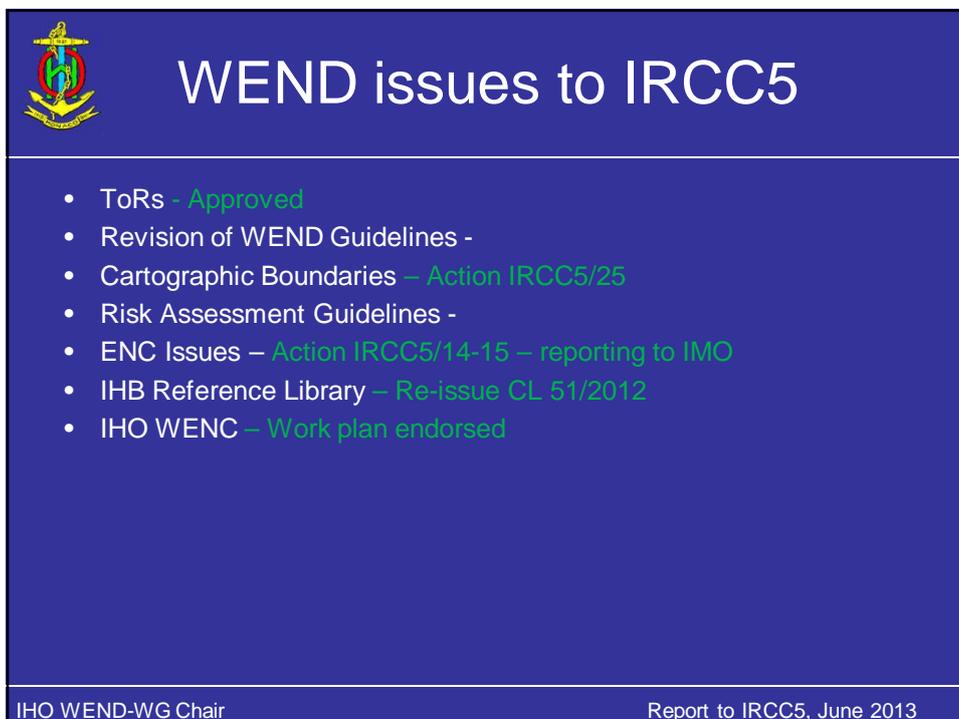
### Management Board Activities

- Audit RENC offices against minimum RENC standards
- Enforce action on poor quality issues on ENC producers
- Transparent procedures
- Virtual structure to achieve WEND vision
- Host HO on MB to ensure liability is addressed



WEND-WG Reporting to IRCC5 meeting  
4-5 June 2013

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## WEND issues to IRCC5

- ToRs - **Approved**
- Revision of WEND Guidelines -
- Cartographic Boundaries – **Action IRCC5/25**
- Risk Assessment Guidelines -
- ENC Issues – **Action IRCC5/14-15 – reporting to IMO**
- IHB Reference Library – **Re-issue CL 51/2012**
- IHO WENC – **Work plan endorsed**

IHO WEND-WG Chair Report to IRCC5, June 2013



Future WEND-WG actions

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### WEND Work Programme

- **Take forward IHO RENC Concept**
- **Develop proposals for IHO WEND metadata store**
- **Develop risk assessment guidelines, protocols & process**
- **Examine standardisation of licensing periods**
- **Briefing material for IMO (standing item)**

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## Future WEND-WG Actions

- **All:** to check their ENC overlappings and CATZOG populations, and forward information of corrective actions by **end of November 2013** (ref. my Letter 14 August 2013)
- **WEND-WG Representative:** to report to WEND-WG on these issues by **end of December 2013** (ref. WEND-WG3 Action 7)
- **WEND-WG4 meeting Niteroi, Brazil from 18 to 20 March 2014**
  -

## Actions requested from the BSHC18 Conference

## BSHC18 Conference is requested to

- take note on this Report
- give further guidance to the WEND-WG representative, as seen appropriately

Thank you!

Juha.Korhonen@fta.fi