



Royal Netherlands Navy  
Hydrographic Service

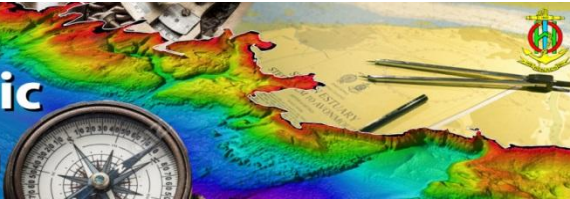


# 32nd NSHC Conference

Agenda item D.1:

## Report of the Resurvey Working Group

**North Sea  
Hydrographic  
Commission**



Leendert Dorst

Chair NSHC Resurvey Working Group

June 2016



## Meetings

- The 5<sup>th</sup> NSHC-RWG meeting was held in Plymouth (UK), directly after Shallow Survey 2015 (18 September 2015).
- Observers: BSHC, IHB, MCA.
- The 6<sup>th</sup> NSHC-RWG is to be planned (Hydro16 Rostock?).
- Vacancy for chair after 6th NSHC-RWG.
  
- Special thanks to Shallow Survey 2015!



## Alternative survey techniques (Conclusion 97)

- New technologies should be evaluated using existing standards (IHB report on S-44 to HSSC7)
  - Satellite-derived bathymetry: requires worldwide guidelines.
  - LIDAR: used in shallow, clear areas. MBES finds objects that LiDAR does not.
  - Crowd-sourced bathymetry: a means to get information on depth where there is none or where it is very old.
- Autonomous surveying: monitored, but not yet applied. UKHO will perform a feasibility study.



## North Sea Bathymetry Database (Conclusion 113)

- First results are available at [www.nshc.pro](http://www.nshc.pro).
- The English Channel will be included, the Irish Sea could be included at the request of UK and IE.



## North Sea wide risk assessment (Conclusion 112)

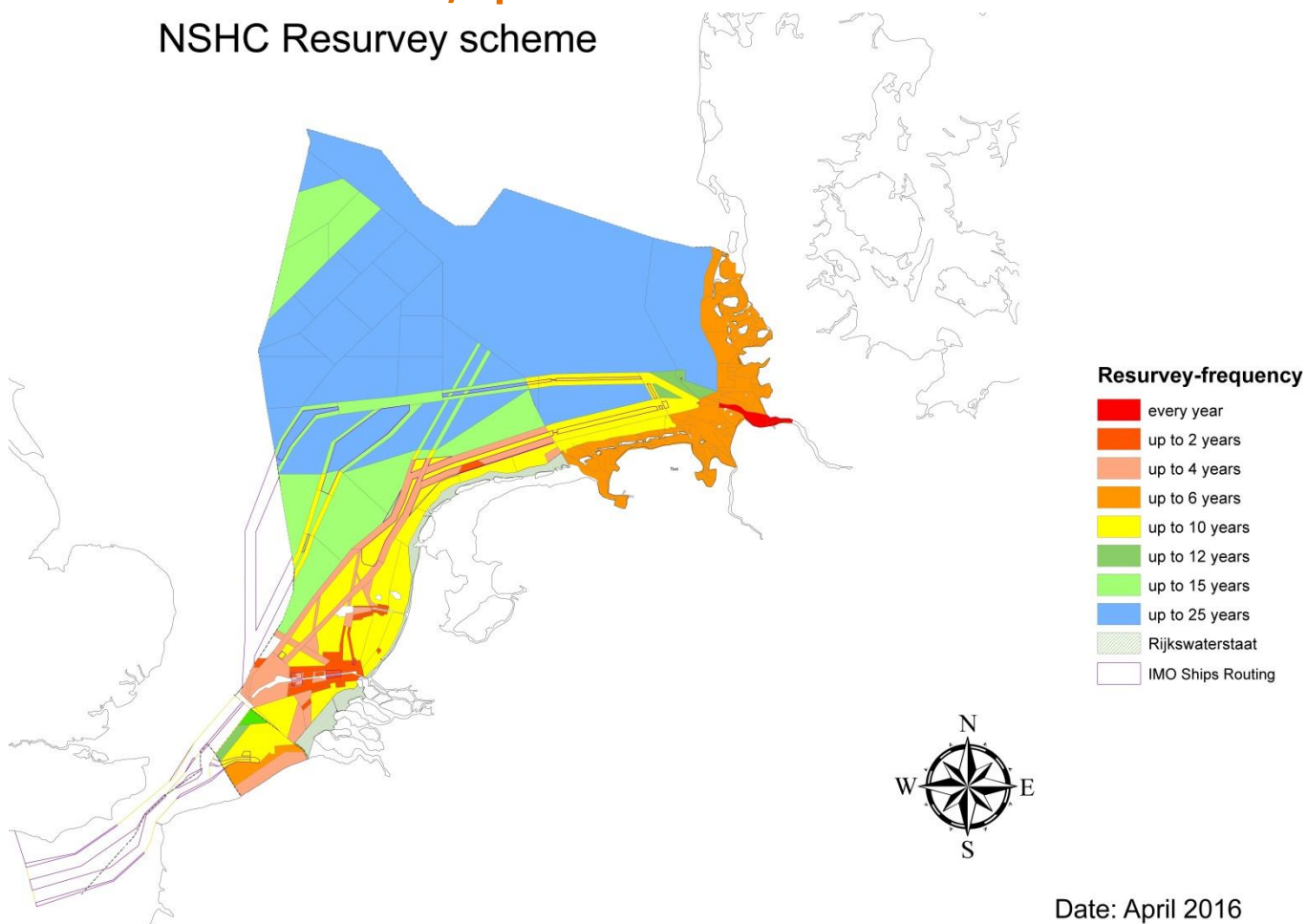
This conclusion reflects that:

- each MS has its own survey strategy, based on the physics of its part of the North Sea, the particularities of usage, and its own capacities;
- it is necessary to verify the consistency of the national strategies;
- RWG is expected to undertake an analysis for the entire NSHC region, in line with recent developments on risk assessment.



# Conclusion 112, part 1

## NSHC Resurvey scheme



Date: April 2016



## Conclusion 112, part 2

The data sets could include:

- depth (as provided by the NSBD)
- morphological characterisation, including expected dynamics
- resurvey frequency (example: map 2)
- applied S-44 order
- date of last survey (example: map 3)
- applied sensors (example: map 4)
- shipping intensity (example: map 5)
- maximum shipping draught (example: map 6)
- administrative and usage areas



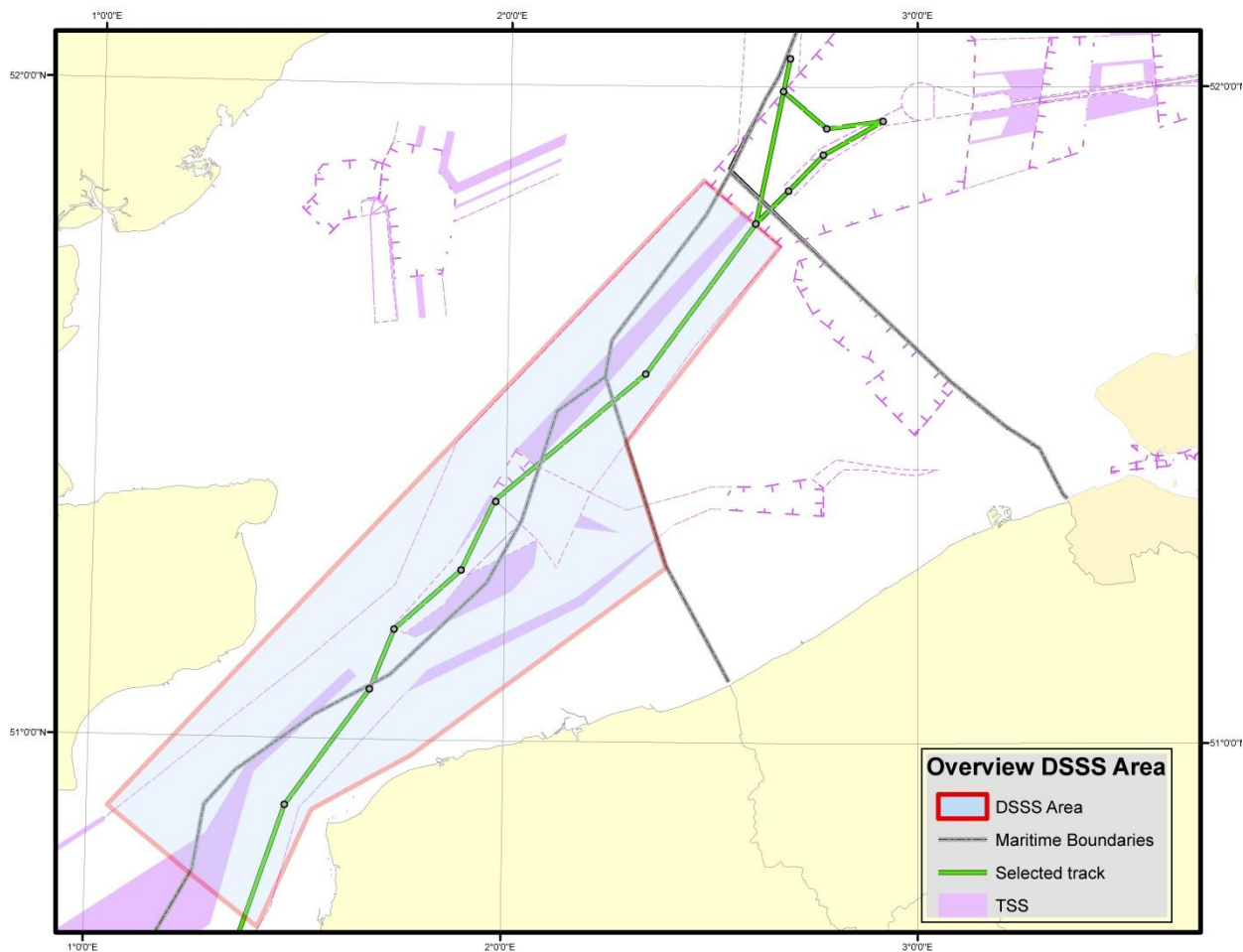
## Conclusion 112, part 3

- no resources
- lack of insight into the relevant data sets
- focus on the national level first





# Dover Strait Survey Strategy (Conclusion 111)





## Dover Strait Survey Strategy (Conclusion 111)

- In a letter of 15 July 2015 to BE, FR and UK, NL concluded that all are in favour of merging the BE/FR/NL/UK DSSSWG with the NSHC RWG
- NL disbanded the DSSSWG
- NL tasked the RWG to suggest updates to the Agreement, building upon the work that has been done by FR
- UK recently proposed “that the Agreement should be formally withdrawn by the four signatories” and “pertinent elements from the Agreement should be reflected in the ToRs of the WG”



## Requested guidance by the RWG

- To note this report;
- To consider a candidacy for WG chair;
- To provide feedback to the first NSBD results.

### Risk Assessment:

- to confirm information exchange (part 1 of conclusion 112);
- to discuss mutual verification (part 2 of conclusion 112);
- not to pursue a common approach (part 3 of conclusion 112).

### Dover Strait Survey Strategy:

- to confirm the update of the Agreement, or withdraw it;
- to approve the suggested changes to the Agreement;
- to formulate additional input on the Agreement.

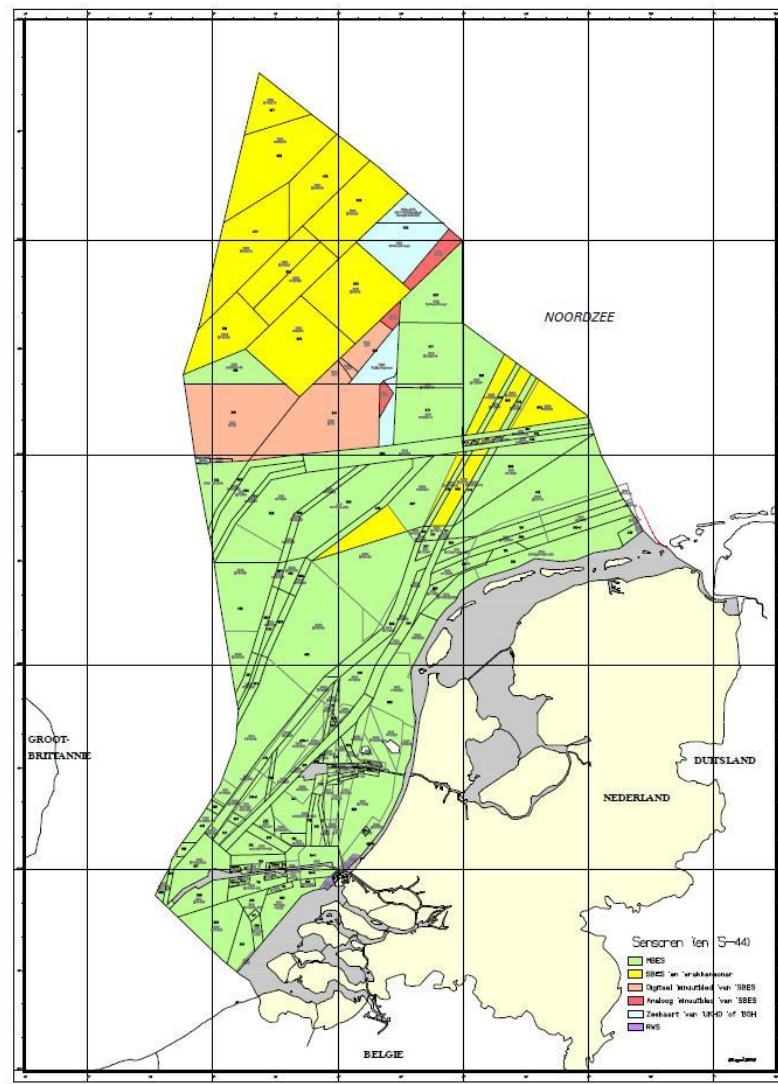
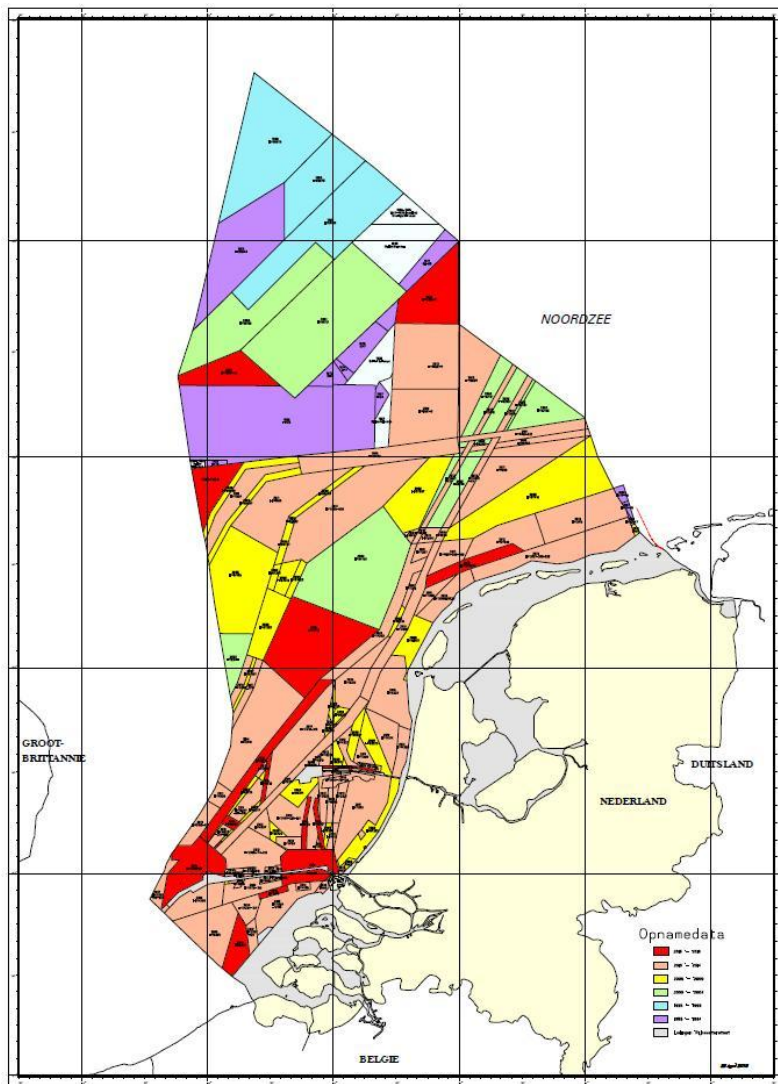


# Bonus slides



# survey dates

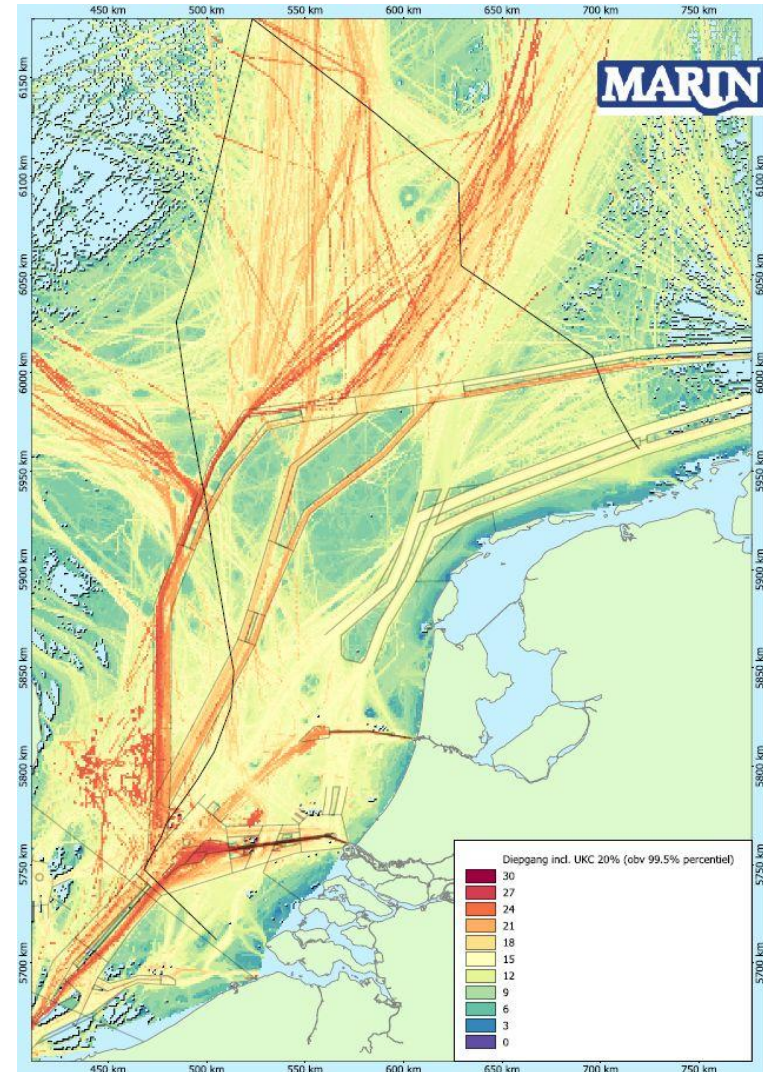
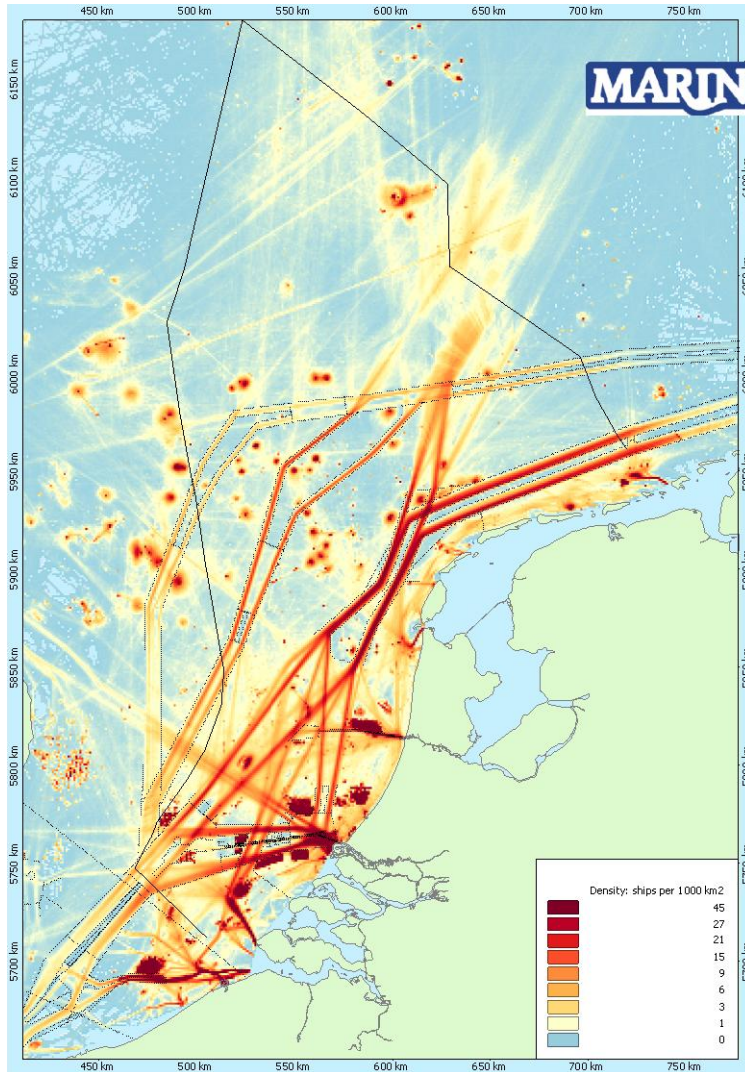
# used sensors



# shipping intensity



# draught





## Scope RWG

With reference to NSHC conclusions nos. 28, 89 and 97,

and considering the need to monitor the implementation of the North Sea Hydrographic Commission's Member States re-survey plans,

the North Sea hydrographic Commission has established the NSHC Resurvey Working Group (RWG) with the following terms of Reference and Rules of procedure.



## ToRs RWG

The NSHC Resurvey Working Group is tasked:

- To maintain and develop the North Sea Resurvey Scheme and present it on the internet.
- To maintain a resurvey metadata database where applicable.
- To follow up the implementation of the Resurvey Scheme.
- To identify possible problems and propose solutions or workarounds to them.
- To specify and propose updates and changes to the Resurvey Scheme.
- To liaise with national Maritime Administrations and other relevant organisations and groups regarding the North Sea Resurvey Scheme.
- To monitor and report on the development of aerial and satellite bathymetry.
- To report to the NSHC at the conferences, and whenever found necessary.





## RoPs RWG

- Each member state of NSHC shall nominate a representative to the RWG, if relevant to the scope and terms of reference. The representatives should be experts in the field of hydrographic survey planning.
- The RWG shall work mainly by correspondence, preferably by e-mail.
- Meetings shall be arranged when found feasible and at least once between two consecutive NSHC conferences. Hosting of the meetings takes turn between the members of the RWG.
- The RWG has a Chair and possibly a Vice-Chair.
- The Chair and Vice-Chair shall be members of the RWG and are nominated by the NSHC.
- With the Chair's approval non-members may attend the RWG meetings.
- Decisions should be made by consensus.