

**20TH MEETING OF THE MESO AMERICAN – CARIBBEAN SEA
HYDROGRAPHIC COMMISSION (MACHC20)
Santo Domingo, Dominican Republic – 3-6 December 20189**

NATIONAL REPORTS FROM THE NETHERLANDS TO THE MACHC20

Executive summary

Satisfactory status for surveying and nautical charting in the MACHC area. The visit to local data providers and the ongoing survey efforts improve the quality of data sets and nautical charting. Continuation of efforts to contribute to a Caribbean SDI, reusing the experiences gained for the North Sea.

1. Hydrographic Office / Service:

a) Name of the institution: Hydrographic Service of the Royal Netherlands Navy

b) Description:

Areas of responsibility are the waters of the Kingdom of the Netherlands in the Caribbean. These are the Leeward Islands (Aruba, Curaçao, Bonaire) and the Windward Islands (Sint Maarten, Saba, Sint Eustatius).

c) Submitted by: Leendert Dorst, LL.Dorst@mindef.nl.

2. Surveys:

The MBES/SSS survey for the Cat.1 and 2 areas of the Windward and Leeward islands has been finished and the data is being processed. A Hydrographic Survey Vessel and smaller platforms were deployed. Also, a land/sea LIDAR survey for Sint Maarten was tendered, in cooperation with local government and the World Bank. This LIDAR survey follows a similar French LIDAR survey for Saint Martin and Saint Barthélemy.

3. New charts & updates:

a) ENC coverage, gaps and overlaps

Full ENC coverage for all appropriate usage bands. UK and FR are producer nations for the overview and general usage bands.

A rescheming of paper charts and ENCs is in progress, starting late 2019. There will be less similarity between the paper chart scheme and the ENC scheme.

b) National paper charts

A rescheming of paper charts and ENCs is in progress, first chart expected December 2019. There will be less similarity between the paper chart scheme and the ENC scheme. Under the existing bilateral agreement, NL and UK investigate possible co-productions of the Caribbean paper charts covering NL waters.

c) Challenges and achievements

The two-way data flow with local data providers is improved with visits to the Leeward Islands (2018) and Windward islands (2019), as well as by promoting MACHC ENC Online as a tool for local data providers to check the current status of the chart.

4. New publications & updates: no significant developments
5. MSI: The national self-assessment of MSI is submitted in Annex C.
6. C-55: no change
7. Capacity Building, offered: practical traineeship on board NL survey vessels
8. Oceanographic activities: no significant developments
9. Spatial data infrastructures

NL offers web services for its geographic names and gridded bathymetric data of the Caribbean Sea. The services for bathymetry were recently upgraded and registered at the Caribbean Marine Atlas. The services for geographic names will be upgraded in 2020. Also, new web services for Administrative Units (maritime boundaries, zones, and limits) and Area Management (PSSA Sababank) will be established. The Netherlands ENCs for the Caribbean Sea are available for online viewing in the MACHC ENC Online application. This tool is used to improve the two-way communication with local data providers.

data set	type	URL
Geographic names at sea	WMS	https://inspire.caris.nl/server/services/ows/view/map/namen-carib_IVS
	WFS	https://inspire.caris.nl/server/services/ows/download/feature/namen-carib_IDS
Bathymetry	WMS	https://inspire.caris.nl/geoserver3/carib_bathy/wms (Sint Maarten, Saba, Sint Eustatius) https://inspire.caris.nl/geoserver3/carib_south/wms (Aruba, Curaçao, Bonaire)
	WCS:	https://inspire.caris.nl/geoserver3/carib_bathy/wcs (Sint Maarten, Saba, Sint Eustatius) https://inspire.caris.nl/geoserver3/carib_south/wcs (Aruba, Curaçao, Bonaire)

URLs for web services in the Caribbean waters of the Kingdom of the Netherlands

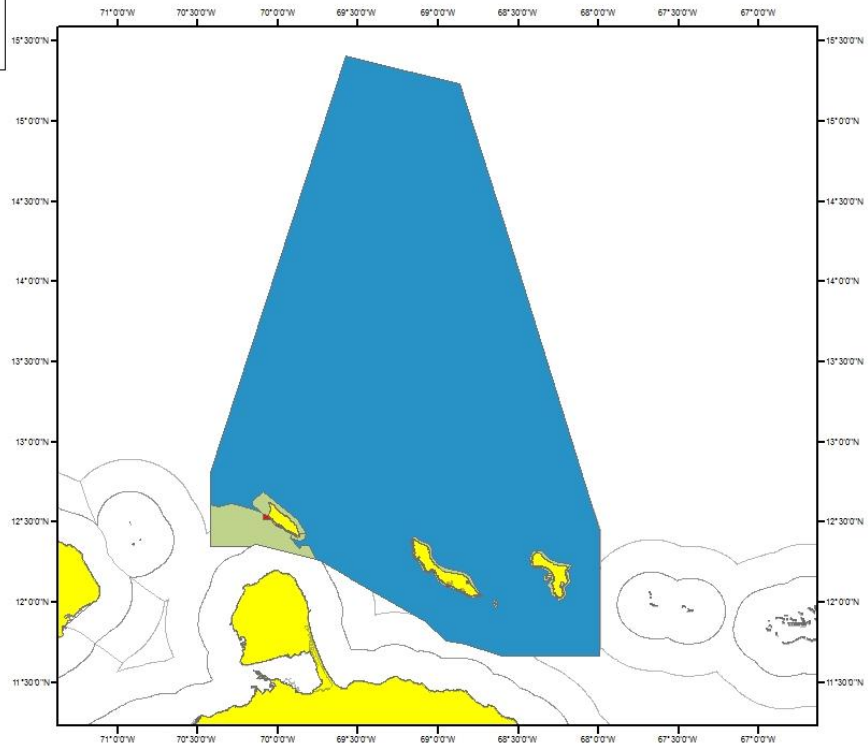
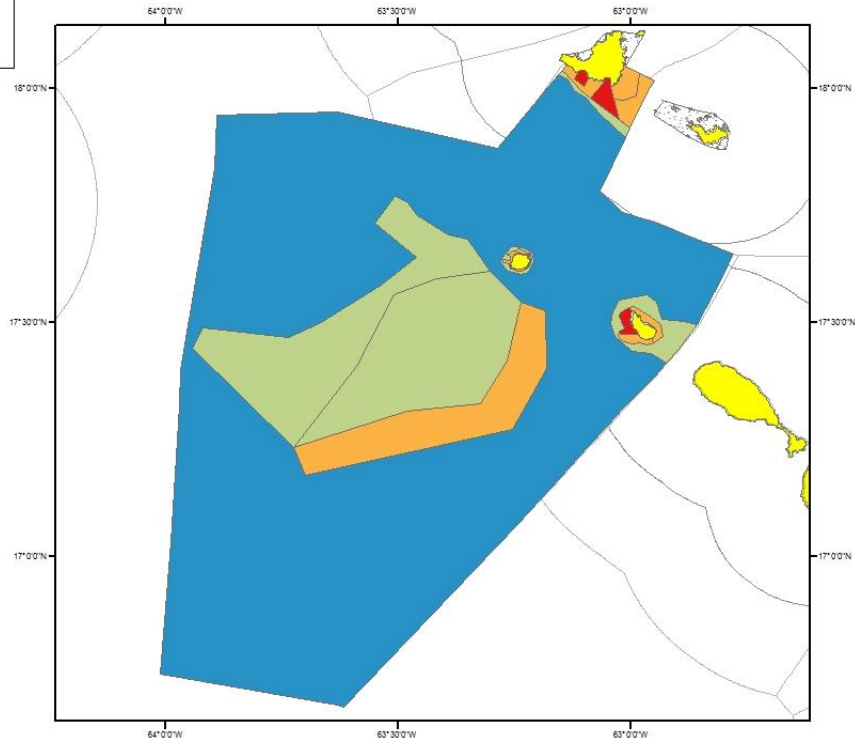
10. Innovation

- a) Use of new technologies: First experiences with LIDAR
- b) Risk assessment

The total NL responsibility area is divided in four categories. The Cat. 1 and Cat. 2 areas are surveyed using a MBES, a SSS, a SV profiler, and Fugro Marinestar ERS for horizontal and vertical positioning.

Cat. 1	0-40 m	Harbours and approaches	every 4 years
Cat. 2	0-40 m	Other coastal areas on South and West coasts	every 12 years
Cat. 3	0-200 m	Other areas up to 200 m	every 24 years
Cat. 4	> 200 m	All areas deeper than 200 m	every 50 years

Categories for hydrographic surveys in the Caribbean waters of the Kingdom of the Netherlands



Survey Policy for the Windward Islands (upper) and Leeward Islands (lower).

c) Policy matters

- Active participation in the IHO Council and its Strategic Plan Review Working Group.
- Active participation in the UN-GGIM Marine Geographic Information Working Group (MGIWG);
- Active participation to improve the availability of ENC data through IC-ENC for non-ECDIS use (besides the current availability through UKHO).
- Active participation in IHO EU Network Working Group, related to the Recast of the European Directive on Public Sector Information. The obligations following from the Recast will also be applied for the Caribbean region.

11. Other activities

a) Participation in IHO meetings

Active participation in several groups, participation in DQWG as chair.
Capt. Van der Donck is a candidate for chairing IHO Assembly 2.

b) Preparation for responses to disasters

See separate briefing for Disaster Relief exercise Caribbean Coast and deployment on the Bahamas.

c) Engagement with the Maritime Administration

The Kingdom of the Netherlands is preparing itself for an IMO Member State Audit Scheme (IMSAS) audit in 2021, with a focus on its two flag states: the Netherlands and Curaçao. To this end, there is an active engagement with the Netherlands Directorate for Maritime Affairs and the Maritime Authority Curaçao (MAC).

d) International engagements: Work on our undelimited maritime boundaries continues.

12. Conclusions

Satisfactory status for surveying and nautical charting in the MACHC area. The visit to local data providers and the ongoing survey efforts improve the quality of data sets and nautical charting. Continuation of efforts to contribute to a Caribbean SDI, reusing the experiences gained for the North Sea.

Input to the IHO Publication P-5 (*Yearbook*)

Country: the Netherlands

Organization: Hydrographic Service of the Royal Netherlands Navy

no change

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting
Worldwide*)
Country: the Netherlands

no change

National MSI Self-Assessment

Country: *Kingdom of the Netherlands*
 Organization: *Caribbean Coast Guard*

1. Maritime area

The TTW and EEZ of the Dutch Caribbean islands Aruba, Curacao, Bonaire (ABC) and Saba, St Eustatius and St Maarten (SSS) as well the SRR in the middle of the Caribbean Sea. GMDSS region classified as A2 area and under coverage of Inmarsat satellite for communication, distress and safety messages like EGC (enhanced Group Cell).

2. Operational Points of Contact for the National Coordinator

INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
JRCC	0059994637700	0059994637950	rcc.curacao@mindef.nl

3. GMDSS Master Plan

All required GMDSS up to date and daily checked.
 INMARSAT-C (AOR-W + E, NAVTEX, VHF/UHF/HF radio telephony (including Emergency and shipping international channels), DSC VHF/MF, Satellite communication/iridium, telephone alarm number 913, COSPAS/SARSAT local user terminal via US MCC to JRCC Curacao, all equipment 24/7 monitored. Additionally SAROPS search and rescue panning and prediction program.

Equipment Type for Ports and Local Area	Software Version	Date of Up-date
VHF ABC and SSS islands port/ATC authorities		2015

Year Y-2		Year Y-1		Year Y	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
1	30 Mins	0	-	0	-

4. NAVTEX Coverage:

AREA H (IV) – VHF/UHF/MF – Navigational, Meteo and all desired urgency broadcasts.
 MMSI 003061000

5. Operational Issues:

New Inmarsat C terminal has been installed Awaiting registration of email address.

6. Contingency Planning

New VHF/UHF radiotelephony network installed on Leeward Caribbean islands.
New VHF/UHF radiotelephony network planned on Windward Caribbean islands.

7. Capacity Building

-

8. Other Activities

-

9. National Maritime Website

-

10. Recommendations

-

11. Summary

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24/7 monitor all GMDSS including all shipping&aircraft related COSPAS/SARSAT