



# **MARITIEME AUTORITEIT SURINAME**

## **National Report**

**12th MEETING OF THE MESO AMERICAN AND  
CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)**

**5<sup>th</sup> -9<sup>th</sup> December 2011  
Basseterre, St. Kitts**

## Content

1. The Maritime Authority Suriname (MAS).....	2
2. Hydrographic Surveys in 2011 .....	3
3. Charts.....	3
4. Maritime Safety Information .....	4
5. C-55 Latest Update.....	4
6. Capacity Building.....	5
7. Status of recent port audits.....	6
8. Port Statistics.....	6
9. Shipping statistics .....	6
10. Current problems / restrictions .....	7
11. Three things that keep us awake at night .....	7
12. Hydrography/hydrographic skills have been of benefit in non- navigational context. ....	7
13. Other activities .....	8

## **1. The Maritime Authority Suriname (MAS)**

The MAS is the statutory body that enforces maritime and shipping legislation in Suriname. The organization was constituted in 1998 by promulgation of the law. The MAS ensures safe navigation on all Surinamese waterways. The mandate encompasses both the maritime area as well as the internal waterways. The company is commercially exploited and is also in charge of pilotage, the maritime administration and casualty investigation.

Based on the fact that the Surinamese ports are situated along the rivers, it is important to have adequate hydrographic coverage and updated hydrographic data of the major ports, harbors, coastal area and the rivers, to facilitate the safe movement of ships.

The Hydrographic division deals with:

- depth measurements in the coastal area and internal waters;
- topographic survey;
- tidal measurement;
- turbidity measurements;
- C.T.D. measurements;
- environmental monitoring
- planning of aids to navigation;
- obstacle determination;
- bottom sampling
- Notice to Mariners.
- object detection by Side Scan Sonar

The MAS, in representing the government of Suriname, also makes a contribution through the support of activities undertaken by IHO and MACHC. In this context, inter alia, we can name:

- the execution of the IHO Strategic Plan;
- the establishment of Marine Spatial Data Infrastructure (MSDI) within the hydrographic division;
- the operations of INT Chart Committee.

More Information about the organization such as history, mission, vision, goals can be found on the website [www.mas.sr](http://www.mas.sr) .

## 2. Hydrographic Surveys in 2011

In 2011 the Suriname River was surveyed. This was done as a pre-survey for the Suriname River dredging project and the production of an ENC. The survey data has been validated and the nautical chart number 2218 of the Suriname River will be updated by the end of the year. Detailed surveys have been done for local ports and monitoring of civil structures.

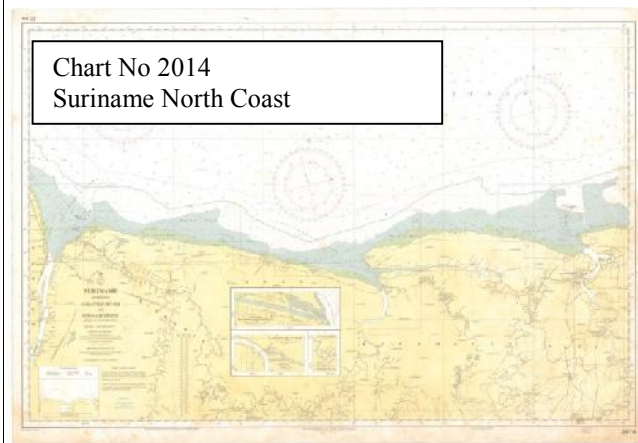
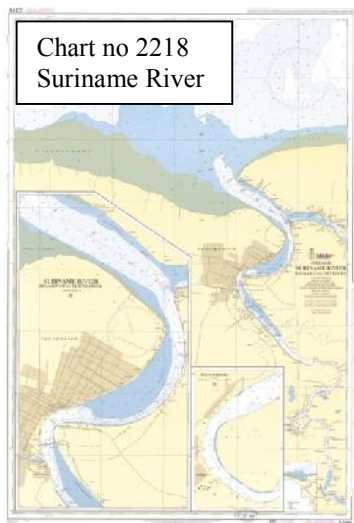
## 3. Charts

The nautical paper charts and ENC of Suriname are a joint production with NLHO.

Two charts will be updated in 2011 in accordance with CATZOC – B.

These are:

- Paper Chart no. 2014 and ENC, Suriname north Coast from the Suriname River to the Corantijn River (1:180.000) expected in December 2011.
- Paper Chart no. 2218 and ENC, Suriname River (1:45.000) expected in December 2011.



## 4. Maritime Safety Information

### NAVIGATIONAL INFORMATION (S-53)

SERVICE	Yes	No	Partial	NOTES
LOCAL WARNINGS	X(NtM)			
COASTAL WARNINGS			X	
NAVAREA WARNINGS	X			
INFORMATION ON PORTS AND HARBOURS <sup>1</sup>			X	

Notices to Mariners are generated by the Hydrographic division and promulgated locally and send to the NAVAREA coordinator.

## 5. C-55 Latest Update

### Status of hydrographic surveys

Routine re-surveys are required in the port areas, which lie in unstable river regimes. The Surinamese coastal waters are subject to frequent changes because of sediment deposit from the mud banks, and a number of areas, especially the main shipping rivers require regular surveys and investigation.

	A	B	C
Offshore passage /Small	100	100	0
Landfall Coastal passage/Medium	100	60	0
Approaches Ports/Large	100	100	0

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

C = percentage which has never been systematically surveyed.

## Status of Nautical Charting

	A	B	C
Offshore passage/Small	100	0	0
Landfall Coastal passage/Medium	60	0	0
Approaches Ports/Large	100	0	0

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4.

B = percentage covered by Raster Navigational Charts (RNCs) meeting the standards in S-61.

C = percentage covered by ENC's meeting the standards in S-57.

Some charts are in need of revision, and are based on outdated source material. The charts of the Suriname and Corantijn river, as transport links between the Atlantic ocean and the main ports, are up to date.

## 6. Capacity Building

The MAS employees have participated in the courses listed below:

- MSI course held in Brazil presented by IHO, in April 2011.
- Basic Marine Cartography in the UK presented by IHO, in March 2011,
- Basic Hydrography course in Suriname presented by Brazilian Hydrographic Service, in April 2011.
- Basic Side Scan Sonar course held in the USA, in October 2011.
- A course in Dredging Technologies in Antwerp, in May 2011.

Required training;

- Nautical Cartography Level A and B
- Hydrography level A and B

Required Intern ship;

- Tidal analysis
- Side Scan Sonar operation and interpretation
- Paper Chart and ENC production

## 7. Status of recent port audits

The MAS certifies vessels and port facilities in accordance with SOLAS regulations, by annual audits. Port facilities that accommodate vessels of 500 GRT are required to be ISPS certified.

Vessels that are ISPS certified are not permitted to moor at port facilities that are not ISPS certified.

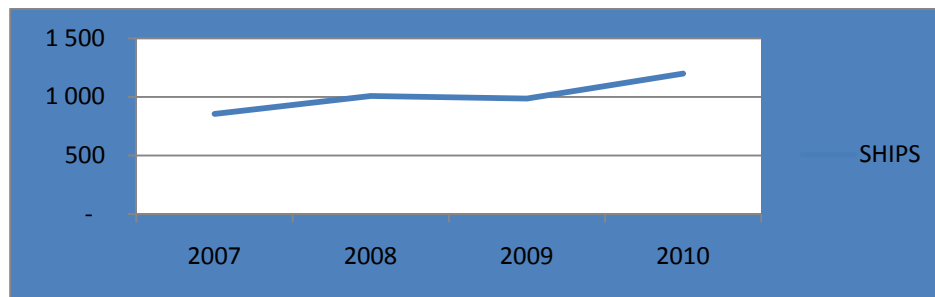
## 8. Port Statistics

Suriname currently has seventeen (17) operational certified ports of which five (5) build within the last five (5) years. These ports accommodate container vessels, bulk carriers, RO- RO (car carriers), Oil and chemical tankers, Reefer ships, Supply ships and Passenger ships.

## 9. Shipping statistics

An increase of vessel entries has been observed in the years 2010 with 40 % and estimation of 64 % in 2011.

Long-term overview					
	2007	2008	2009	2010	2011
					Jan - June
SHIPS	853	1,006	985	1,199	712



## **10. Current problems / restrictions**

### Restriction in Capacity

For the production and swift update of nautical charts and publication professional trained personnel are required. Suriname has one person with basic cartographic training without practical experience. In order to abreast the IHO developments the MAS requires at least two persons with cartographic experience.

### Restriction in Equipment and vessels

The MAS dispose of two survey vessels, one for internal water survey and the other for coastal surveys up to 60 nautical miles. Platforms beyond 60 nautical miles need to be chartered.

At this point the data is gathered by oil exploration companies in cooperation with the State oil Company (When the exploration ceases the continuity of data will cease as well beyond 60 nautical miles).

### Restriction in Finance

Hydrographic surveys, equipment and data infrastructures require a great amount of resources that are not earned back by nautical publications. Therefore the surveys are planned by priority and are often limited.

## **11. Three things that keep us awake at night**

- I. How to increase the data quality and make data available as soon as possible?
- II. Future plans that need to be implemented such as nautical chart production
- III. How do we cover all the survey area of Suriname?

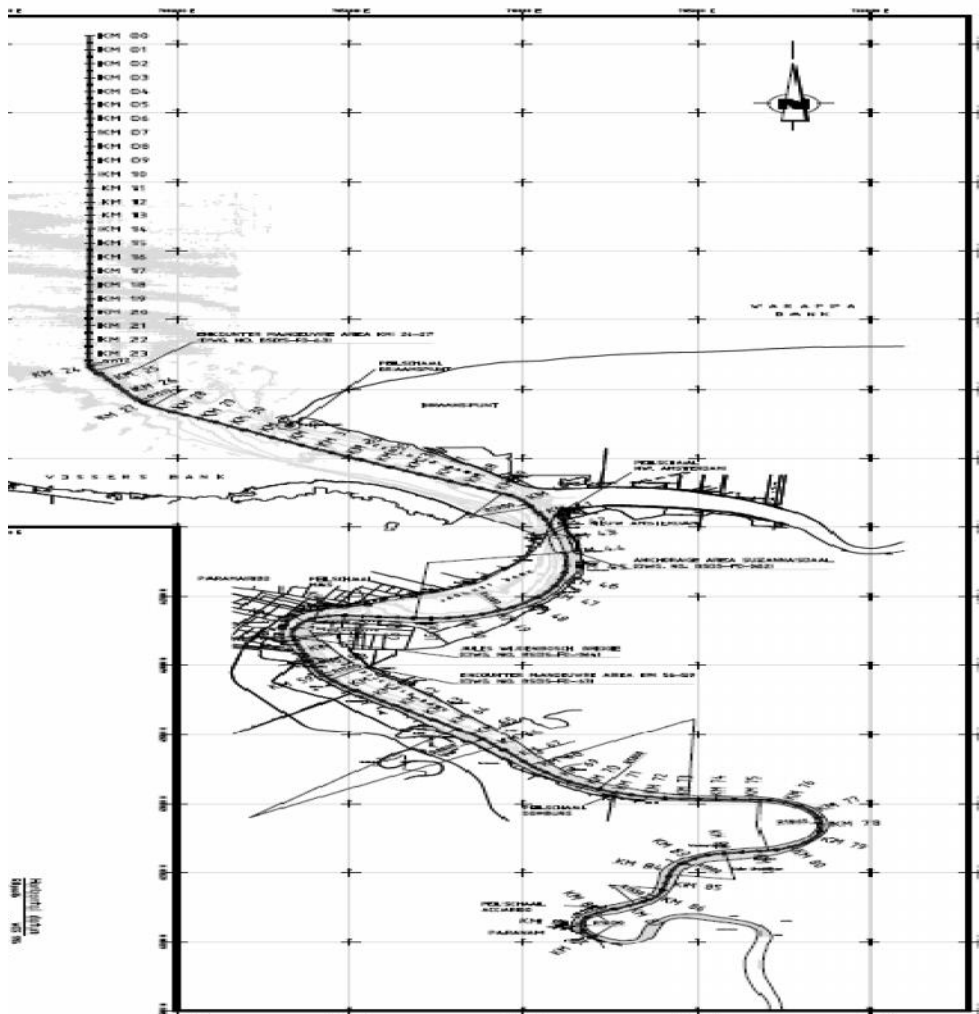
## **12. Hydrography/hydrographic skills have been of benefit in non- navigational context.**

- Determination of the limits of fishing grounds in cooperation with the department of fisheries.
- Bathymetric surveys for construction of dikes and dams in cooperation with the department of civil works.



### 13. Other activities

- Obtain knowledge in the production of paper charts and ENC's
- Acquire equipment that can be use efficiently such as Side Scan, GIS, MB system and meet IHO standards.
- Extension of tidal station in coastal area.
- Extension of base points along coastal area and riverbanks.
- Extension of survey area.
- Establishing a Marine Safety Information System
- Collaboration with several institutions national and international
  - The MoU with NLHO is revised mainly for the production of ENC.
  - A MoU with UKHO is being drafted for the distribution of nautical publication and products.
- Dredging of the Suriname river from a minimum depth of 4.5m to 5.5m over a distance of sixty-three (63) kilometers.



## **14. Conclusion**

Great effort has been made to guarantee safe navigation in the Surinamese waterways, but there are still challenges ahead. MAS is willing to share experience with other hydrographic offices and is looking forward to cooperate more with countries in the region.