

**INTERNATIONAL HYDROGRAPHIC ORGANIZATION
CAPACITY BUILDING PROGRAMME**



**EAST ASIA HYDROGRAPHIC COMMISSION
TECHNICAL VISIT TO
VIETNAM MARITIME SAFETY-NORTH**

NOVEMBER 2014

**INTERNATIONAL HYDROGRAPHIC ORGANIZATION
CAPACITY BUILDING PROGRAMME**

SUMMARY SHEET

Title of Activity: EAHC Technical Visit to Vietnam Maritime Safety- North

Host Country: Vietnam

Venue and Date: Vietnam Maritime Safety-North, 06 November 2014

Organized by: East Asia Hydrographic Commission and Vietnam Maritime Safety-North

Funding source: International Hydrographic Organization CBSC Fund

Number of participants: four (4)

Participating countries: Philippines, Malaysia and HongKong-China

1. Introduction

The International Hydrographic Organization (IHO) and the East Asia Hydrographic Commission (EAHC) have been working together in encouraging non-member States in the East Asia region to join the IHO. So far, two (2) countries have already submitted their application to become IHO Member States (MSs), Brunei Darussalam and Vietnam. Both countries have recently acquired the required 52 approvals from MSs.

To further enhance the technical cooperation in the region and encourage non-MSs to become part of the Organization, the IHO has approved the Technical Visit to Vietnam as part of the 2014 Capacity Building Work Program (CBWP).

The Philippines, as the current EAHC Chairman, is the project leader for the Technical Visit. Commodore Jacinto M. Cablayan, EAHC Chairman, headed the Technical Visit team accompanied by EAHC Vice-Chairman Rear Admiral Zaaim bin Hasan, Director General of the National Hydrographic Centre, Royal Malaysian Navy, Commander Rosalino delos Reyes of the EAHC Chairman's office, and Mr. Kg Kwok Chu from HongKong-China and currently the South China Sea ENC Coordinator.

2. GENERAL ASSESSMENT

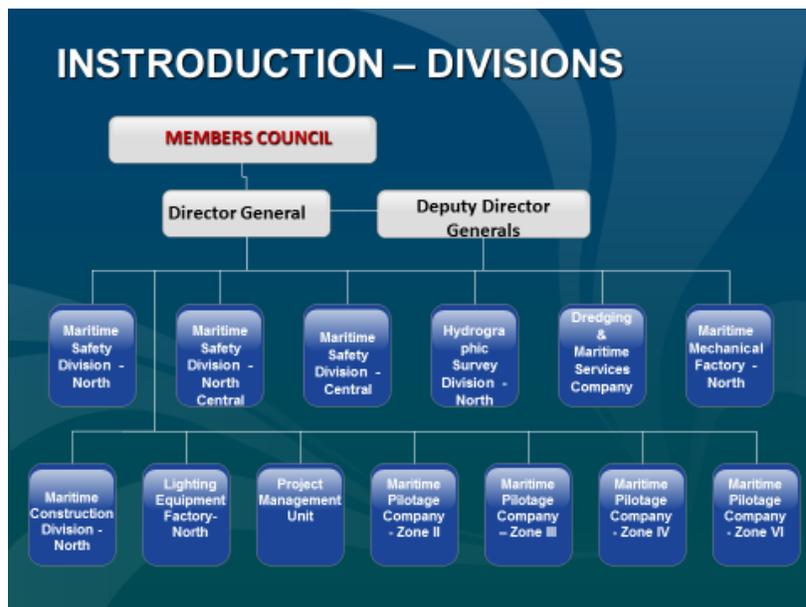
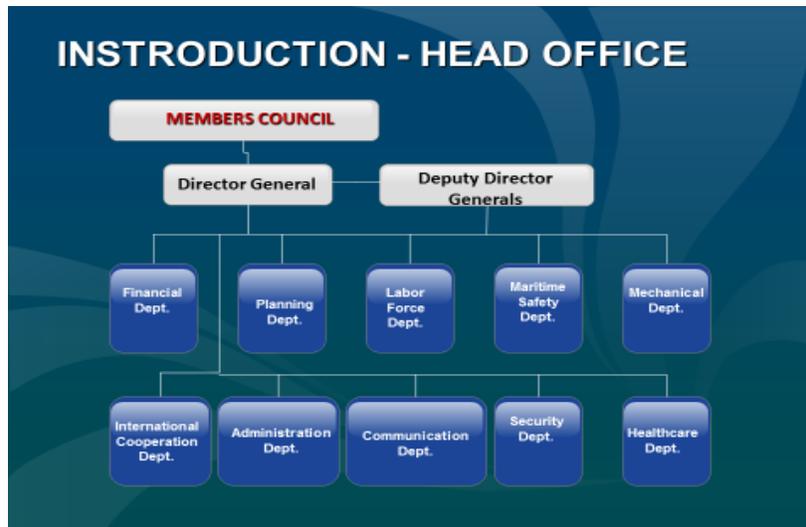
Vietnam Maritime Safety – North (VMS-N) is under the Ministry of Transport with the responsibility of conducting hydrographic surveys within the limits of fairways, channels, anchorage, pilot area, and quarantine area. It is headed by a Director General and assisted by three Deputy Director Generals. The roles and responsibilities of VMS-N include the following:



Some of the aids to navigation fabricated and being maintained by VMS-N
 (Source: presentation of Le Minh Bang)

- a. **Operation and maintenance of the lighthouse system**
- b. **Operation and maintenance of aids to navigation**
- c. **Conduct hydrographic survey for Notices to Mariners, paper charts and ENC production**
- d. **Provide pilotage service**
- e. **Fabrication of buoys and lighting equipment**
- f. **Conduct of dredging operation**
- g. **Construction of lighthouses**
- h. **Maintain tidal and weather station**
- i. **Undertakes vessels repair**
- j. **Performs maritime safety control for marine construction sites**
- k. **Maintain a mechanical factory for the fabrication of buoys and other lighting equipment**

In addition, there are several companies under the control of VMS-N like the Maritime Construction Company, Dredging and Maritime Services Company and Maritime Pilotage Company which provide services for maritime construction, dredging and pilotage.



Organizational structure of Vietnam Maritime Safety-North

(Source: presentation of Le Minh Bang)

2.1 STATUS OF HYDROGRAPHIC SURVEYING AT VMS-N

There are three government organizations doing hydrographic surveys in Vietnam, these are; Vietnamese Navy under the Ministry of Defense, Vietnam Maritime Safety-North and Vietnam Maritime Safety-South under the Ministry of Transport and the Geodesy and Mapping Department of the Ministry of Natural Resources and Environment.

The Ministry of Defense was appointed by the government to facilitate the procedures in their application for membership to the IHO.

The administrative water area being surveyed by VMS-N are covered by the water depths under 40 meters and resurveyed annually following the IHO S44 standards. The Vietnamese Navy undertakes the hydrographic survey of the water area outside of the port area and farther offshore. The Geodesy and Mapping Department are doing the mapping of the seabed within the baseline and coastline at 1:50 000 scale. About 17.3% of Vietnam's water area had been surveyed.

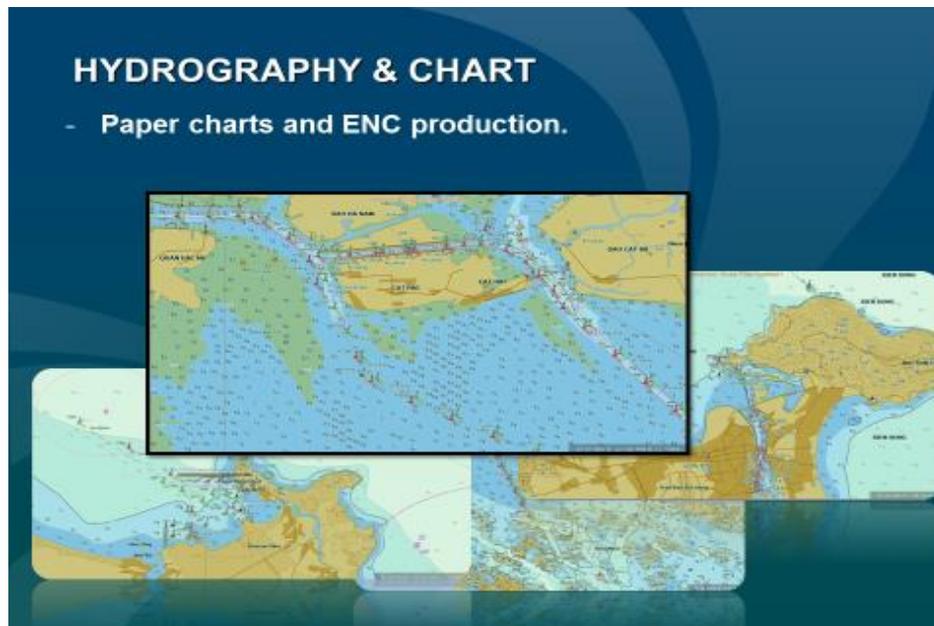
VMS-N have two survey vessels and three boats. One was built in 1967 (L 17.5m, B 4m, D 1.2m) and the other one was built in 2006 (L 21.7, B 4.8, D 1.35m). All were equipped with a singlebeam system. The other two are fitted with a multibeam system and are being utilized only when necessary. They also have a side scan sonar and real time kinematic GPS for the conduct of hydrographic surveys. VMS-N also collects tide and sound velocity data for hydrographic survey using digital pro sound profiler, valenport tide gauge and datamar-3000. There is a long term plan of putting up additional tide stations at important ports with an expected target of nine stations.



Survey platform and equipment used in hydrographic survey
(Source: presentation of Le Minh Bang)

2.2 STATUS OF NAUTICAL CHARTING

VMS-N have already produced 33 paper charts for approach and channel with an additional 23 charts covering the harbor limits. The scale varies between 1:25000 to 1:70000. The charts however, are not yet officially published by the Ministry of Transport but hoping that official publication will be in 2015. About 33 ENCs were already compiled.



Sample output of paper charts and ENCs
(Source: presentation of Le Minh Bang)

In addition to paper charts and ENCs, VMS-N also published Notices to Mariners and List of Lights. Tide and Current Tables and Sailing Direction are not yet available.

2.3 CAPACITY BUILDING

The surveyors and cartographers of VMS-N attended their training at the Vietnam Maritime University and Mining and Geodesy University. Training for surveyors and cartographers will be continued to meet the S5 and S8 requirements of the IHO.

2.4 FUTURE PLANS FOR VMS-N

VMS-N will continue to undertake hydrographic survey for all channels using the multibeam system. They also plan to install more tide and weather stations in their areas of jurisdiction. The organization would hope to pursue the publication of their paper charts and ENC officially by next year. They also plan to invite other relevant government organizations like the Vietnam Navy, Foreign Affairs Ministry, VMS-South and other stakeholders, to discuss how they would address issues particularly their membership to the IHO among other concerns.

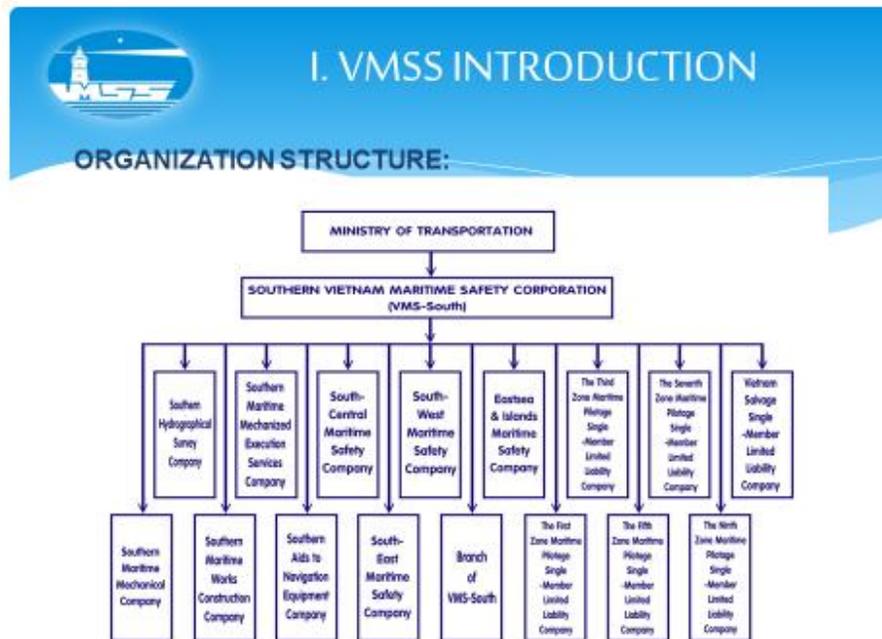
3. STATUS OF VIETNAM MARITIME SAFETY-SOUTH

3.1 HYDROGRAPHIC AND CHARTING ACTIVITIES OF VMS-S

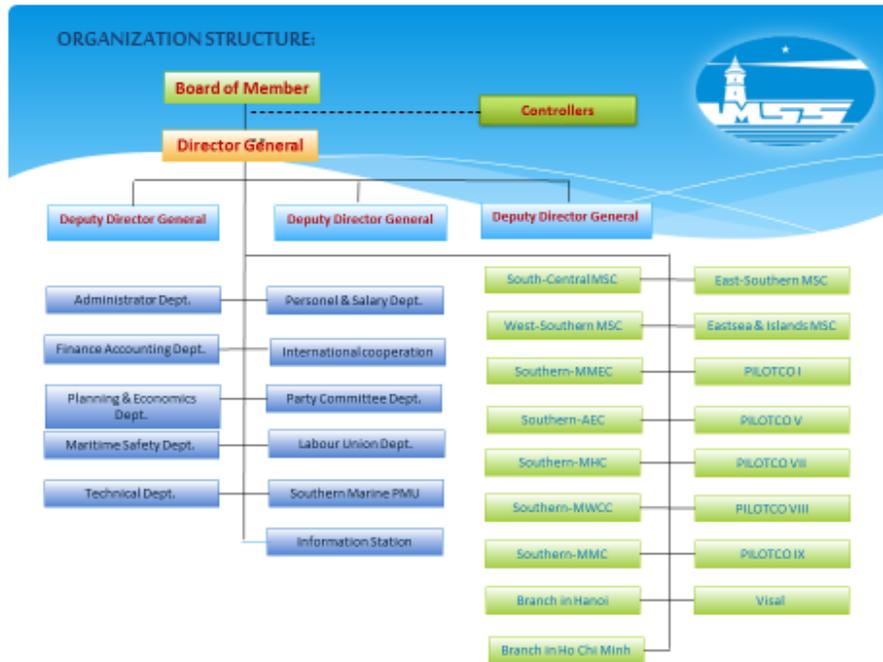
During the technical visit at VMS-N, two officials from VMS-S were also present and gave a powerpoint presentation about the activities being undertaken by VMS-S.

Vietnam Maritime Safety – South (VMS-S) is also under the Ministry of Transport with the responsibility of conducting hydrographic surveys within the limits of fairways, port areas and marine channels from Binh Dinh to Kien Giang provinces including the mainland, coasts and island. It is headed by a Director General and assisted by three Deputy Director Generals. The main survey works being carried out by VMS-S as explained in the powerpoint presentation include the following:

- a. Design and survey of marine construction
- b. Survey of fairways
- c. Compilation and production

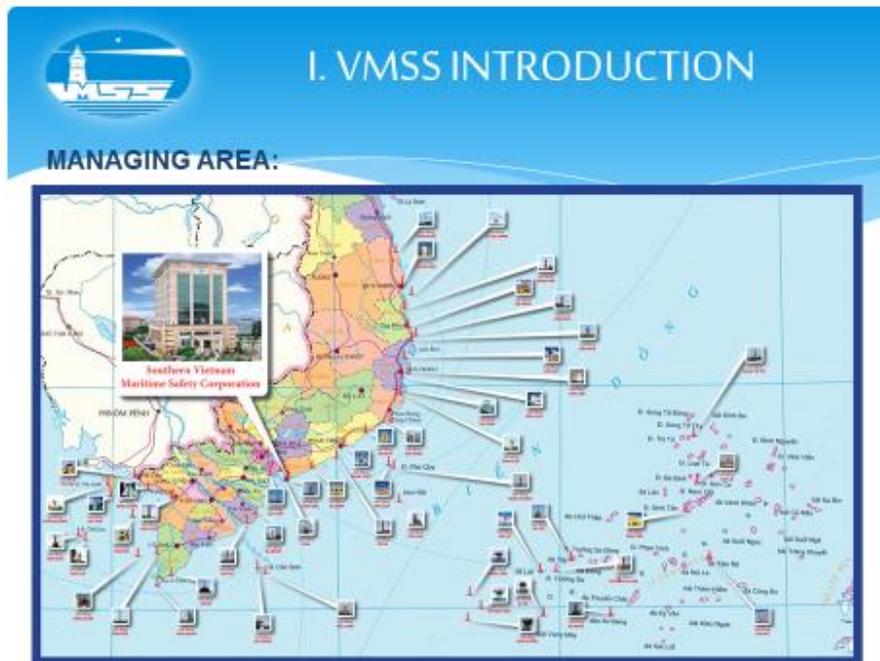


Sample output of paper charts and ENC's
(Source : presentation of Tran Minh Thuan)



Organizational structure of Vietnam Maritime Safety-South
(Source: presentation of Tran Minh Thuan)

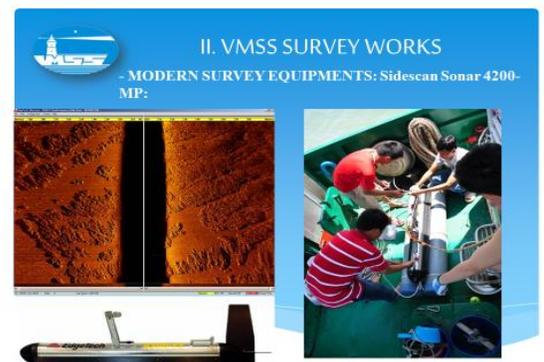
The area of survey coverage for 22 fairways is approximately 538 square kilometers. They were able to cover the 17 fairways with 46 ENC cells. These 22 fairways are surveyed twice a year to ensure that danger areas and obstructions to navigation are fully covered.

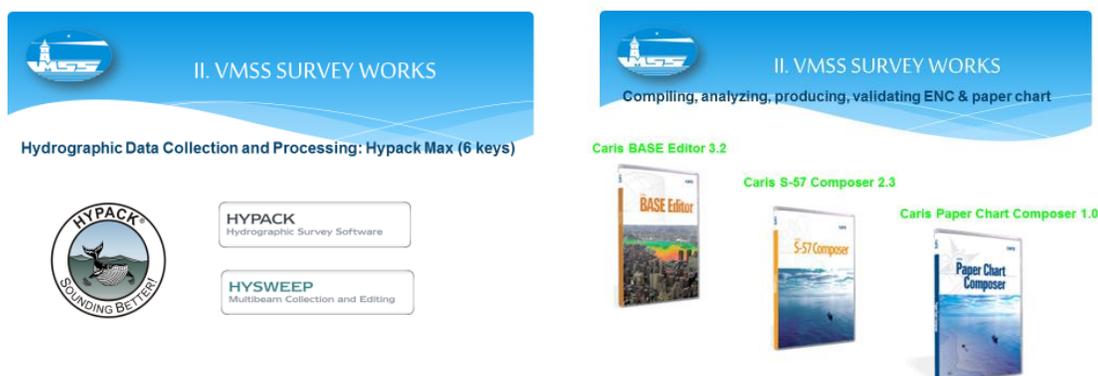


Area of survey coverage of VMS-S
(Source: presentation of Tran Minh Thuan)

Ord	Channel name	Length (km)
1	Quy Nhon	9.1
2	Vung Ro	2.5
3	Dam Mon	16.5
4	Nha Trang	11
5	Ba Ngoi	13
6	Vung Tau – Thi Vai	53
7	Dinh river	16.6
8	Dong Tranh – Tac Bai – Go Gia	39.5
9	Sai Gon – Vung Tau	84.5
10	Dua river	10.4
11	Dong Nai	9.5
12	Soai Rap – Hiep Phuoc	67
13	Cua Tieu – Tien river	74
14	Dinh An – Can Tho	130.6
15	Sa Dec – Dong Thap	1
16	Nam Can	45
17	Ha Tien	11.5
18	An Thoi	0.87
19	Phan Thiet	1.1
20	Phu Quy	3.2
21	Con Son	14
22	Ben Dam – Con Dao	10

List of fairways and their corresponding length
(Source: presentation of Tran Minh Thuan)





(Source: presentation of Tran Minh Thuan)

The slides above shows some of the equipment and software utilized by VMS-S in their hydrographic surveying, paper chart and ENC production.

3.2 FUTURE PLANS FOR VMS-S

VMS-S will continue to embark on strengthening its technical staff through various capacity building programs by sending them to training related to ENC and paper chart production. They will continue undertaking hydrographic survey of their 22 fairways to ensure safety to navigation. They will actively participate and collaborate with relevant government authorities in Vietnam like VMS-N, the Vietnam Navy among others, in their pursuit to become a full member of the IHO. VMS-S will strengthen their cooperation between the EAHC, the IHO, VMS-N and other institutions in relation to their hydrographic and charting activities.

4. CONCLUSION

The technical visit of the EAHC was very timely considering that Vietnam is actively pursuing their membership application to the IHO. The officials of VMS-N and VMS-S expressed their warm appreciation to the delegation for the guidance and advice provided for the required course of action they have to take in their quest to become a full member of the organization. Vietnam promised that they will actively participate in the meetings, capacity building programs and support the affairs of the Commission.

5. RECOMMENDATIONS

The EAHC recommends that:

- a) Vietnam be invited in future EAHC and IHO meetings in order for them to be aware and updated of the activities of these organization and prepare them in getting involve in the affairs of these two international bodies.
- b) Vietnam be invited in all capacity building programs to strengthen their capacities in the fields of hydrographic surveying, nautical charting, marine cartography and other relevant training programs.
- c) Continue providing assistance and guidance in the preparation of the requirements of becoming a full member State of the IHO and EAHC.

Focal Persons for Vietnam Maritime Safety-North and Vietnam Maritime Safety-South

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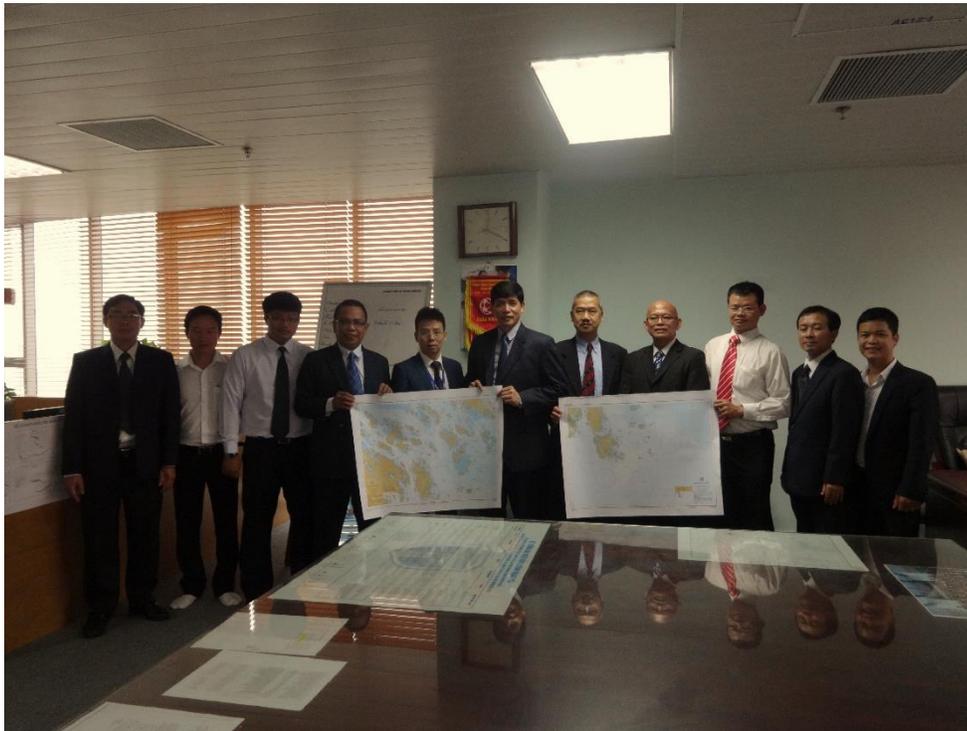
**Telephone : 84 (0) 64 3576 316
Fax : 84 (0) 64 3858 312
Website : www.vms-south.vn
Email : office@vms-south.vn**



The members of the delegation headed by the EAHC Chair Commodore Jacinto M. Cablayan, Philippines (2nd from left) flanked by Rear Admiral Zaim Bin Hassan, Malaysia (left), Cdr. Rosalino C. delos Reyes, Philippines and Mr. Ng Kwok Chu, Hongkong,China



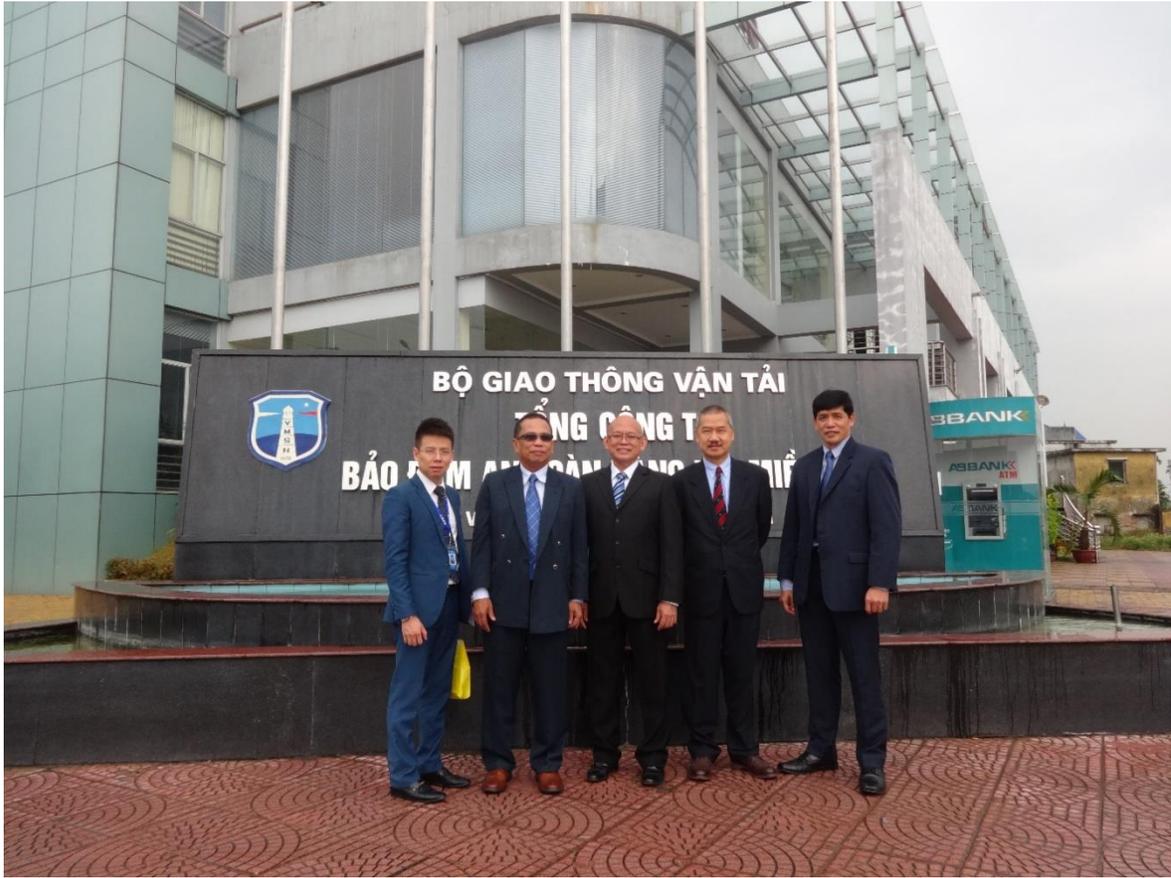
Mr. Luu Van Quang (center), Director General of Vietnam Maritime Safety-North flanked by officials from VMS-N and VMS-South warmly welcomes the EAHC delegates



The members of the EAHC delegation together with some officials from VMS-North and VMS-South



EAHC Chairman Commodore Jacinto M. Cablayan and VMS-North Director General Luu Van Quang exchanging tokens of appreciation



The EAHC delegation in front of VMS-North office together with Mr. Le Minh Bang (left), Director of International Cooperation Department, VMS-North, Rear Admiral Zaim Bin Hassan, Commodore Jacinto M. Cablayan, Mr. Ng Kwok Chu and Commander Rosalino C. delos Reyes