



# IHO Capacity Building Programme TECHNICAL VISIT

The State of Hydrography and Nautical Charting in Georgia



16-18 October 2018



<b>Table of Contents</b>	
Table of Contents	Page 3
Abbreviations	Page 4
Executive Summary	Page 6
Report of Technical Visit to Georgia	Page 8
References	Page 8
Introduction	Page 8
1. Background	Page 9
2. Composition of the Team	Page 9
PART A - Overall assessment of the situation in Region	Page 10
	, 0
PART B – GEORGIA Assessment	Page 12
Description of Maritime Activities	Page 13
Outline C 55 Analysis	Page 17
Proposals for Coordination and Capability Building	Page 18
Proposals for Assistance	Page 23
Follow-up Actions	Page 25
Conclusions	Page 26
Recommendations:	Page 27
<b>Assessment of the Previous Technical Visit</b>	Page 28
Present Technical Visit Recommended Actions	Page 31
	<u> </u>
List of Annexes	Page 32

# **Abbreviations**

BASWG Blackand AzovSeasWorkingGroup

CB CapacityBuilding

CBSC CapacityBuildingSub-Committee

ENC ElectronicNavigationalChart

IHO International Hydrographic Organization

IMO International Maritime Organization

INT International

MBSHC Mediterranean and BlackSeasHydrographicCommission

MSI MaritimeSafety Information

MTA MaritimeTransportAgency

NHC National Hydrographic Committee

NtMs Notice toMariners

RHC RegionalHydrographicCommission SHSG StateHydrographicServiceofGeorgia

SOLAS [United Nations]Convention for theSafetyofLifeatSea

UN UnitedNations

UNCLOS UnitedNationsConventionon LawoftheSea

WMO World MeteorologicalOrganization

WWNWS WorldwideNavigationWarningService

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# **Executive Summary**

#### **TECHNICAL VISITS**

A proposal for a technical visit to Georgia (Item A-03 / CBWP 2018) was approved in the 15<sup>th</sup> meeting of the Capacity Building Sub-Committee (CBSC) in Paramaribo, Suriname, 7-9 June 2017 as follow-up visit in 2014 and to assess the current status of nautical charting and hydrography in the country and to provide advice to the government, public administration and to stakeholders on a way ahead. At the last 20<sup>th</sup> Mediterranean and Black Seas Hydrographic Commission (MBSHC) the visiting team was defined to be comprised of Turkey (Lead) and Ukraine, but the MBSHC Coordinator asked for a proposal by MBSHC Member States for a Team Leader and Italy answered in positive way and the visit wasfound by CBWP 2018 (2.500,00 €) and paid by the IHO Capacity Building (CB) Program.

The first Technical Visit to Georgia waspaid in 2010under the IHO Capacity Building (CB) Program and the second one in 2014 was paid by representative of Turkey and Ukraine.

This last visit was to follow up the recommendations made in the 2010 and 2014 visits, and for further recommendations.

#### GENERAL AWARENESS IN STATE OF GEORGIA

Georgia is a member of International Maritime Organization (IMO) and a signatory to the Safety of Life at Sea Convention (SOLAS). In general there is awareness in Georgia on the obligations of Regulations 4 and 9 of SOLAS Chapter V, which places an obligation on contracting Governments to arrange for the collection, compilation, dissemination and maintenance of all information required for safe navigation. Therefore, Georgia is required to collect and publish Maritime Safety Information (MSI), arrange for hydrographic surveys to be undertaken, and nautical charts and publications to be compiled and published and for these documents to be maintained.

The Government of Georgia, through its various maritime Authorities, is aware of the current status of hydrography and nautical charting in the country and the benefits of modern hydrography to economic growth, safety of navigation and protection of the marine environment. Awareness was raised at the administrative and working level by the visit of the IHO Technical Visit Team.

#### IHO MEMBERSHIP of GEORGIA

Georgia was an Associate Member of the Mediterranean and Black Seas Hydrographic Commission (MBSHC) and is participating in its meetings since 2009 and in meetings of the Black and Azov Seas Working Group (BASWG), which is a subordinate body of the MBSHC, since 2008 on a permanent basis. Georgia applied to become a Member State of the IHO in 2012 and is a new member of the IHO since 2015.

#### INTERNATIONAL OBLIGATION of GEORGIA

Regarding the performance of Georgia's international obligations arising from SOLAS, State Hydrographic Service of Georgia (SHSG) assumed main responsibility for national hydrography and nautical cartography development. SHSG reports directly to the Ministry of Economic and Sustainable Development of Georgia. The IHO Technical Visit Team considers that SHSG staff in all levels is fully aware of the national responsibilities and takes intense pride in its successful delivery.

#### CERTIFIED PERSONNEL

However, SHSG does not have Category A Hydrographic Surveyors nor Nautical Cartographers, but only nr. 1 Category B Hydrographic Surveyor (will graduate in November 2018) and nr. 1 Category B Cartographer (graduated in 2016).

#### HYDROGRAPHIC SURVEY & NAUTICAL CARTOGRAPHY CAPABILITY

Georgia has currently capability for hydrographic surveying and nautical documentation (traditional and digital) production for a total coastline of 320 Km. They produce INT paper charts in Georgian waters, but Russian Federation is responsible for one INT chart (Region of Abkhazia).

The cartographic production is kept up-to-date and old underline survey are replaced by new modern multibeam surveys. A comprehensive survey and chart up-dating program is required so to contribute to a modern maritime and port infrastructure and to allow Georgia to fulfil its international obligations under the SOLAS Convention. The only exception is in the waters of occupied Abkhazia, where there is no access for SHSG for a 200 Km of coastline (62%) from the center to the northern territory of the country.

#### MSI RESPONSIBILITY

SHSG is also responsible for MSI. Currently there is national NAVTEX Service in Georgia and MSI service through NAVAREAIII Coordinator for international shipping is established. Local and Coastal Warnings are disseminated via VHF Radio through voice communication.

It was evident to the Technical Visit Team that Georgia already possesses hydrographic/charting capability, awareness and willingness and there has been many developments and improvements, new hydrographic surveys, INT Chart and ENC production, MSI provision through NAVAREA III Coordinator and procurement of the new equipment and the tools to follow up the recommendations made in the technical visit paid in 2010 and 2014 under the IHO CB Program, that will help Georgia to build a solid maritime infrastructure to support the safety of navigation and the economic growth.

# REPORT OF TECHNICAL VISIT TO GEORGIA (2018, October 16<sup>th</sup> – 18<sup>th</sup>)

# **References:**

- A. [Email from MBSHC CB Coordinator dated 2018, September 18<sup>th</sup> (01:40 PM) Follow-up visit to Georgia / Invitation to National Representative (GE) to meet with Technical Visit Team (IT and UA)]
- B. [15<sup>th</sup> BASWG Report from Georgia (2018)]
- C. [20<sup>th</sup> MBSHC Report from Georgia (2017)]
- D. [IHO CB Technical Visit Report 2014]
- E. [IHO CB Technical Visit Report 2010]
- F. [THE NEED OF NATIONAL HYDROGRAPHIC SERVICES IHO PUBLICATION M2 Version 3.0.6 December 2016]
- G. [NATIONAL HYDROGRAPHIC REGULATIONS IHO PUBLICATION C-16 1<sup>st</sup> edition 2007]
- H. [IHO CBSC PROCEDURE 9: GUIDELINES TO CONDUCT TECHNICAL VISITS]

#### Introduction

The International Hydrographic Organization (IHO) is an intergovernmental international organization, currently comprising of 89 Member States. The IHO seeks to ensure that all States with coastlines and maritime interests provide adequate and timely hydrographic data, products and services, thereby advancing maritime safety and efficiency in support of the protection and sustainable use of the marine environment. The United Nations recognizes the IHO as the competent authority for hydrography and nautical charting. The International Hydrographic Bureau (IHB), based in Montecarlo (Participate of Monaco), is the secretariat of the IHO.

Georgia is currently a member of IHO.

The IHO has encouraged the establishment of Regional Hydrographic Commissions (RHCs) to coordinate hydrographic activity and cooperation at the regional level. The RHCs are made up predominantly of IHO Member States; however, other regional States also participate as Associate Members. RHCs are not formal bodies of the IHO, but work in close cooperation with the Organization to help further achieve its goals and programs. RHCs meet at regular intervals to solve mutual hydrographic and chart production issues, plan joint survey operations, and resolve schemes for INT Chart coverage in their regions. Non-Member States may participate as RHC Associate Members or Observer as it is not any more the case of Georgia in the MBSHC (and BASWG).

This report has been written with the express intention of assisting the Government of Georgia to strengthen and develop its hydrographic/cartographic capability to meet its current and future needs and its international maritime obligations under the UN Convention for the Safety of Life at Sea (SOLAS). The report comprises a description of the visit, major conclusions and a number of recommended actions for consideration by the relevant organizations.

#### 1. Background

[Refer to RHC Conference proceedings or other regional meetings which have led to the formation of the Technical Visit Team and the shaping of its Terms of Reference.

Draw attention to the RHC Chair's invitation to nations in the region to meet with the Technical Visit Team and discuss national plans (Reference A).

Note the target date for feedback from the Technical Visit Team. Draw attention to Terms of Reference of the Technical Visit Team at Annex A.]

A proposal for a technical visit to Georgia (Item A-03 / CBWP 2018) was approved in the 15<sup>th</sup> meeting of the Capacity Building Sub-Committee (CBSC) in Paramaribo, Suriname, 7-9 June 2017 as follow-up visit in 2014 and to assess the current status of nautical charting and hydrography in the country and to provide advice to the government, public administration and to stakeholders on a way ahead. At the last 20<sup>th</sup>Mediterranean and Black Seas Hydrographic Commission (MBSHC) the visiting team was defined to be comprised of Turkey (Lead) and Ukraine, but the MBSHC Coordinator asked for a proposal by MBSHC Member States for a Team Leader and Italy answered in positive way and the visit was found by CBWP 2018 (2.500,00 €) and paid by the IHO Capacity Building (CB) Program.

#### 2. Composition of the Team

[Note that the RHC Technical Visit Team is comprised by:]

Name	Role
Captain Lamberto Orlando LAMBERTI (Deputy Director)	Team Leader
Italian Navy Hydrographic Office	
Mr. Taras PRON /Cartographer)	Assistant
State Hydrographic Service of Ukraine	

Capt.LAMBERTI and Mr. PRON carried out a hydrographic awareness and technical assessment and follow up visit to Georgiabetween16 and 18 October 2018.

The IHO Technical Visit Team develops the main meeting at the SHSG facilities, the first day visited the main Office in Poti, the Lighthouse and the port of Poti by survey boat (main infrastructure in Georgia). The second day they visited the office in Batumi, the Maritime Transport Agency (MTA) and the lighthouse and port facilities.

The last day was useful for closing remarks and to fix the draft version of Technical Visit Report.

The meetings with the staff of the SHSG enabled the IHO Technical Visit Team to assess the current status of the hydrographic/cartographic activities in Georgia.

#### **LOGISTIC**

FLIGHTS: The IHO CBSC Secretary arranged for the flights of Italian and Ukraine delegates from Milan Malpensa airport (Italy)/International Boryspil Kiev airport (Ukraine) to Batumi airport (Georgia).

ACCOMODATIONS: The Technical Visit Team arranged for the accommodations in the Intourist Palace Hotel & Casino in Batumi near to the Turkish Consulate.

TRANSPORT: the transfer from airport and hotel to the location of the meeting was ensured by SHSG.

SOCIAL EVENTS: every lunches and dinners was hosted by SHSG with a very familiar, fruitful and friendly atmosphere.

# PART A - Overall assessment of the situation in Region

# 3. Efficacy of the Technical Visit.

[State whether the visit represented a worthwhile investment by the RHC countries which contributed resources, and make recommendations for any adjustments of terms of reference or work practice for any follow up efforts.

Assess the extent to which the visits improved inter visibility between local agencies and brought awareness of the issues, and of the efforts of local coordinators, to Ministerial or Permanent Secretary level.

Comment on interest in follow up advice.]

The visit was really a worthwhile investment because is first activity after the Georgia State became a Member State of the IHO and the importance of the issue is due to the presence of the Vice Chair of CBSC as a Team leader of the delegation.

During technical visit to the SHSG and with other State Agency (MTA, etc) the discussions always were very fruitful to understand how were working the relationships between National bodies.

In every situation and issue discussed the SHSG demonstrated high interest on suggestion forwarded by Technical Visit Team.

#### 4. Cooperative Arrangements and Potential.

[Report the Team's views on the potential for regional cooperation, noting those regional organizations to which the nations visited belong.]

Visiting Team gives advice about a potential cooperation locally in the Black and Azov Sea Region (Ukraine, Romania, Turkey, etc.) and in the Mediterranean area.

SHSG is planning to sign a MoU with Republic of Korea (October 2018) in the field of Hydrography and Nautical Cartography.

#### a. [Regional Organization].

[Note any calls made by the Team on Secretariats of regional organizations, assess the influence and interest of the organizations in the sphere of work of the Technical Visit Team, and recommend IHO Secretariat or RHC liaison where appropriate. Report any forthcoming meetings of the organizations, particularly at ministerial level, at which the IHO should seek visibility and influence. Report any local institutions, particularly training facilities, which are sponsored by the organizations and which might be utilized by RHC members.]

SHSG willing to participate in the new MBSHC Meeting that will be held next year in Cadiz (Spain).

Technical Visit Team informs SHSG of the importance for attending also other IHO meetings and activities, and suggests for participation in the next year (2019) of a delegation from SHSG as observer in the CBSC and IRCC Meetings in Genoa (Italy) and recommends to attend as a MS the 2<sup>nd</sup> IHO Assembly in 2020.

Technical Visit Team suggested also SHSG for a strong participation in IHO activity and in hydrographic and cartographic Working Groups.

#### b. Regional Organization.

[Some Regional Organizations have appointed Regional Maritime Safety Advisers to lobby and advise member states. RHCs should be working closely with them. Where there is no information on such posts in advance of a Study Team Visit, the Leader should make every effort to establish contact and report it.]

Note the Agreement between the Cabinet of Ministers of Ukraine, the Executive Power of Georgia and the Government of the Republic of Bulgaria on the joint operation of the railway ferry service between the ports of Varna (Republic of Bulgaria), Poti / Batumi (Georgia) and Odesa (Ukraine).

# c. Defence and Security Arrangements.

In many regions there is strong liaison between Navies and Defence Force Coast Guards because of the need for cooperation to combat drug trafficking and other threats. These disciplined forces may have key roles in coordination, especially of Maritime Safety Information (MSI) broadcast and Search and Rescue (SAR) components of GMDSS

SHSG normally cooperates and has relationship with other Govern agencies/bodies without formal arrangements, because it is in the framework of national legislation. For the activity related to Private Companies there is national regulation which control the related activities and there is the need to put in force a formal contract/arrangement.

#### PART B – GEORGIA Assessment

#### 5. RHC Involvement.

[Note whether the country is an IHO member, and/or a member of the RHC.

Note whether it was represented at the most recent Regional Conference, and whether a National Report was available to the RHC Technical Visit Team.

Where none of these apply, note whether there is any routine liaison with the HO of a RHC or IHO member nation.]

SHSG is a Member State of IHO since 2015 and participated to the activities and meetings of MBSHC and BASWG since 2009 as an active Associate Member State of IHO. In 2014 Georgia hosted 12<sup>th</sup>BASWG meeting and in 2015 hosted 19<sup>th</sup>MBSHC meeting. HSHG was present at last 20<sup>th</sup>MBSHC (2017) and 14<sup>th</sup>BASWG (2018) releasing his National Report in both activities available in IHO Website. Visiting Team based lot of preparing work on these reports.

# 6. Preliminary Liaison.

[Record any local assistance with coordination of the visit.]

All preliminary assistance was well organized by IHO CBSC Secretary and of personnel (Mrs. Manana KIRTADZE) of SHSG on email correspondence.

#### 7. Points of Contact.

YEARBOOK up-dates are reported in Annex C

[Confirm the accuracy of details in the IHO Year Book of the local first point of contact for hydrographic and MSI matters.

Include changes as an Appendix.

Note any local difficulties in line accountability, and loss of top level awareness and support for the national hydrographic capability, which will be discussed later in the report. Report any changes in local legislation or organization which will result in changes to information published by the IHO.]

# **Description of Maritime Activities**

#### 8. National Maritime Affairs.

[Provide a thumb nail sketch of the significance and salient features of the maritime sphere in the country visited.

Note any individuals who have been especially helpful in building up this picture.]

During the visit it has been very useful the information provided by the following SHSG personnel (Person/Charge):

Revaz BABILUA Director SHSG

Giorgi KARTVELISHVILI Hydrography Research and Cartographic Division
 Manana KIRTADZE Hydrography Research and Cartographic Division

Aleksandre ZARKUA Navtex Division

#### 8.1 National Hydrographic Awareness.

The Government of Georgia, through its various maritime Authorities, is aware of the current status of hydrography and nautical charting in the country and the benefits of modern hydrography to economic growth, safety of navigation and protection of the marine environment.

The IHO Technical Visit Team considers that SHSG staff in all levels is fully aware of the national responsibilities and takes intense pride in its successful delivery. Awareness was raised at the administrative and working level by the visit of the IHO Technical Visit Team.

# 8.2 National Hydrographic Infrastructure

Georgia is a member of IMO and a signatory to the Safety of Life at Sea Convention (SOLAS). In general there is awareness in Georgia on the obligations of Regulations 4 and 9 of SOLAS Chapter V, which places an obligation on contracting Governments to arrange for the collection, compilation, dissemination and maintenance of all information required for safe navigation. Therefore, Georgia is required to collect and publish Maritime Safety Information (MSI), arrange for hydrographic surveys to be undertaken compliant to the IHO technical standards (IHO/S-44 Publication) and nautical charts and publications to be compiled and published and for these documents to be maintained with their timely updating.

SHSG also is Lighthouse Authority in Georgia and responsible for establishment and the maintenance of the navigational aids in Georgian waters according to the international standards (IALA).

SHSG and MTA of Georgia are Legal Entities of Public Law and report directly to the Ministry of Economic and Sustainable Development of Georgia.

The SHSG's budget consists mainly in the income from Lighthouse fees paid by vessels using Georgian Ports and from selling of paper charts and royalties of ENC.

Ports of Georgia belong to government property and are operated by private Companies. However, there is a Port State Supervision and Control Service, which operates in each port at the command of a Harbor Master and is a part of Maritime Transport Agency (MTA) of Georgia.

Maritime Transport Agency (MTA) of Georgia, represented by Capt. Zaza Makharadze First Deputy DIRECTOR, has responsibility for Maritime Affairs and implementation of all Maritime Conventions ratified by the State of Georgia. Commitments and responsibilities of MTA include:

- approval of ports' security plans;
- exercising of state port control functions;
- maintenance of state shipping register; inspection of ships flying the Georgian flag; control of seagoing vessels from the side of port state; cooperation with relevant international organizations and foreign maritime authorities; support of ratification by Georgian government of international conventions related to maritime transport, etc.

It has no hydrographic capability. It is the principal point of contact with the IMO and the Georgian Ambassador in the UK is the Permanent National Representative inside the IMO. MTA works closely with SHSG in the field of maritime safety provision.

# 8.3 National Hydrographic Authority

The IHO recommends that every coastal State should designate a National Hydrographic Authority responsible for coordinating hydrography and charting in the country. The role of the National Hydrographic Authority is to be the principal national and international point of contact and to act on behalf of the government to ensure that the State meets its international obligations to make proper MSI and nautical charting services available to mariners. The National Hydrography Authority is the first point of contact for in-country stakeholders and for maintaining relations with relevant international organizations. In the case of Georgia, SHSG is the National Hydrographic Authority and the first point of contact for in-country stakeholders and for maintaining relations with relevant international organizations in terms of hydrography. This includes the IHO (in particular MBSHC and BASWG), other national hydrographic offices and agencies that might support hydrographic development and assistance in Georgia. SHSG must seek a formal arrangement in order to establish a national legal framework by means of a law, decree or equivalent.

Regarding the performance of Georgia's international obligations arising from SOLAS, SHSG assumes main responsibility for collection and dissemination among mariners of MSI, arrangement and fulfilment of hydrographic surveys, issuance of nautical charts and publications and their timely updating. SHSG also is Lighthouse Authority in Georgia and responsible for establishment and the maintenance of the navigational aid in Georgian waters. Therefore, SHSG is the National Hydrographic Authority and the first point of contact for in-country stakeholders and for maintaining relations with relevant international organizations in terms of hydrography.

The technical team recommends SHSG to create national legislation concerning the role, duties and responsibilities of SHS of Georgia and its budget (refer to IHO publication C-16 for examples abroad) and procedure to get the data from foreign surveys carried out in the waters under its national jurisdiction with the other ministries in charge (Ministry of Defense, Ministry of Internal Affairs, Ministry of Foreign Affairs, Ministry of Environmental Protection and natural Resource, Ministry of Education with the National Research Council, etc.).

#### 9. Trade and Maritime Traffic.

[Where possible provide statistics on shipping transit and port calls. Describe the main components of sea borne traffic, and the patterns of activity in national waters, under the following headings:]

In Annex E there has been a main description of trade and maritime traffic.

#### a. Through Routes.

[Note any regional through routes which pass through the country's waters.]

Batumi-Odesa ferry boat route

Poti-Varna ferry boat

Poti-Constanta ferry boat

#### b. Tran-shipment.

[Comment on the existence of any hub ports.]

Poti is a general hub Port of the Georgia and also Trans Caucasian countries (Azerbaijan etc)

Batumi port has some boards were operate Batumi International container Terminal LLC.

#### c. Bulk Trades.

[Comment on the significance of this element of international shipping and any impact on port development plans.

Note the existence of refineries and of bulk loading facilities.]

Black sea oil terminal (Kulevi) and Supsa oil terminal are connected with Varna and other terminal in the Mediterranean Sea.

LTD Batumi oil Terminal will be operated until 2019.

#### d. Feeder, Coasting and Local Trade.

[Comment on volume and patterns, and list significant ports, including ferry ports.] Not enough information.

# e. Offshore Supply and Support.

[Comment on significance and on any particular influence on MSI and GMDSS requirements.]

No offshore activity is performed.

#### f. Tourism Cruise Liners.

[List all local ports of call and anchorages.]

Connection with cruise ships are mostly in the summer with port of Batumi.

# g. Tourism Small Craft.

[Comment on the significance of leisure cruising, and note major cruising areas and concentrations of marina developments.

In some smaller island states this may be the most significant maritime segment of the economy.

Establish whether mega-yachts are visiting.]

During summer most activity with the small crafts is registered in Batumi and surrounding area.

There is a small marina for recreational and sailing boat in front of the Panoramic Wheel near by the Batumi Lighthouse.

#### h. Fisheries.

Note the volume and type of fishing in national and adjacent waters.

Include both local artisanal and pelagic fisheries, and the presence of foreign vessels.]

There are local small fishery crafts starting mainly from Poti and also from Batumi. It has been registered a lot of fishery activities from Turkish fishery fleet in

Georgian coastal area and the fishing boats are mostly based in Poti.

#### i. Other informations;

[Note any other information useful in national and adjacent waters.]

There is new small naval base of the coast guard 6 miles North from the Port of Batumi.

Along the coastline for 6 kilometers south of Batumi port there are 3 (three) piers orthogonal to the beach, that was used for mooring but nowadays not any more, they host now two restaurants e the southern pier is used for fishermen.

# 10. Responsibility for Safety of Navigation.

[Record the authority which is responsible for:

- the maintenance of channels,
- removal of wrecks,
- provision and maintenance of Navaids,
- and the promulgation of Notices to Mariners.

Note any difficulties in conducting these tasks e.g. defective buoy tenders.]

The maintenance of channels and the removal of wrecks inside the ports and approach is managed by Port Authorities. In coastal areas the responsibility is mostly managed by Ministry of Environmental, Protection, Agriculture and National Resources.

The provision and maintenance of Navaids and the promulgation of Notices to Mariners is on the responsibility of SHSG.

#### 11. Defence Force Responsibilities.

[Note the roles of the Navy/Defence Force Coast Guard (CG). e.g. SAR, fishery protection, and operations to counter traffic in drugs or illegal immigrants.

Comment on any specific defence requirement for improved hydrographic data.]

In 2008 after the last conflict the Navy was converted in a Coast Guard depending on the Ministry of Internal Affairs.

SHSG makes special charts and surveys, and release some special information (MSI and weather forecast, etc) fo the needs of the Coast Guard.

#### 12. Coastal Zone Management and Environmental Protection.

[Note the existence of any marine National Parks or other management zones, and the existence of any climate monitoring stations.]

The maintenance of channels and the removal of wrecks inside the ports and approach is managed by Port Authorities. In coastal areas the responsibility is mostly managed by the Ministry of Environmental, Protection, Agriculture and National Resources is responsible in these areas and SHSG provide surveys and MSI information on request.

# **Outline C 55 Analysis**

#### 13. Status of surveys within the National Maritime Zone.

[Summarize the status of surveys within the territorial sea and EEZ, and comment on any areas of particular concern in the light of the foregoing description of maritime activities.

Make particular note of any coastal areas which are charted purely from lead line surveys.

Note any offshore banks or other shoal areas which require side scan sonar coverage to bring the area to full modern standards.

Note the need to obtain coordinates for offshore oil and gas fields.]

The Status of Surveys is still not assessed in digital form and SHSG was advised from Technical Visit Team on the necessity of completing the Questionnaire C-55 and the relative part of the IHO C-55 Publication.

There are not off-shore infrastructure nor oil & gas platforms.

#### 14. Collection and Circulation of Nautical Information.

[Assess the effectiveness of this crucial process, based on information from the HO with charting responsibility as well as the national coordination point.

Note any advice which has been given to local authorities, and detail any assistance which is required from the HO with charting responsibility.

There is a good circulation of nautical information inside the Country between national Agencies and good relationship with countries in the Black and Azov seas (Ukraine, Turkey, etc.).

The situation of overlapping of ENC and the impossibility of SHSG to access to the area of Abkhazia is stated in the report of Coordinators in the last MBSHC and BASWG meetings.

# 15. Survey Capability.

[Comment on the state of any local hydrographic service/unit, and draw attention to any supporting documentation in accompanying Attachments e.g. Mission and Output Plan documentation.

Summarize the future plans of the unit, and assess the sufficiency of manpower and equipment resources.]

SHSG is advised to produce a medium term National Survey Plan for a period of 3/5 years (See last National Report in Annex F).

#### 16. Independent Chart Production Capability.

[Note any charts which are being produced locally, and comment on their standard.

Summarize discussion of implementation of the INT chart scheme in the region, noting. local comment on proposals for coverage.

Report clearly any local proposals for modification or extension of coverage of INT small scale, large scale and port schemes.

Report proposals for local surveys within the area of coverage of proposed new charts.]

SHSG is still undertaking the responsibility of charts and publications production at national and international level. SHSG has a national portfolio for traditional nautical chart and ENC with some INT chart (See last National Report in Annex F).

# **Proposals for Coordination and Capability Building**

#### 17. National Hydrographic Committee.

[Note the existence of any high level coordinating bodies, and assess their awareness of the contribution of hydrography to national policy making.

State whether the Team has advised creation of a more focused committee, and note any proposals for reporting route and frequency.

Note whether the local hydrographic service/unit is making a technical contribution to delimitation, offshore resource exploitation, environmental management, maritime traffic control, or any other areas of National Maritime Policy.]

The Government of Georgia, through its various maritime Authorities, is aware of the current status of hydrography and nautical charting in the country and the benefits of modern hydrography to economic growth, safety of navigation and protection of the marine environment.

No formal National Hydrographic Committee (NHC) was established in Georgia but currently the Committee's role has been covered by the Ministry of Economic and Sustainable Development of Georgia.

The Ministry supervises the operation and activities of SHSG (as the Authority responsible for collection, systematization, processing and dissemination of hydrographic data in one form or another) and other main services and agencies of the country, which are interested in obtain the hydrographic data.

The Technical Visit Team notes that currently it is established a Join Maritime Operation Center (JMOC) under control of Ministry of Internal Affairs that is operating also as National Hydrographic Coordinating Committee (NHCC) in Georgia.

# 18. Phase 1 Hydrographic Capability: MSI Organization and GMDSS.

[Summarize any proposals for improvement of liaison and effective passage of information between national and regional charting agencies.

Comment on the requirement for liaison with Transport Ministries or Port Authorities.]

MSI is considered by the IHO as the first phase in hydrographic capacity building and currently there is no national/international NAVTEX Service in Georgia but, however Coastal Warnings are disseminated via radio through voice communication.

There is clearly established MSI infrastructure that coordinates its activities with the Worldwide Navigation Warning Service (WWNWS) implemented globally by the IMO, World Meteorological Organization (WMO) and IHO. SHSG is the primary MSI authority in Georgia.

Currently it has been established in Georgia the National NAVTEX Service on national frequencies; the establishment of international NAVTEX Service it is undergoing. However Coastal Warnings are disseminated via radio through voice communication.

MSI service through NAVAREA III Coordinator for international shipping is established via email. SHSG apply for B1 code to IMO NAVTEX Panel for international NAVTEX Service.

Notices to Mariners (NtMs) are issued when necessary and periodically publish every month and on year basis a list of NtMs published.

According to IHO more member states have indicated that their Temporary and Preliminary NMs included in their ENCs. This activity is in evaluation from SHSG. See last National Report in Annex F,

#### a. MSI (Navigational Warnings).

[Note the existence of local navigational warnings and Notices to Mariners and other publications e.g. Lists of Major Navaids, Tide Tables.

Comment on their reliability.

Comment on discussions with local authorities, and summarize proposals offered for improvement of MSI in national waters.]

There is clearly established MSI infrastructure that coordinates its activities with the Worldwide Navigation Warning Service (WWNWS) implemented globally by the IMO, World Meteorological Organization (WMO) and IHO. SHSG is the primary MSI authority in Georgia.

SHSG currently has been issued in two language (Georgian/English):

- List of Light and Aids to Navigation according to IHO standards;
- Sailing Direction (that include Navigational Regime and Sailing Rules in Georgian waters) in National standards.

Technical Visit Team suggest SHSG to improving on issuing new publication in IHO standards (Radio Navigational Warning, Tide Table, etc.).

See last National Report in Annex F.

#### b. Information on Ports and Harbors.

[Comment on discussions with government representatives concerning the legal requirement and economic importance of timely supply of plans and coordinates of new development to responsible charting agencies.

Note where the local hydrographic service/unit or port authorities need better top level support in collation and dissemination of this information.

Where there is no hydrographic unit comment on the capacity of the Land Survey Department to advise port authorities and other agencies.]

The MTA through the Port Authorities is responsible and manage the information with a good exchange with SHSG.

# c. GMDSS Status.

[Summarize the status of GMDSS in local waters, and any advice offered to local authorities (Table 1).]

Table 1: Summary of Progress towards Implementation of GMDSS.

Master Plan	A1 Area	A2 Area	A3 Area	NAVTEX	SafetyNET	Notes
Yes	Yes (VHF)	Partial (MF)	No	Yes	Yes	1 to 8

See last National Report in Annex F.

#### [Notes:

- 1. Specify any geographic limitations to Area coverage.
- 2. Note NAVTEX Station location, especially when designed for optimum overlap.
- 3. Note where proposals are subject to financial appraisal by the national government.
- 4. Note where choice of MSI medium is to be subjected to cost analysis, and comment on optimum solution and interim arrangements.
- 5. Note Team recommendations of negotiation for facility sharing.
- 6. Specify any firm commitments or local proposals for co ordination.
- 7. Note where SafetyNET is available and could be used for Coastal Warnings but the state wishes to assess comparative costs of implementing their own NAVTEX Station before adopting this solution.
- 8. Note where the Team could not establish status of National Plan.]

#### d. Others Services.

#### [Note any other information useful in national and adjacent waters.]

In addition to the SHSG's functions that are described above, Georgian Hydrographic Service has got in its framework a Synoptic Department managing and monitoring meteorological station and weather forecasting, tide gauges and buoy system to the vessels and Port Authorities. According to its Statute SHSG bears responsibility for collection of meteorological information and its transmission to concerned Authorities.

From to "state-of-the-art" synoptic buoys Synoptic Department acquires all necessary data about speed and direction of currents, sea state and salinity, water temperature, atmospheric pressure and temperature, humidity, wind direction and velocity, rainfall amount and visibility. The collected information is telemetered repeatedly to Synoptic Department for appropriate processing. Then it is used for preparation of meteorological forecasts and satellite meteorological charts, which are delivered to port services twice a day. The information can also be transferred upon request (See last National Report in Annex F).

#### 19. Phase 2 Hydrographic Capability: Survey.

[Comment on the adequacy of top level support and resourcing for the local hydrographic service/unit.

Summarize any proposals which the Team has made for revision of line accountability of the unit.

Where there is no local hydrographic unit, comment on the requirement for independent capability.]

Hydrographic Researches, Correction and Cartography Department operates in the framework of SHSG. The department carries out hydrographic surveying of port waters, approach channels, approaches to ports, water areas with overflow vessel traffic and offshore waters for subsequent use of the findings with the aim of issuing and updating of nautical charts and informing mariners on changes in navigational circumstances.

In accordance with its Statute SHSG carries out on a regular basis hydrographic surveys in water areas of all Georgian ports (except waters of occupied Abkhazia, where there is no access for SHSG). Hydrographic surveys have been carried out by SHSG in compliance with its Statute (Regulations for the Service) on free of charge basis for the purpose of obtaining data for nautical charts correction.

Periodicity of hydrographic surveying depends on hydrological conditions in water areas and extent of sediment accumulation in harbor waters and approach channels. SHSG is the only service carrying out hydrographic surveys in port waters. The exception is the port of Poti, where owing to considerable sediment accumulation the dredging operations have been carried out repeatedly. Surveying team, which is a part of Port State Supervision and Control Service, carries out surveys of the port waters for continuous depth control. SHSG cooperates closely with Maritime Transport Agency and its divisions in sea ports with regard to exchange of navigational and hydrographic information and hydrographic data for harbor waters .

# a. Provision of Survey Data.

[Clarify accountability for this task.

Note any commitment to pass data to other HOs with INT or primary charting responsibility in the area.

List any data which has been passed to the Team for onward transmission.]

SHSG has a cooperation Agreement with Turkey for co-production of the INT 3808. On behalf of a regulation and by law SHSG can be commissioned from a Private

Company for conducting hydrographic survey or to publishing some special cartographic project.

#### b. Survey Capability.

[Summarize the Team's judgment of current and potential capability.

Comment on advice given by the Team.

Identify areas where RHC members could assist by loan of experts or equipment.

Note opportunities for regional collaboration.]

SHSG pays focuses extensively on upgrading and procurement of new equipment for hydrographic surveying. From 2011 SHSG has been utilizing swallow water multibeam echo-sounders that ensures surveying in compliance with IHO S-44 standard for hydrographic surveys. Multibeam surveys have been performed in water areas of Batumi, Poti, Kulevi, Supsa ports, as well as in approach channels to the ports and areas with the highest traffic density.

Along with this, until recently the multibeam echo sounder was installed on the elderly survey boat, which also completed the tasks for aids to navigation deployment and was not fully suitable for hydrographic surveys performance. Currently for hydrographic surveys it is used, as the situation requires, big hydrographic boat DHK-81, 1 surveying launch and 2 small boats.

SHSG is now employing a hydrographic catamaran boat that is custom designed for a multibeam echo-sounder usage. After installation of the SeaBat P-50 multibeam echo sounder on the new hydrographic catamaran boat it is planned to arrange and perform systematic hydrographic surveys not only in port waters, approaches to ports and in areas with high-density vessel traffic, but also in all coastal waters of Georgia.

In addition, SHSG runs 2 singlebeam echo-sounders, side-scan sonar, sound velocity meter, GPS-equipment for positioning purposes in the course of surveying. PDS-2000 and HYPACK software is used for hydrographic surveys performance and processing of hydrographic data.

Staff of Hydrographic Researches, Correction and Cartography Department also monitor the coastline location through the utilization of appropriate GPS-equipment and satellite images.

Technical Visit Team note the need to improve hydrographic survey in medium and deep water and suggests SHSG for a refitting of actual owned vessel or a purchasing of a new one with "State-of-the-Art" instrumentations for Hydrography, Oceanography and Geophysics Research and for maintenance work of lights and buoys.

See last National Report in Annex F.

#### c. Potential for Regional Activity.

[Comment on volume of work in local waters and remaining capacity to assist other states in the region.

Make recommendations on the ability of the hydrographic service/unit to provide technical hydrographic advice to neighboring States.

Note any potential for regional burden sharing e.g. DGPS provision.]

There a concrete potential Regional Activity with a cooperation at National level and at international level (with Turkey, Ukraine and other Mediterranean MS).

For instruments up-date see last National Report in Annex F.

20. Phase 3 Hydrographic Capability: Chart Production.

[Summarize the Team's judgment on current and potential capability, and on viability of local chart production.

Comment on advice given by the Team.

Assess quality of routine data management, paying particular attention to such measures as assessment of density of sounding coverage and development of capability in plotting bottom contact detail from side scan sonar.

Comment on the balance of effort devoted to data collection compared to local production of publications.]

SHSG has both paper charts and ENCs in Georgian waters as well as several nautical publications. Georgian waters are currently covered by 9 paper charts and 4 ENCs. As Georgia is now IHO Member State, for the 6 INT charts covering that area SHSG is overtaking in his responsibility for publishing and maintain with NtMs.

After the recommendation regarding the chart scheme in the technical visit in 2010 and 2014, SHS has prepared new chart scheme which consists of 9 traditional nautical charts and all of them are produced. SHSG is planning to improve his National and International Charting Plan. The detail of the charts in Georgian waters is in Annex F.

There is currently a lack of information in IHO publication C-55 for Georgia for Status of Survey, MSI Information, Traditional Nautical Charts and ENC, as no relevant information is received from SHSG.

Technical Visit Team give advice as to up-date with Hydrographic Service of Spain correspondent and to complete the information on IHO C-55 Publication.

Considering the coastline length of Georgia, new chart scheme and existing paper charts and ENCs published and maintained by SHSG, the nature of coastal waters with few hazards and dangers, and the together with the existing hydrographic resources, it seems that there is not that much to do for Georgia to reach a very good state in the worldwide hydrographic community. A current chart production, hydrographic surveying and procurement program seems well enough for the future.

#### 21. Table 2 presents the summary of the assessment of the National Hydrographic Capability

IHO	RHC	NHC	Phase 1	Phase 2	Phase 3	Notes
Member			Capacity	Capacity	Capacity	
Yes	Member	No	Yes	Yes	Yes	1 to 6
			(Self)	(Self)	(Self)	

Technical Visit Team give advice as to up-date with CBSC MBSHC Coordinator (Turkey) in order to complete the information.

# Notes:

- 1. Inform how the Maritime and Port organizations in the country relate with the national hydrographic authority and or the charting authority.
- 2. Inform whether the Maritime and Port organizations have some survey equipment, and some surveyors trained to IHO standards.
- 3. Note whether it may be possible to generate/regenerate limited field survey capability.
- 4. Note any charts which are produced, together with limitations e.g. suitable for government planning, but not for navigation, particularly in view of lack of correction arrangements.
- 5. Note where RHC advice on equipment management and maintenance is merited.
- 6. Note any assessment of potential to provide field survey services to other states in the region, and recommend scope for RHC consultative support.]

# **Proposals for Assistance**

#### 22. Training.

[Identify training priorities, and comment on advice given by the Team.

Note the status of any National Indicative Plan. Comment on response to any assistance offered by IHO Secretariat.

Summarize proposals for training available from other RHC or IHO member states.]

SHSG is funded in the proper way and has significant national hydrographic resources but lacks a coordinated approach to developing its staff and gaining the best from the equipment available. It is strongly recommended that the SHSG continue to review this situation and propose first a coordinated plan to obtain almost 1 (one) Category A Hydrographic Surveyor in order to gain the necessary professional experience and improve education for more than 2 (two) skilled personnel on Category B Hydrographic Surveyor and Cartographer Courses.

A list of courses is contained in IHO publication C-47 - Training Courses in Hydrography and Nautical Cartography, freely available from the IHO website. The list of the IHO recognized programmes in Hydrography and Nautical Cartography can be found on the IHO website under "Capacity Building" section, sponsored by IHO, Nippon Foundation and Republic of Korea. Short courses for fundamentals of hydrographic data collection are available through the IHO Capacity Building Programme and should be considered by Georgia with the MBSHC CB Coordinator support. SHSG participate in this program attending courses on 2016, 2017 and 2018 (4 Courses already followed) and n. 1 person is planned to participating on MSI Workshop in Istanbul (November 2018).

Appropriate training of personnel will ensure more benefits for SHSG with respect to arrangement of hydrographic surveys and use of state-of-the-art surveying techniques. Therefore the Technical Visit Team recommends SHSG to seek ways to provide the technical staff with the necessary trainings in the fields of hydrography, nautical cartography and MSI and to favour Ministry of Economic and Sustainable Development of Georgia in facilitation of procedures of founding related to training of its technical staff in the international certified programmes (training/courses).

Technical Visit Team advice that in MBSHC/BASWG Region there are Member State managing Category A and Category B Hydrographic Surveyor and Nautical Cartographer Courses.

#### 23. Equipment.

[Summarize any advice given for equipment procurement options, or for technical advice. Note where any special conditions (e.g. local topography and disruptive masking of GPS) need to be taken into account.]

SHSG has sufficient instrumentation to support swallow water surveys in port and approach areas.

Technical Visit Team note the need to improve hydrographic survey in medium and deep water and suggests SHSG for a refitting of actual owned vessel or a purchasing of a new one with "State-of-the-Art" instrumentations for Hydrography, Oceanography and Geophysics Research and for maintenance work of lights and buoys.

# 24. Funding.

[Confirm that local authorities are aware of the information in IHO Publication M 2. Note any specific proposals for advice or lobbying by RHC or IHO Secretariat. Brief on the role of the IHO CBSC, and the importance of submission of bids through the RHC Chair.]

Technical Visit Team confirmed that local authorities are aware of the information in IHO Publication M 2. and briefed SHSG on the role of the IHO CBSC, and the importance of submission of bids through the RHC Chair.

Nowadays SHSG is a IHO MS and he start to access to financing activity made by CB Program, as some SHSG personnel has participating in the CBWP 2018.

For the future commitment could be done with the candidature of personnel in the CBWP 2019 and strong commitment and need of funding to personnel in HS category A Course an HS/Cartographic Category B.

# **Follow-up Actions**

25. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and RHC Membership.

[Summarize recommendations for contacts, or supply of documentation. ACTION: IHO Secretariat; RHC Chair.

SHSG is aware of the role of the IHO CBSC, and the importance of submission of bids through the RHC Chair.

Technical Visit Team advised SHSG for the importance of Formation of a NHC, Development of a National Hydrographic Strategy, and RHC Membership.

26. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

SHSG is really aware of its commitments and duties.

- a. Note any commitment by the Team to forward Hydrographic Notes with urgent MSI. Note where copies are to be supplied to Hydrographic Unit and Maritime Services/Port Authorities to give them a format for subsequent routine communication of updates. ACTION: Technical Visit Team.

  Noting to report.
- Note any requirement for MSI/SAR liaison with local authorities. ACTION: NAVAREA Coordinator. Noting to report.
- 27. Encouragement of Development of Hydrographic Capability.

[Note areas where the Hydrographic Unit merits assistance:]

Technical Visiting Team suggest SHSG to continue and improve cooperation with MBSHC and especially with BAS Member State in the area of responsibility (Joint Projects).

a. Options for provision of consultative support including temporary secondments. ACTION: RHC Members.

Noting to report.

- b. Options for transfer or loan of equipment. ACTION: RHC Member States. Noting to report.
- c. Assessment of the case for regional investment in equipment purchase e.g. DGPS. ACTION: RHC.

Technical Visiting Team note the opportunity to improve the DGPS Service with the new equipment for coastline or ports with DGPS correctional stations, to improve vessels equipment accuracy (Beacon IALA System and others, etc.)

d. Recommendations for follow up technical assistance in development of a National Indicative Plan for training funding. ACTION: RHC and IHO Secretariat. Noting to report.

#### **Conclusions**

#### 28. Co operative Opportunities.

[Summarise opportunities for RHC and IHO Secretariat to build on any openings which have emerged from the visit, as indicated at paragraph 5. It is particularly important to identify where the RHC can represent the implications of IHO work for higher level regional policy. Draw attention to any specific commitments made by the Technical Visit Team to supply copies of this report or other IHO material.]

In the present report co-operative opportunities are already highlighted for SHSG with IHO, MBSHC and BAS Member States.

#### 29. National Hydrographic Committees (NHCs).

[Note the incidence of consultative high level committees for maritime affairs in the states visited by the Team, and note any issues which dominate their agendas e.g. environmental monitoring and response to disaster. Report on responsiveness to the concept of a National Hydrographic Committee or equivalent arrangement.]

As a result of discussions and on the ground of obtained information and facts the following main conclusions were drawn:

- All branches of Georgian Government demonstrate understanding of importance and advantages of activities of State Hydrographic Service of Georgia, as well as willingness to improve it in the future.
- SHSG owns necessary technological tools for fulfilment of hydrographic surveys.
   The work has been carried out for modernization of vessels involved in hydrographic surveys and equipment for hydrographic surveying in order to ensure compliance with IHO standards (IHO S-44 Publication).
- SHSG surveying personnel feels the lack of formal hydrographic qualifications that hinder their professional development and improvement of skills.
- SHSG employees experience problems with participation in the IHO Category B training courses due to peculiarities of Georgian domestic legislation concerning purchase of services.

#### **Recommendations**

#### 30. Urgent Actions.

[High light urgent actions emerging from the Summary Tables, and identify the Agencies which have important roles to play in advising on specific recommendations in the individual Country Reports.]

Not urgent action required.

# 31. RHC Follow up Actions

[List under appropriate headings, noting that details can be found in each individual Country Report e.g.:

- a. Encouragement of NHCs through a Regional Plan. Specify Team recommendations for regional initiatives (e.g. in maximization of equipment resources) and for RHC and IHO Secretariat follow up with local contacts.
- b. Funding. Note requirements for RHC advice in the preparation of National Indicative Plans for funding applications. Specify proposals for bilateral support which merit RHC championship.
- c. Regional and Bilateral Training. Report the potential of training establishments in the region to offer MSI and hydrographic courses, and make proposals for co ordination and championship by RHC and IHO Secretariat.]

Noting to report here.

# 32. Follow up Opportunities.

[Draw attention to forthcoming openings for follow up actions e.g. TACC meetings.] Noting to report here.

#### 33. Preparations for Next RHC Conference.

[Note specific recommendations for liaison action by the RHC Chair.] Noting to report here.

#### **Assessment of the Previous Technical Visit**

#### Technical Visit 2010

The first technical visit to Georgia under the IHO CB program was paid in 2010. The report of that visit can be found at IHO Website.

Recommendations that were made following previous technical visit to Georgia are key headings below with an assessment of progress made with each item:

- Participate fully in the activities of the MBSHC and BASWG:

After the technical visit in 2010 Georgia participated in all MBSHC and BASWG meetings

**ACTION COMPLETED** 

- Apply for membership of the IHO as this will allow the Hos achieve the maximum benefit from the IHO Capacity Building programme:

Georgia is Member State since 2015.

**ACTION COMPLETED** 

- Consider the formation of a National Hydrographic Committee to oversee hydrographic provision:

No formal National Hydrographic Committee (NHC) was established in Georgia but currently the Committee's role has been covered by the Ministry of Economic and Sustainable Development of Georgia.

The Ministry supervises the operation and activities of SHSG (as the Authority responsible for collection, systematization, processing and dissemination of hydrographic data in one form or another) and other main services and agencies of the country, which are interested in obtain the hydrographic data.

The Technical Visit Team notes that currently it is established a Join Maritime Operation Center (JMOC) under control of Ministry of Internal Affairs that is operating also as National Hydrographic Coordinating Committee (NHCC) in Georgia.

**ACTION COMPLETED** 

- Continue with equipment purchase and training as proposed: ACTION COMPLETED

- Seek opportunities for staff to attend hydrographic and cartographic training courses. ACTION COMPLETED

- Seek opportunities to improve the English language skills of key staff members: ACTION COMPLETED

- Arrange for the dissemination of MSI via both national and international services. ACTION COMPLETED
- Establish a chart scheme to cover Georgian waters: ACTION COMPLETED
- Establish a prioritized survey plan to update the information required for the charts: ACTION PARTIALLY COMPLETED

#### Technical Visit 2014

The second technical visit to Georgia under the IHO CB program was paid in 2014. The report of that visit is not available at moment in the IHO Website.

Recommendations that were made following previous technical visit to Georgia are key headings below with an assessment of progress made with each item:

- Continue with equipment purchase and training as proposed:
   To keep continuing.
- Seek opportunities for staff to attend hydrographic and cartographic training courses.
   To keep continuing.
- To seek ways to provide the technical staff with the necessary trainings in the fields of hydrography, nautical cartography and MSI.
   To keep continuing.
- To make easier SHS of Georgia (by Ministry of Economic and Sustainable Development of Georgia) in facilitation of procedures related to training of its technical staff in the international certified programmes (training/courses).
   To keep continuing.
- To establish NAVTEX Service
   Done
- To schedule performance of hydrographic surveys for complete the coverage of Georgian coastal waters with up-to-date data, taking into consideration the priority surveys program. To keep continuing.
- To schedule production of new edition of the existing charts and new charts (both paper charts and ENCs) with the up-to-date data.
   Done. Undergoing production of new edition
- To continue purchasing of up-to-date hydrographic/cartographic equipment, systems and software for carrying out the hydrographic surveys and chart production.
   To keep continuing.
- To make necessary arrangement for printing both paper charts and nautical publications.
   Done
- To complete and forward to International Hydrographic Bureau the IHO C-55
   Questionnaire "Status of Hydrographic Surveying and Nautical Charting World-Wide"
   that is of significant importance for international cooperation strategy.
   Undergoing and to keep continuing.
- To create maritime spatial data centre (MSDI) under the umbrella of SHS of Georgia. This future hydrographic service could provide "more than nautical charts" to all parties interested (maritime portal, bespoke charts, recognized marine database, qualified data, etc.). For interoperability, it is important that the future hydrographic service adopts the relevant standards and be aware of the emerging S-100-compliant standards. Partially done Undergoing

- To create national legislation concerning the role, duties and responsibilities of SHS of Georgia and its budget (refer to IHO publication C-16 for examples abroad) and procedure to get the data from foreign surveys carried out in the waters under its national jurisdiction with the other ministries in charge.
  - Done –To keep continuing. and maintaining up-to-date
- To continue to participate in International Hydrographic Conferences, the meetings of Mediterranean and Black Seas Hydrographic Commission and it sub bodies (Black and Azov Seas Working Group for example) as well as the meetings of relevant IHO bodies. To keep continuing.

#### **Present Technical Visit Recommended Actions**

In order to enhance the quality of the performed work and fulfilment by Georgia of its international commitments regarding provision of navigational safety in Georgian waters, the IHO Technical Visit Team provides the following recommendations for the consideration of Georgian relevant Authorities and IHO Secretariat and MBSHC/BAS Chair:

1. To seek ways to provide the technical staff with the necessary trainings in the fields of hydrography, nautical cartography and MSI.

ACTION: To keep continuing.

2. To make easier SHS of Georgia (by Ministry of Economic and Sustainable Development of Georgia) in facilitation of procedures related to training of its technical staff in the international certified programmes (training/courses).

ACTION: To keep continuing.

- 3. Establish a prioritized survey plan to update the information required for the charts: ACTION: To keep continuing.
- 4. To schedule performance of hydrographic surveys for complete the coverage of Georgian coastal waters with up-to-date data, taking into consideration the priority surveys program.

ACTION: To keep continuing.

5. To schedule production of new edition of the existing charts and new charts (both paper charts and ENCs) with the up-to-date data.

ACTION: Undergoing production of new edition

6. To continue purchasing of up-to-date hydrographic/cartographic equipment, systems and software for carrying out the hydrographic surveys and chart production.

ACTION: To keep continuing.

7. To complete and forward to International Hydrographic Bureau the IHO C-55 Questionnaire "Status of Hydrographic Surveying and Nautical Charting World-Wide" that is of significant importance for international cooperation strategy.

ACTION: Undergoing and to keep continuing.

8. To create maritime spatial data centre (MSDI) under the umbrella of SHS of Georgia. This future hydrographic service could provide "more than nautical charts" to all parties interested (maritime portal, bespoke charts, recognized marine database, qualified data, etc.). For interoperability, it is important that the future hydrographic service adopts the relevant standards and be aware of the emerging S-100-compliant standards.

ACTION: SHSG is aware of the importance of introducing the new standard S-100 – Undergoing and to keep continuing

9. To create national legislation concerning the role, duties and responsibilities of SHS of Georgia and its budget (refer to IHO publication C-16 for examples abroad) and procedure to get the data from foreign surveys carried out in the waters under its national jurisdiction with the other ministries in charge.

ACTION: To keep continuing, and maintaining up-to-date

10. To continue to participate in International Hydrographic Conferences, the meetings of Mediterranean and Black Seas Hydrographic Commission and it sub bodies (Black and Azov Seas Working Group for example) as well as the meetings of relevant IHO bodies.

ACTION: To keep continuing.

#### New Recommendations

- 11. SHSG is advised to produce a medium term National Survey Plan for a period of 3/5 years.
- 12. to improve on issuing new publication in IHO standards (Radio Navigational Warning, Tide Table, etc.).
- to up-date the summary of the assessment of the National Hydrographic Capability (the Table 2) with CBSC MBSHC Coordinator (Turkey) in order to complete the information.
- 14. In MBSHC/BASWG Region there are Member State managing Category A and Category B Hydrographic Surveyor and Nautical Cartographer Courses recognized by FIG/IHO/ICA International Board of Standard of Competence.
- 15. To note the need to improve hydrographic survey in medium and deep water and suggestions was forwarded to SHSG for a refitting of actual owned vessel or a purchasing of a new one with "State-of-the-Art" instrumentations for Hydrography, Oceanography and Geophysics Research and for maintenance work of lights and buoys.
- 16. Suggested to introduce further SW in production line of SHSG to analyze ENC.

DATE	2018, October 18 <sup>th</sup>	
MBSHC TECHNICAL VISIT TEAM LEADER	Captain Lamberto Orlando LAMBERTI	
SIGNATURE	Captain Soundet frambet	

#### List of Annexes:

- A. Terms of Reference of the RHC Technical Visit Team.
- B. Summary of Events.
- C. P5 Yearbook Annuaire Georgia update Oct 2018
- D. SHSG Organization Template
- E. Georgian Trade and Maritime Traffic
- F. SHSG Report to the 14th BASWG Meeting

DISTRIBUTION: MBSHC Chair

INFORMATION: IHO / SHS of Georgia / SHS of Ukraine / HI of Italy