



IHO Capacity Building Programme

**The State of
Hydrography and Nautical Charting
in Republic of Albania**

December 2016

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Abbreviations

ASIG	State Authority for Geospatial Information (Autoriteti Shtetëror për Informacionin Gjeohapësinor)
AHS	Albanian Hydrographic Service
AL-NO HIP	Albanian – Norwegian Hydrographic Information Project
CBSC	Capacity Building Sub-Committee
EEZ	Exclusive Economic Zone
ENC	Electronic Navigational Chart
FST	Fleet Survey Team (US Navy)
IHO	International Hydrographic Organization
IMO	International Maritime Organization
IMOC	Interinstitutional Maritime Operations Centre
MBES	Multi-Beam Echo Sounder
MBSHC	Mediterranean and Black Seas Hydrographic Commission
MGI	Military Geographic Institution of Albania
MSI	Maritime Safety Information
NAVOCEANO	USN Naval Oceanographic Office
NHS	National Hydrographic Service
NHS	Norwegian Hydrographic Service
NHC	National Hydrographic Committee
NtMs	Notice to Mariners
PCA	Primary Charting Authority
RHC	Regional Hydrographic Commission
SOLAS	[United Nations] Convention for the Safety of Life at Sea
UKHO	United Kingdom Hydrographic Office
UNCLOS	United Nations Convention on the Law of the Sea
USN	United States Navy
WWNWS	Worldwide Navigation Warning Service

REPORT

1. Introduction

The International Hydrographic Organization (IHO) is an intergovernmental international organization, currently comprising of 86 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 IHO Secretariat is based in Monaco. Albania currently is not 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 problems, plan joint survey operations, and resolve schemes for International Chart coverage in their regions.

This report has been written with the express intention of assisting the Government of Albania to strengthen and develop its hydrographic 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.

The report is supported by various Annexes providing detailed information including the dependence on hydrography and nautical charting of various sectors in Albania, an analysis of the current survey state, an analysis of the existing charting situation and surveys, and recommendations for the strengthening of national hydrography in Albania.

2. IHO Technical Visit

A proposal for a technical visit to the Albania was approved by the 14th Capacity Building Sub Committee (CBSC) to assess the current status of nautical charting and hydrography in the country and to provide advice to the government and to stakeholders on a way ahead. At the 19th Mediterranean and Black Seas Hydrographic Commission (MBSHC) the visiting team was defined to be comprised by Turkey (Lead), Greece and the IHO Secretariat.

Although the team comprised of representatives from IHO, Turkey and Greece, due to busy agenda of IHO, Burak İNAN from Turkey and Dimitrios EVANGELIDIS from Greece carried out hydrographic awareness and technical assessment visit to Albania between 30 November and 2 December 2016.

The IHO Team first called on the Director of the Albanian Hydrographic Service (AHS), LCDR Alfred VELAJ. The main meetings were held in Port of Durres at the Albanian Navy General Staff installations, where the AHS is located. The IHO Team was also greeted by the Albanian Commander of Naval Force Major General YLBER DOGJANI as well as the Chief of Staff Cpt. ARSEN MULLAJ. Additional meetings with various other stakeholders and Institutions took place in both cities of Durres and the capital Tirana.

The meetings enabled the IHO Technical Team to build up a picture of the conspicuous features of the hydrographic activities. The meetings also facilitated the appreciation of data available and data sharing amongst the national representatives. It was clear to the visiting team that all the stakeholders especially AHS was well prepared for the meetings and able to actively interact with the team.

This resulting report has been written with the express intention of assisting the Government of Albania to develop and strengthen its hydrographic capability to meet its current and future needs and also its international maritime obligations under the SOLAS Convention. The report comprises a description of the visit, a brief assessment of the current situation and an analysis of the nation's hydrographic needs, major conclusions and a number of recommended actions for consideration by the relevant authorities.

3. Assessment of the Previous Technical Visit

A previous technical visit in Albania conducted in May 2008.

4. Albanian Hydrographic Assessment

The following is a general assessment of the situation in Albania regarding hydrography and nautical charting services.

4.1 National Hydrographic Awareness

In general, there is high awareness in Albania of the obligations and provisions under SOLAS Chapter V Regulations 4 and 9 to ensure that appropriate hydrographic and charting services are made available. Albania has been a member of IMO and potentially member of the IHO. There exists a national legislation regarding the SOLAS Convention regulations implementation / acceptance.

The Government of Albania, through its various agencies, is aware of the current state of hydrography and nautical charting in Albania and the benefits of modern hydrography to economic growth, safety of navigation and protection of the marine environment. Awareness was one of the key tasks of the IHO Technical Visiting Team.

AHS is currently not a member of the IHO. There is a strong willing by the Albanian Navy Command and AHS leader to be full member the soonest. The final decision will be taken in higher governmental/ political level.

One of the meetings was held by Ministry of Transport Legal representative. From the discussion it came up that he was well aware on SOLAS Convention regulations regarding the Mariners and Governmental obligations related to the hydrographic services and the IHO. He also expressed his support to the intention of Albania being an IHO member.

4.2 National Hydrographic Infrastructure

There is established Hydrographic Service within the Albanian Navy (AHS). The national HO deals with bathymetry data collection and processing, as well as the lights and buoys. The Military Geographic Institution (MGI) is responsible for the national chart production work including paper nautical charts, ENCs and land maps (main charting authority). This means that in order an official nautical chart to be produced; two different governmental agencies have to closely cooperate.

AHS has recently obtained new equipment and appear to have a specific plan to build hydrographic infrastructure for the next years, but due to lack of funds they rely on international collaboration and assistance.

AHS is the principal point of contact with the IHO. With the clear support of the Albanian Navy and the MGI, AHS assumed main responsibility for national hydrography. MGI gathering maritime data from the AHS represents itself as the Primary Charting Authority (PCA).

4.3 National Hydrographic Committee (NHC)

To coordinate hydrographic effort for the effective fulfilment of SOLAS responsibilities and the efficient management of a State's maritime area the IHO recommends the establishment of a NHC to provide input to and coordination of the hydrographic programme and setting national charting and surveying priorities. In this way, the stakeholders are in a position to assist in the continuing maintenance of the charts, longer term planning and perhaps also to the programme budget.

All hydrographic stakeholders need to be involved in contributing to Albania national hydrographic programme. This is not only to identify and prioritise national requirements, but also to contribute to the execution of the programme. This could be through help in-kind, such as the provision of boats, or personnel or through contributions to enlist contract support – for example for surveys of areas targeted for development. A key role for the stakeholders is to educate and encourage everyone to forward all relevant new or changed hydrographic information to the national coordinator for hydrography and charting.

Albania has currently no established National Hydrographic Committee but the need for coordination of the national hydrographic effort was clearly demonstrated to the IHO Technical Team. Recently (2009), there was a relatively new established organization called Interinstitutional Maritime Operations Centre-IMOC. Its mission is to ensure the surveillance of the Albanian Maritime space, in order to realize the direction of the operations on sea, in compliance with the national and international maritime legislation. Due to its nature of being interinstitutional board, IMOC has the flexibility to coordinate and gather all the Albanian authorities dealing with its scope. After discussion with the leader of the IMOC, it came up that it is of his knowledge and awareness of the SOLAS obligations and of the benefits of improving hydrography. IMOC can easily play (among others) a national coordinator role of a hydrographic committee in Albania since it collaborates with all the stakeholders involved.

4.4 National Hydrographic Authority (NHA)

The IHO recommends that every coastal State should designate a NHA responsible for coordinating hydrography and charting in the country. The role of the NHA 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 Maritime Safety Information (MSI) and nautical charting services available to mariners. The NHA is the first point of contact for in-country stakeholders and for maintaining relations with relevant international organisations. In case of Albania, these contacts would include the IHO, MBSHC, related MBSHC Coordinators, other countries and agencies that might support hydrographic development and assistance in Albania.

The AHS within in the Albanian Navy is the most appropriate body to be the National Hydrographic Authority. If necessary, the AHS should seek for a formal arrangement in order to establish a modernized national legal framework by means of a law, decree or equivalent.

In Albania, Point of Contact (POC) for IHO issues is AHS.

4.5 Maritime Safety Information (MSI)

POC for MSI issues is also by law the AHS. In reality, the burden is shared among different agencies and not always clearly defined. AHS is compiling the NtMs and MSI. Harbour Master located in Port of Duress is responsible for broadcasting the information when needed on a non-regular basis. Additionally, there is no Navtex and SafetyNet service available.

4.6 Hydrographic Surveying

The only hydrographic data available comes from collaboration with other navies in the past (Italian Navy, Hellenic Navy, RN, USN/ NAVOCEANO/ FST). The most recent collaboration is with the USN in the area of Port of Duress and Port of Vlora.

A recent collaboration project with the Norwegian Hydrographic Service (NHS) called AL-NO HIP, approved and started in 2014, included data collection, data processing and chart production. Particular certified training on each of the above subjects were also included.

More specifically, the 3 year project AL-NO HIP is focusing on the following issues:

- Basic capacity building in hydrography (on progress)
- Procurement and installation of equipment related to hydrography (Done)
- Capacity building and training in survey operations (undergoing)
- Training in data processing and management (2 Cat B from this project - 1 existing)
- Conduct of survey/data collection (starting next year)
- Procurement of chart/ENC production tools (Done)
- Capacity building in marine cartography/ENC production (undergoing)
- Production and validation of ENCs (One ENC is produced validation on progress)
- Distribution of ENCs (TBD)
- Establishment of bathymetric database (software installed, training ongoing)

Hydrographic surveys do not cover the needs of safety of navigation (especially for larger scale charts) and in many cases not done according to modern standards. It is important to mention that the bathymetric data is not updated due to the lack of means and personnel.

Status of Hydrographic Surveys

Length of coastline	554 kilometres 299 NM		
Surface of national maritime	There is no official declaration of EEZ		
	% surveyed adequately for present requirements	% requiring resurvey at larger scale or to modern standards	% never systematically surveyed.
Ports and Port Approaches	38	41	21
Area with depths of less than 50 m.	0	100	0
Adjacent area with depths of less than 200 m.	0	100	100
Area with depths greater than 200	0	100	100

4.7 Nautical Charting

IHO CB Technical Team visited MGI, the National Mapping and Charting Authority of Albania. MGI is responsible for all the cartographic production including paper nautical charts, ENCs as well as land maps and military charts. Being responsible for the maritime charting products, MGI participates together with AHS, in the AL-NO HIP project.



Visit to Military Geographic Institution of Albania

Within the frame of the AL-NO HIP project there is an ENC schema of eight (8) harbour cells, three (3) approach cells and one (1) coastal cell. There is a plan for production of the ENCs until the end of 2017. Negotiations with PRIMAR took place for the distribution of ENCs. Albania signed a membership agreement with PRIMAR on March 21st 2017.

Since Albania is not yet a member of the IHO, there is no official schema of INT paper nautical charts. There is an old national nautical chart folio consisting mainly from charts issued by other HOs collaborated with AHS the past years. In any case, these charts are not updated and there is no official program or mechanism for the systematic updating of any nautical chart in Albania.

Due to lack of adequate number of qualified personnel, the lack of experience and lack of paper chart production software, Albania is considered to have poor national capability for nautical chart production at this stage. In September 2015 Albania installed a modern chart production system (CARIS Suite) at MGI premises and until March 2017 had personnel trained in relevant CARIS software related to electronic and paper chart production.

There is no yet established a paper nautical chart scheme for Albanian waters.

It is planned that a national paper chart cell schema for Albanian waters to be issued very soon.

4.8 Hydrographic Resources

The only hydrographic data available comes from collaboration with other navies in the past (Italy, Greece, UK, USA/ FST). The most recent collaboration is with USA in the area of Port of Durrës and Port of Vlorë.

Recent AL-NO HIP project with Norwegian Hydrographic Service (NHS) approved and started in 2014 included data collection, data processing and chart production. Particular certified training on each of the above subjects also included.

There are three (3) small old launches available but never used as hydrographic vessels.



Unused old hydrographic launches

A 12m rebuilt survey launch, equipped with a MBES for shallow water hydrographic surveying was added in the project as an offer by NHS to AHS. The equipment installed on board is the latest from the market. An EM2040 Compact MBES and a Seapath 330 were installed in October 2016 from Kongsberg in Stavanger, Norway. In February 2017, the ex-survey boat from NHS arrived in Port of Durrës and after relative tests was officially delivered by AHS under the name of *SHQIPONJA*.



New survey launch

No permanent tide gauges are installed at the moment. Two have already been ordered but not yet installed.

There is a portable tide gauge installed and operating in Port of Durrës since March 2017. Plan is a total of 2 tide gauges to be installed and operated by the end of next year. All gauges will be operated by AHS.

4.9 Personnel and Training

AHS consists of a staff of 3 persons including the Director. There are in total, 3 qualified hydrographers. They are well-motivated and highly professional with mixed specializations, grades and experience. The current manpower available to AHS is summarized below. Nautical Cartographers work under MGI.

Category	Numbers	Remarks
Hydrographic Surveyor Cat B	3	One staff member equivalent Cat B through experience
Nautical Cartographer (MGI)	3	Non Cat B

There is a lack of adequate human resources for hydrographic field surveys. One officer is appointed in Italy (Cat A studies) for the next year.

Recent AL-NO HIP project with Norwegian Hydrographic Service (NHS) started in 2014 includes particular certified training on data collection, data processing and chart production.

4.10 Additional stakeholders

Key players in Albania with various maritime geospatial interests are the following organizations/ institutions:

- General Maritime Directorate (Ministry of Transport and Infrastructure) Albanian Ministry of Transport and Infrastructure - Harbour Master
- Interinstitutional Maritime Operations Centre – IMOC State Authority for Geospatial Information (ASIG), the Board of Geospatial Data
- National Mapping and Charting Authority of Albania – Military Geographic Institute MGI

4.11 Contingency Plan

There is no contingency plan which can be used after the occurrence of a disaster affecting coastal areas under national jurisdiction to promulgate Maritime Safety Information and conduct a preliminary survey to confirm the principal transportation routes.

5. A Way Ahead

5.1 Maritime Safety Information (MSI)

MSI is considered by the IHO as the first phase in hydrographic capacity building. It was clear to the IHO Technical Team that there was lack of understanding and coordination of MSI affairs under the SOLAS obligations. In addition MSI training for new staff is needed. AHS may benefit from valuable MSI training opportunities of the IHO Capacity Work Programme. To assist in this the MBSHC CB Coordinator should submit the MSI training requirement of Albania in the next CBSC meeting.

5.2 National Hydrographic Surveying and Charting

Albania has extensive hydrographic surveying needs. Surveys - were exist - do not cover the needs of safety of navigation (especially in shallow waters) and in many cases not done according to modern standards. The hydro data from which the charts and ENCs are supposed to be compiled is not updated. To assist in this the IHO Technical Team recommended that the AHS to establish a Hydrographic Strategy Plan which includes a Charting Plan, a Survey

Plan, a Training Plan and an Infrastructure Development Plan with the priorities and milestones.

5.3 Bilateral Arrangements for Surveying and Charting

Bilateral agreements with established hydrographic services are a valuable means of fulfilling SOLAS obligations for countries with a limited and/ or developing hydrographic capability. The visiting team could not identify any formal arrangements between AHS and other Hydrographic Services (HSs) regarding hydrography and cartography, except the AL-NO HIP project.

5.4 National Hydrographic Authority

Although General Maritime Directorate (Ministry of Transport and Infrastructure) is the lead authority for maritime safety, AHS is the recognized point of contact for the IHO. So, the AHS seems to be the most appropriate body to be the National Hydrographic Authority (NHA). The AHS should seek a formal arrangement in order to establish a national legal framework by means of a law, decree or equivalent.

5.5 National Hydrographic Committee

It was evident to the visiting team that stakeholders already aware of the need of the effective cooperation and coordination of the national activities regarding with the hydrography. So, as a first step it is recommended that the regular meetings of the stakeholders, which can be called National Hydrographic Correspondence Group, under the chairmanship of the IMOC or the AHS, are held to make best use of Albania's valuable hydrographic assets. This will prove a positive step towards the establishment of a formal National Hydrographic Committee (NHC) to build a solid maritime infrastructure to support the safety of navigation and the economic growth. It may be necessary for a formal arrangement, in order to establish a national legal framework by means of a law, decree or equivalent related to the above recommendations for the NHC.

5.6 National Hydrographic Capability Development

Albania has limited national hydrographic and cartographic resources and lacks a legal arrangement and an investment on these issues. AHS and MGI are two organisations under the Ministry of Defence and have periodically planned resources in hydrography and cartography.

Training is a continuing issue for AHS, which, by necessity, has to be conducted out of Albania. A minimum number of at least two (2) Cat A Hydrographers, four (4) Cat B Hydrographers and three to four (3-4) Cat B Cartographers could be considered as the appropriate manning to be in line with the new priorities.

It is recommended that the training be provided - according to the needs - to the existing staff as a matter of priority. In addition, training options for new recruits should be included in future budgets or plans.

There are limited opportunities for international hydrographic training. 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 FIG/IHO/ICA recognized programmes in Hydrography and Nautical Cartography can be found in the IHO website under "Capacity Building". Short courses in the fundamentals of hydrographic data gathering are available through the IHO Capacity Building Programme and should be considered by Albania with the MBSHC CB Coordinator support.

It is an option for Albania to establish formal bilateral agreements with well-established hydrographic offices in the region as an interim solution until the in-house chart and survey production is established.

An additional source of capacity building is to include clauses in commercial survey contracts in the country to include capacity building. This can be achieved by amending national regulations that control surveys in the national territorial waters and the EEZ (when defined).

5.7 Contingency Plan

All Coastal States should have contingency plans developed in advance in order to be prepared in case a disaster occurs. After the occurrence of a disaster affecting coastal areas under its jurisdiction, each State should promulgate Maritime Safety Information and conduct a preliminary survey to confirm the principal transportation routes, according to the extent of the damage. In response to the reconstruction of ports, each State should undertake hydrographic surveys so as to keep the charts updated. These actions should be coordinated with neighbouring States, Regional Hydrographic Commissions and others as appropriate. It is important that each Coastal State provides both a senior point of contact and a working point of contact for communication and coordination purposes; this could include the Ministry of Transport and Maritime Affairs and the AHS of the Albanian Navy which seem the most appropriate organizations so far. Contingency plan should contain the key elements which are stated in IHO Resolution 1/2005 as amended - IHO Response to Marine Disasters, and Contribution to Prevention and Alert Systems.

6. Technical Visit Conclusions

Based on discussions and the facts obtained, the following principal conclusions have been reached:

- (1) There is generally good awareness of national hydrography in Albania and a desire to improve it. Most of the necessary components for addressing hydrographic issues, particularly in relation to SOLAS Chapter V regulations, are in place in Albania. Albania, as a contracting party to the SOLAS convention, a full IMO member and potentially a member of the IHO, is already in the position to increase its hydrographic capability.
- (2) The establishment of the National Hydrographic Committee (NHC) can provide the framework to enhance cooperation amongst the various stakeholders.
- (3) The AHS of the Albanian Navy is potentially the most effective means of improving awareness of hydrography within government and at national level. In the near future, it is expected AHS to take the main responsibility as the National Hydrographic Authority.
- (4) The Albanian government should invest significant resources to the maintenance and the advancement of the AHS for the safety of navigation in Albanian waters and the economic development and the marine environmental protection of the nation.
- (5) An effective MSI service is not yet in place, in order to support the safety of navigation, the safety of life at sea and the protection of the marine environment. It is expected that in the near future, the collection of the hydrographic data and the new nautical chart production will help to establish an effective MSI service in Albania.
- (6) Albania has extensive hydrographic surveying needs. There are three (3) small old launches available but never used as hydrographic vessels.

It is anticipated that a 12m rebuilt survey launch (Shqiponja) equipped with a MBES for shallow water hydrographic surveying, offered by NHS to AHS by the end of December 2016, to be the main hydrographic platform to cover the immediate requirements. The Survey

Launch Shqiponja with the new EM2040 Compact MBES and the new Seapath 330 will be soon operative in collecting hydrographic data.

It was clear to the IHO Technical Team that AHS needs to establish a Hydrographic Strategy Plan which includes a Charting Plan, a Survey Plan, a Training Plan and an Infrastructure Development Plan with the priorities and milestones.

(7) Albania has poor national capability for chart production. Among others, MGI which is mainly dealing with land mapping, is responsible for all the cartographic production, including paper nautical charts, as well as ENCs. Being responsible for the maritime charting products, MGI participates together with AHS, in the AL-NO HIP project and benefits from the project training courses. This is very important since the MGI personnel involved are not FIG/IHO certified cartographers and they lack of experience in nautical charting. Last but not least, it is noted that a continuous, close and healthy collaboration between AHS and MGI should always be maintained in order to ensure seamless and adequate production of maritime chart products.

(8) A capacity building plan is needed in order to provide the human resources to the operation of the AHS and achieve the goals envisioned by the AHS.

(9) AHS needs to go through a period of staff change (training and reinforcement) consequently with the equipment change which will need careful handling to allow the organization to maintain its output and prepare for the future.

(10) There is no Bilateral Arrangement reported between AHS and other Hydrographic Services (HSs) for hydrographic and/ or cartographic work assignment.

(11) There is no contingency plan which can be used after the occurrence of a disaster affecting coastal areas under national jurisdiction to promulgate Maritime Safety Information and conduct a preliminary survey to confirm the principal transportation routes.

7. Technical Visit Recommended Actions

(1) It is recommended Albania to be a full member of the IHO. Being a member of the large hydrographic community will benefit the most from various international collaborations and activities and will be part of the discussions/ decisions taken for the future of hydrography.

(2) In the meantime, it is recommended Albania to attend relevant meetings of the MBSHC and the IHO.

(3) Albania should consider the creation of a National Hydrographic Correspondence Group which will meet regularly, under the chairmanship/ leadership of the IMOC or the AHS, with the participation of:

- Albanian Navy
- AHS
- Interinstitutional Maritime Operations Centre – IMOC
- General Maritime Directorate (Ministry of Transport and Infrastructure) Albanian Ministry of Transport and Infrastructure - Harbour Master
- State Authority for Geospatial Information (ASIG), the Board of Geospatial Data
- National Mapping and Charting Authority of Albania – MGI

This will prove a positive step towards the establishment of a formal National Hydrographic Committee (NHC) to build a solid maritime infrastructure to support the safety of navigation and the economic growth. The NHC will work at the Government level and constantly engage with the relevant stakeholders in order to coordinate the national hydrographic activities while contributing to the high-level awareness. It is recommended that the AHS should seek

a formal arrangement in order to establish a national legal framework by means of a law, decree or equivalent related to the above recommendations for the NHS.

(4) The AHS within in the Albanian Navy seems to be the most appropriate body to be the National Hydrographic Authority (NHA). It is recommended that the AHS should seek a formal arrangement if necessary, in order to establish a national legal framework by means of a law, decree or equivalent.

(5) In case of being a full member of the IHO, Albania should establish, through the responsible MBSHC regional group, an official INT paper chart and ENC schema, recognised by the international community.

(6) The Albanian Government, under the consultancy of the NHC, to consider establishing a NAVTEX and SafetyNet Service for the Albanian waters in the future.

(7) The Albanian Navy/ AHS should consider:

a. To fully complete the current collaboration AL-NO HIP project with the NHS in all specific areas of it (staff training, on board/ office equipment installation etc.)

b. To focus in development a hydrographic infrastructure in the next years, so as to be capable of accomplishing/ executing independent hydrographic surveys in Albanian waters. This includes the reinforcement of the AHS-MGI staffing, personnel training according to the international standards and the necessary equipment acquirement.

c. To establish a 5-year National Hydrographic Survey and Chart Production Program in Albania.

d. To start a routine field survey program according to the adopted National Hydrographic Survey and Chart Production Program.

(8) The AHS organizational structure expansion is necessary to meet the urgent requirements of data acquisition (field surveys) and charting. A minimum number of at least two (2) Cat A Hydrographers, four (4) Cat B Hydrographers and three to four (3-4) Cat B Cartographers could be considered as the appropriate manning to be in line with the new priorities.

(9) MBSHC CB coordinator to inform AHS regarding the CB training opportunities in the region and elsewhere,

(10) AHS to benefit from the training opportunities as approved in the IHO CB Work Programme.

(11) Albania to consider establishing formal bilateral arrangements with well-established Hydrographic Services to cover part of its National Hydrographic Survey and Chart Production Program. This will significantly accelerate the completion of the whole program or any individual targets of it and will offer to mariners official hydrographic products of Albania according to the international standards (IHO).

(12) Albania to consider and prepare a Contingency Plan that can be implemented in the event of a significant disaster occurring in the country and provide a senior point of contact for communication and coordination purposes.

(13) AHS and MGI to fully adopt the relevant IHO standards, to be aware of the emerging S-100 compliant standards and get prepared to the new standard S-101 for ENC production.

General Description of Albania and its Geography and Infrastructure¹

1. Introduction

The coastal area of Albania is one of the hot spots for biodiversity in the Mediterranean Sea. The coastal landscape is highly heterogeneous, including lagoons, wetlands, sand dunes and river deltas.

Albania's coastal zone is one of the country's most valuable assets, recognized as the country's "most important and economically valuable space from both the development and the environmental point of view. Integrated Coastal Zone Management (ICZM) is key to the sustainable development of both tourism and trade, two promising pillars to support the country's long-term economic growth. Services already make out 45% of total GDP in Albania and, following substantial fluctuations throughout the '90s, international tourism is on the rise.

With population and pollution pressures concentrated largely in the two main coastal cities of Durres and Vlore and significant coastal areas left underdeveloped or pristine under the former totalitarian regime, Albania has an opportunity that is unique in Europe to manage sustainably its coastline, maximizing both conservation and development objectives.

2. Ports and Harbours

Ports in the country are divided into two main types: industrial ports and marinas. Industrial ports include ports for the transport of goods and people while marine ports include tourist ports and former military ports.

The main Ports:

Shengjin : Fishing port

Durres: Containers, general cargo and main ferry terminal

Vlore: Oil port and related industries

Saranda: Tourism port for ferries and cruise ships.

All ports and harbours in Albania including total area in square meters and measurements.

NR	NAME OF PORT	AREA. M ²	COMENTS
1	TUNELI LINDOR SHËNGJIN	23 476	SB DATA US Navy '94
2	PORTI SHËNGJIN	297 343	SB DATA US Navy '94
3	BAZA E KEPIT TË PALIT	47 753	NO DATA
4	PORTO ROMANO	567 391	NO DATA, PRIVATE DREDGING
5	PORTI I PESHKIMIT DURRËS	73 888	NO DATA, PRIVATE DREDGING
6	PORTI I DURRËSIT	664 072	MB DATA FST '11
7	PORTI I PESHKIMIT VLORË (TRIPORT)	317 874	SB DATA FST '94

¹ http://www.planifikimi.gov.al/sites/default/files/30.06.2016_FINAL%20DRAFT%20_%20PINs%20%20Bregdeti.pdf

8	PETROLIFERA VLORE	531 025	MB DATA US Navy '12
9	PORTI I VLORËS	102 559	MB DATA US Navy '12
10	POLICIA KUFITARE RADHIMË	10 386	NO DATA
11	MARINA E ORIKUMIT	42 148	NO DATA
12	BAZA E PASHA LIMANIT	57 720	MB DATA FST '12
13	MOLI I HIMARËS	84 662	SB DATA US Navy '94
14	PORTO PALERMO (KALAJA TUNELI	649 177	SB DATA US Navy '94
15	BAZA E SARANDËS (GJIU I LIMIONIT)	20 962	SB DATA US Navy '94
16	PORTI I SARANDËS	93 806	SB DATA US Navy '94 (HN, 2000 SURVEY)
TOTAL AREA		3 584 242 m²	

It is predicted to propose many small ports integrated into the settlements of existing villages and cities or in new touristic clusters around cultural highlights (castle Porto Palermo) for the navy in order to enhance maritime tourism, to be visited and connected attractive places and to be observed the entire coast of the country.

3. Cruise Ship Operations

Albania is served by two primary deep-sea ports at Durres and Vlora, and two secondary ports at Shengjin and Saranda used mainly by cabotage (coastal) shipping. Passengers transport destinations include primarily Italy and Greece (number of passenger is increasing in the last years). More specifically, the major origin and destination are the Adriatic ports of Bari, Brindisi, Ancona, and Trieste. Most of the routes are realized by Italian companies. As a result of recent investments, the anchoring and processing capacities and the port efficiency have increased, accompanied with an increase in the number of passengers and volume of goods processed in ports. The major weight of work is covered by Durres port as a result of investments in building the new passengers' terminal. Its modernization and capacity enhancement will pave way for increase of the number of passengers. Also the increasing number of operators creates conditions for improvement in services making them more attractive for passengers in the future. Moreover, it is expected that tourism growth in the future will trigger increased demand for passenger ferry services.

Although most of the routes are realised by foreign enterprises, passenger ferry services can be considered a strategic activity for the development of port facilities, for the arrivals of Italian tourists, and also for assuring the movement of Albanians working in neighbouring countries. The investments for the building of a new passenger terminal in Durres and the improvement of business conditions are signals that make this activity among the most relevant and promising.

4. Offshore Oil and Gas

Recently, studies have been carried out on petrol extraction potentials in marine waters; at this stage no investments or extraction have been developed. According to some assessments, there is a great potential of Off-shore oil and gas in Albania, particularly in the Ionian area, in borderline with Greece. It is estimated that the value of the under-sea oil be EUR 100 – 200 *billion* in Ionian Sea.

5. Maritime Claims

Territorial sea: 12 nautical miles

Contiguous zone: 12 nautical miles

Exclusive economic zone (EEZ): –

Continental shelf: 200-m depth or to the depth of exploitation

6. Defence including Coastguard

The Albanian Naval Force is the naval branch of the Albanian military. Their name was changed from the Albanian Naval Defence Forces in 2010. The Naval Force is headquartered in Durrës, and operates multiple bases, including Kepi i Palit base in Durrës, and Pashaliman in Vlorë. The vessels of the Albanian Naval Force are mostly patrol craft and support craft. The Naval Force operates four large Damen Stan Type 4207 patrol boats, three of which were built in Albania. Some of the Naval Force's vessels were purchased from, or donated by Italy, the United States, China, or the Soviet Union. Most former Soviet or Chinese boats have been retired from service.

The Navy performs mainly duties, based on the concept of "one Force, two Missions." The legal framework has been updated in order to facilitate these missions and EU-NATO integration. The Navy is also responsible for aids to navigation, including lighthouses.

7. Sea Fishery

The fishing fleet is oriented mainly on trawl fishing with about 62% of the fishing boats. However, an indefinite number of small scale vessels is not included in the list due to the fact that they are operating sporadically (mainly in summer) and there are several small vessels which do not hold licenses, but are used for fishing.

The fisheries sector is still in transition despite significant development and processing capacities inherited from the past. The main categories of Albanian fisheries are divided into marine fisheries, inland fisheries and aquaculture. Marine fisheries are divided into professional industrial fisheries and professional artisanal fishery. Differentiation between industrial and artisanal fishing is based on the type of fishing gear used by license holders. All forms of trawling and purse seining, irrespective of the technical characteristics of the nets that are used, are regarded as industrial fishing activities. Artisanal fishing covers all forms of fishing activities by means of fixed or selective gear such as hooks, fixed nets, trammel net and gill net. Professional fishing also entails all fishing activities for economic purposes. This type of fishing activity represents the most significant activity from the economic aspect

8. Marine Reserves

Marine aquaculture in Albania has marked great growth over the last decade, despite slow recent growth constrained by slow growth in the domestic market demand and constraints in access to exports, especially towards EU (e.g. molluscs). Domestic consumption is expected to increase in the future, in particular the increased demand triggered by tourism development that will further push the sector growth. There is potential and need for innovation as regards species that can/will be cultivated. As of present, marine aquaculture is oriented towards few fish species but with market development, diversification is needed.

9. Tourism and Coastal Recreational Amenities

Adriatic coast: The main beaches are those of Velipoja, Shën Gjin, Durrës, Golem, Spillenja, Divjaka, Vlora, among others. Besides the beaches, the Adriatic coast is rich in lagoons and other natural ecosystems providing wonderful opportunities for those passionate about the study and observation of birds, as well as those interested in eco-tourism.

Ionian coast: The Ionian coastline is known for having fascinating beaches with deep and very clean waters. Younger crowds tend to visit the Ionian beaches as the area offers many opportunities for those interested in water sports like diving, boat tours, etc. Some of the most interesting beaches in the south of Albania are Dhërmi, Jal, Himara, Qeparo, Borsh, Saranda and Ksamil.

10. Planned Maritime Developments in Albanian Waters

A draft plan is prepared from National Agency for Territorial Planning, not fully implemented.

Technical Visit Programme



IHO Capacity Building Programme
Technical Visit Agenda

PROGRAM
ALBANIAN NAVY – IHO DELAGATION

(Durrës-Tirana, November 30th - December 02nd 2016)



Technical Visit Agenda		
30 November 2016		
No	Time	Event
1.	12:00	Arrival of the IHO delegation at Hani Hotit Border Check
2.	12:00	Transfer to the Hotel
01 December 2016		
No	Time	Event
3.	08:15 – 09:00	Departure of IHO Delegation from hotel to Albanian Navy HQ
4.	09:00-09:15	Opening Remarks & Introduction between IHO – Albania Navy Command, AHS, IMOC
5.	09:15-09:20	Admin Remarks, Agenda
6.	09:20-10:00	Albanian Navy HS presentation on organization and future plans, discussion
7.	10:00-10:30	IHO presentation (HNHS Director) CB presentation (MBSHC CB Coordinator)
8.	10:30-10:45	Courtesy Call to Albanian Navy Commander
9.	10:45-11:00	Official Photo
10.	11:00-11:15	Transfer to Port of Durres Meeting with Port Directory, Harbour Master
11.	11:15-12:30	Discussions
12.	12:30-14:00	Lunch hosted by Alb Navy
13.	14:00-15:30	Tour Visits to AHS and Port of Durres
14.	15:30-17:00	IMOC Visit
15.	17:00-17:30	Transfer of IHO Delegation to Arvi Hotel Durres
02 December 2016		
No	Time	Event
16.	09:00 – 10:30	Departure of IHO Delegation from Arvi Hotel to, ASIG
17.	10:30 – 12:00	Meeting at MIGI. Discussions at MGII & Relevant Public offices according to pre-scheduled meetings
18.	12:00-14:00	Lunch Break
19.	14:00-17:00	Final assessment with the relevant participants.
03 December 2016		
No	Time	Event
20.	07:00	Transfer of IHO Delegation to Nene Tereza Intl Airport and leave.

List of Contacts

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