

**BLACK AND AZOV SEAS WORKING GROUP  
(BASWG)**

**STATE HYDROGRAPHIC SERVICE OF UKRAINE**



**NATIONAL REPORT OF UKRAINE**

**14th Meeting of the Black and Azov Seas Working Group  
(BASWG14)**

## NATIONAL REPORT OF UKRAINE

### to the 14th Meeting of the Black and Azov Seas Working Group (BASWG)

#### 1. Hydrographic Office/Service

##### a. *General*

The State Hydrographic Service of Ukraine (SHSU) is a national hydrographic office established within the framework of the Ministry of Infrastructure of Ukraine.

The main tasks of the SHSU are as follows:

- Fulfillment of international commitments of Ukraine pertaining to the safety of navigation, in particular hydrographic surveying of oceans and seas in accordance with the IHO standards, provision of the seas and inland waterways within zone of responsibility of Ukraine with AtoNs, their maintenance and ensuring of continuous operation in conformity with the IALA requirements;
- Compilation and distribution of nautical and pilot inland charts, Sailing Directions, Notices to Mariners, other nautical publications;
- Acting as a national navigational warnings coordinator and a national NAVTEX coordinator in Ukraine;
- Development of the AtoN system by means of implementation of new methods, techniques and technologies in the fields of navigation, hydrography and cartography;
- Lighthouses renovation involving the energy-saving technologies (solar batteries, wind power stations, LEDs etc.), modernization of floating AtoNs through use of plastics, flasher mechanisms with LED modules and implementation of the Automatic Identification System (AIS);
- development and maintenance of the uniform system of hydrographic support of navigation in the seas and inland waterways of Ukraine.

Due to the Russian Federation's occupation and annexation of the part of Ukrainian territory, from March 2014 the SHSU doesn't have access to Ukraine's inland waters and territorial sea in the area of Crimean Peninsula. Aids to navigation on the Crimean coast have been temporarily out of the SHSU's control. Mariners are requested to exercise caution.

The sea ports of Kerch, Sevastopol, Feodosiia, Yalta, Yevpatoriia are closed until the restoration of the constitutional order of Ukraine within the territory of the Autonomous Republic of Crimea and Sevastopol city that are temporarily occupied by the Russian Federation (in accordance with the Order of the Ministry of Infrastructure of Ukraine No 255 of June 16, 2014).

In compliance with the Law of Ukraine No 1207-VII of 15 April 2014 'On Securing the Rights and Freedoms of Citizens and the Legal Regime on the Temporarily Occupied Territory of Ukraine', inland waterways and territorial sea of Ukraine around Crimean Peninsula, as well as the territory of exclusive (maritime) economic zone of Ukraine along Crimean coastline have been defined as temporarily occupied territories.

- b. Updates for the IHO Yearbook, e.g. reorganization (please, see below the updates to the IHO Yearbook as of 24 April 2018; all updated information is in **red bold**)

<b>STATE HYDROGRAPHIC SERVICE OF UKRAINE</b> <b>23, Gagarina Avenue</b> <b>Kyiv 02094</b> <b>UKRAINE</b>	
<b>Department of which the Hydrographic Office is part</b>	Ministry of Infrastructure of Ukraine
<b>Principal functions of the H.O.</b>	Hydrographic surveys, oceanography, nautical charts and inland charts in paper and digital form, cells, nautical publications (Notices to Mariners, Sailing Directions, List of Lights etc.), <b>broadcasting of meteorological information</b> , radio navigational warnings, aids to navigation.
<b>National day</b>	24 August
<b>Telephone:</b> <b>Fax:</b> <b>E-mail:</b>	+38 (044) 296 60 40 +38 (044) 292 12 17 <a href="mailto:office@hydro.gov.ua">office@hydro.gov.ua</a>
<b>Date of establishment and Relevant National Legislation</b>	February 9, 1994 Ordinance of the Cabinet of Ministers of Ukraine No 84 of February 9, 1994
<b>Name and rank of the Director or Head</b>	<b>Oleksandr Shchypstov, PhD</b> <del>Mr. Dmytro PADAKIN, PhD</del> Acting Head
<b>Tonnage</b>	2017 = 496 423
<b>Staff employed</b> - Hydrographers (Name and rank of managing staff)	<b>Mr. Dmytro PADAKIN, PhD – Deputy Head of the State Hydrographic Service of Ukraine</b> <del>Mr. Mykola GOLODOV, PhD – Deputy Head of the State Hydrographic Service of Ukraine</del> <del>Mr. Sergii OSYPCHUK, PhD – Deputy Head of the State Hydrographic Service of Ukraine</del>  Mr. Oleg Marchenko – Head of <i>Ukrmorcartographia</i> (the charting branch of the State Hydrographic Service of Ukraine)
<b>№ of charts published</b>	<b>177</b> paper charts 129 paper charts for inland waterways

<p><b>№ of INT charts published</b></p> <p><b>№ of ENC cells published</b></p>	<p>15</p> <p><b>239</b> ENCs <b>102</b> cells 181 inland ENCs</p>
<p><b>Type of publications produced (e.g.; Tide Tables, Sailing Directions, List of Lights etc.)</b></p>	<ul style="list-style-type: none"> <li>- Notices to Mariners (in Ukrainian and English) No.907.00;</li> <li>- ‘Sailing Directions on Ukrainian Waters of the Black Sea and the Sea of Azov’ No.101 (in Ukrainian);</li> <li>- ‘Lights and Beacons of the Black Sea and Sea of Azov’ No.201 (in Ukrainian);</li> <li>- ‘Regime of Navigation in Ukrainian Waters of the Black Sea and the Sea of Azov’ (summary description) No.402 (in Ukrainian);</li> <li>- Catalogue ‘Nautical Charts and Publications’ No.701 (in Ukrainian and English);</li> <li>- ‘Nautical Charts Symbols’ No.902 (in Ukrainian and English);</li> <li>- ‘Description of Maritime Buoyage System in Ukrainian Waters. IALA System. Region A’ No.903 (in Ukrainian);</li> <li>- ‘Maritime Buoyage System in Ukrainian Waters. IALA System - Region A’ No. 904 (in Ukrainian);</li> <li>- ‘Symbology for Inland Waterways Charts’ No. 908 (in Ukrainian, English and Russian);</li> <li>- ‘Lights and Beacons of the Danube River. Kiliiske Mouth Delta to the Prut River Mouth’ No.202 (in Ukrainian and Russian);</li> <li>- ‘Sailing Directions of the Danube River. Kiliiske Mouth Delta to the Prut River Mouth’ No.103 (in Ukrainian and Russian);</li> <li>- <del>‘Instructions on Producing of Field Updates to Navigational Charts, Manuals and Publications (IKM-2005)’ No.918 (in Ukrainian);</del></li> <li>- <del>‘Instructions for Compilation of Technical Orders and Technical Reports Resulting from Hydrographic Surveys (ITH-2005)’ No.932 (in Ukrainian);</del></li> <li>- ‘Instructions on Requirements and Methods of Bottom Features Surveying for Navigational Purposes’ No.933 (in Ukrainian);</li> <li>- ‘Regulation on Aids to Navigation on the Inland Waterways, in the Territorial Sea and Exclusive (Maritime) Economic Zone of Ukraine’ No.937 (in Ukrainian);</li> <li>- <del>‘Regulation on the Numbering System for Paper Nautical Charts, Electronic Navigational Charts and Inland Waterways Charts, Books, Sailing Directions and Blank Technical Documentation’ No.934 (in Ukrainian);</del></li> <li>- ‘General Provisions for Compilation of Notices to Mariners’ No.935 (in Ukrainian);</li> <li>- <del>‘Regulation on Procedure for Conducting of Oceanologic Surveys in the Black Sea and the Sea of Azov’</del></li> </ul>

	<p><del>No. 920 (in Ukrainian);</del>  <del>- 'Instructions on Compilation and Preparation of Coastal Warnings and Appropriate Informing of Mariners' No. 944 (in Ukrainian);</del>  <del>- 'Instructions on Input Expertise of Hydrographic Surveys Materials for the Purpose of Charting' No. 936 (in Ukrainian);</del>  - 'Oceanographic Atlas of the Black Sea and the Sea of Azov' No. 601 (in Ukrainian and English);  - <b>'The List of Current Temporary and Preliminary NtMs of State Hydrographic Service of Ukraine' No. 910 (in Ukrainian and English), 2018;</b>  - 'Navigational and Reference Tables for Navigators' No. 909 (in Ukrainian);  - 'Dnipro River Pilot' No.105;  - Navigational-Hydrographic Dictionary (in Ukrainian, English and Russian);  - 'Charting Support for Navigation' (in Ukrainian);  - 'Navigational Support of Sailing' (in Ukrainian);  - 'Nautical Hydrography' (in Russian);  - 'Oceanography' (in Russian);  - 'Navigational Hydrometeorology' (in Russian).</p>		
Surveying vessels / Aircraft	Displacement	Date Launched	Crew
GS – 82	807.0	1969	23
GS – 273 *	713.0	1972	23
A. LYSENKO	52.7	2003	4
A. SOLODUNOV	52.7	2005	4
V. ZARUDNIY *	53.0	2006	4
ODESA *	320.0	2007	10
SHLIAHOVYK	92.0	2010 (remanufactured)	6
BGK-334	127	1974	11
KAPITAN ZIBER	133	2015 (remanufactured)	7
KAPITAN BASHEV	133	2014 (remanufactured)	6
KAPITAN CHEREMNYKH	133	2017 (remanufactured)	6
MGK-catamaran *	2.5	2013	2
MGK-catamaran	2.5	2013	2
MGK-catamaran	2.5	2014	2
MGK-catamaran	2.5	2014	2
MGK-catamaran	2.5	2014	2
* Temporarily detained in the occupied territory.			

## 2. Surveys

### a. *Coverage of new surveys*

Within Ukrainian zone of responsibility the SHSU routinely performs hydrographic surveys in the water areas of commercial ports, approaches to ports, places of anchorage and areas of high-density vessel traffic.

The hydrographic surveys at scales of 1:5 000 and 1:1 000 were performed in 2017 in the water areas of Buzko-Dniprovsko-Lymanskyi channel, Khersonskyi sea channel, Spaskyi channel, sea approach channel to Bystre Mouth, water areas, anchorages and approach channels to the sea ports of Odesa, Chornomorsk (also, the fishing port), Mykolaiv (also, the river port), Yuzhnyi, Khersonskyi, Dnipro-Buzkyi, Bilhorod-Dnistrovskyi, Ochakiv port, as well as the Olviia Stevedoring Company.

Since March 2014 the State Hydrographic Service of Ukraine has not carried out hydrographic surveys in water areas and approaches to the Crimean ports, inland waterways and territorial sea of Ukraine in the vicinity of the Crimean Peninsula, due to occupation and annexation of the Autonomous Republic of Crimea by the Russian Federation. Consequently, the depths in these areas can be different from those specified on charts.

For reissuing of nautical navigational and inland charts and preparation for issuing of the ENC cells in compliance with the IHO standards, during the years 2016-2017 it was carried out the hydrographic surveys:

- in the coastal water areas on approaches to the sea ports of Yuzhnyi and Odesa;
- in the coastal water areas near the Bystre Mouth and the Danube delta;
- in the north-western part of the Black Sea southwestward from the Tendrivska Beak Island within limits of the cell No.UA4CC814;
- on approaches to the Traffic Separation Scheme No. 2 (approaches to the ports of Chornomorsk, Odesa and Yuzhnyi) and in the water area of the recommended routes Nos. 44, 60;
- in the fairway of the Ukrainian part of the Danube river from the Reni port to the mouth (Kiliiske Mouth);
- in sections with the most critical depths of the Pivdennyi Buh River from Voznesensk to Mykolaiv;
- in the navigable pass of the Dnipro river, in sections with the most critical depths from the mouth to Kaniv.

The State Hydrographic Service of Ukraine routinely fulfils examination of sunken wrecks and other navigational dangers. The information about detected dangers and changes in navigational conditions is disseminated in the coastal warnings and in the Ukrainian Notices to Mariners.

### b. *New technologies and/or equipment*

In 2015-2017 it was put to use 4 new multi-beam echosounder systems to meet the needs in hydrographic surveying of the coastal waters of Ukraine, port water areas, navigable waterways and areas with minimum depths.



The hydrographic surveying and data processing are fulfilled using the HYPACK and HYSWEEP software.

In 2016 the SHSU has put into operation the StrataBox bottom profiler and G-882SX marine magnetometer.



Small surveying catamaran (MGK-catamaran *Гідрограф-2*) with the multibeam echosounder system installed in 2016



Big surveying vessel *A.Lysenko* with the multibeam system installed in 2016

*c. New ships*

Surveying vessel *Kapitan Cheremnykh*

*d. Problems encountered*

The State Hydrographic Service of Ukraine is not able to carry out hydrographic surveys in the area of the Crimean Peninsula due to obstacles described above in paragraph 1(a).

**3. New Charts & Updates***a. ENC's*

36 updated ENC's since July 2017.

1 new ENC since July 2017.

25 new ENC cells since July 2017.

ENC schemes are included to Annex B.

№	Usage Band	Released ENC Cells	Target	Coverage %
1.	Overview	2	2	100.00%
2.	General	6	6	100.00%
3.	Coastal	32	32	100.00%
4.	Approach	37	37	100.00%
5.	Harbour	25	61	40.98%
6.	Berthing	-	21	0%

*b. ENC distribution method*

Distribution Agreements with PRIMAR and UKHO.

*c. RNC's*

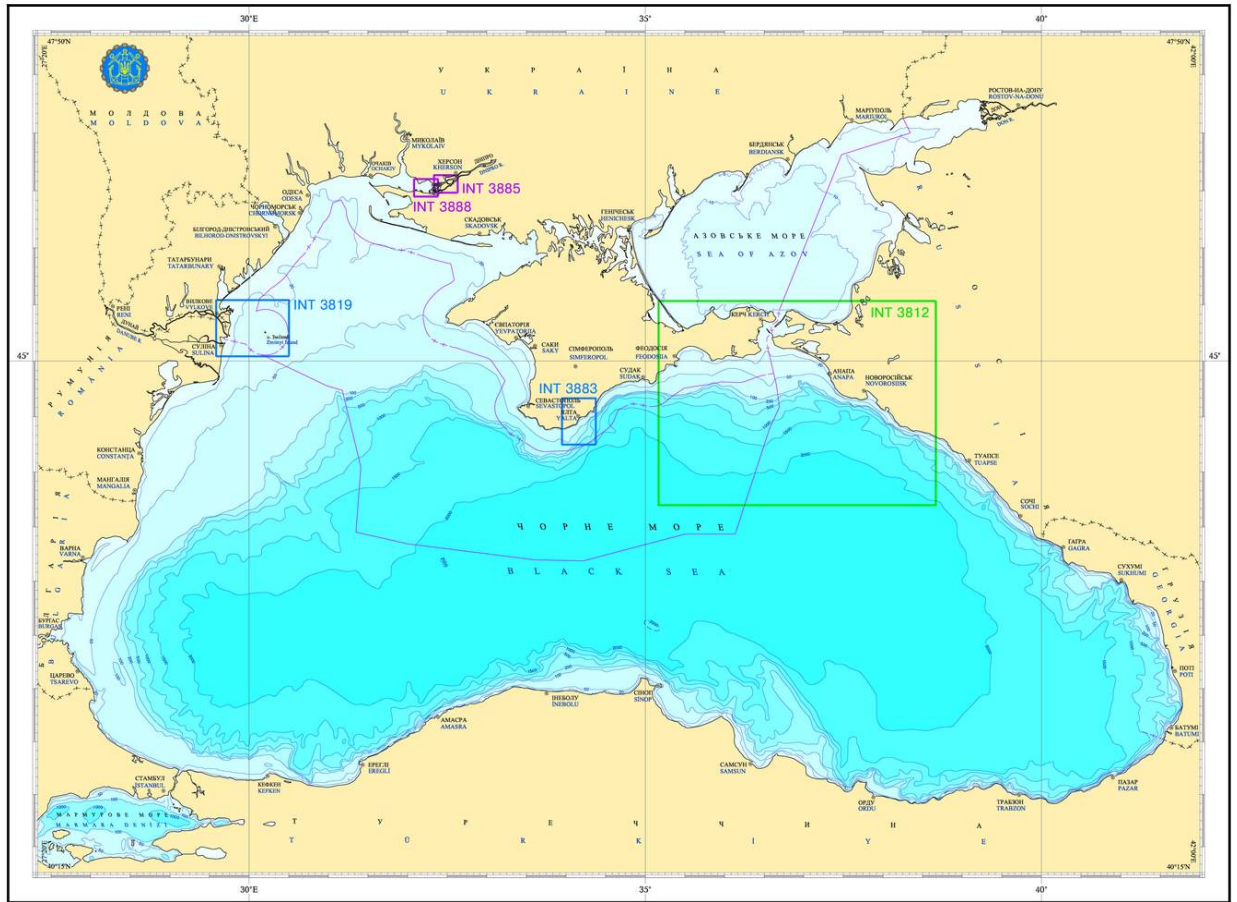
The SHSU does not produce RNCs.

*d. INT Charts*

Updated:

3228	INT3812	UA	300 000	Illi Cape to Vulcan Bay
3410	INT 3883	UA	50 000	Simeiz to Hurzuf
3439	INT 3819	UA	75 000	Approaches to Zmiinyi Island and Bystre Mouth
3506	INT 3888	UA	25 000	Stanislav Cape to Kizomys Settlement
3507	INT 3885	UA	25 000	Kizomys Settlement to Kherson Port





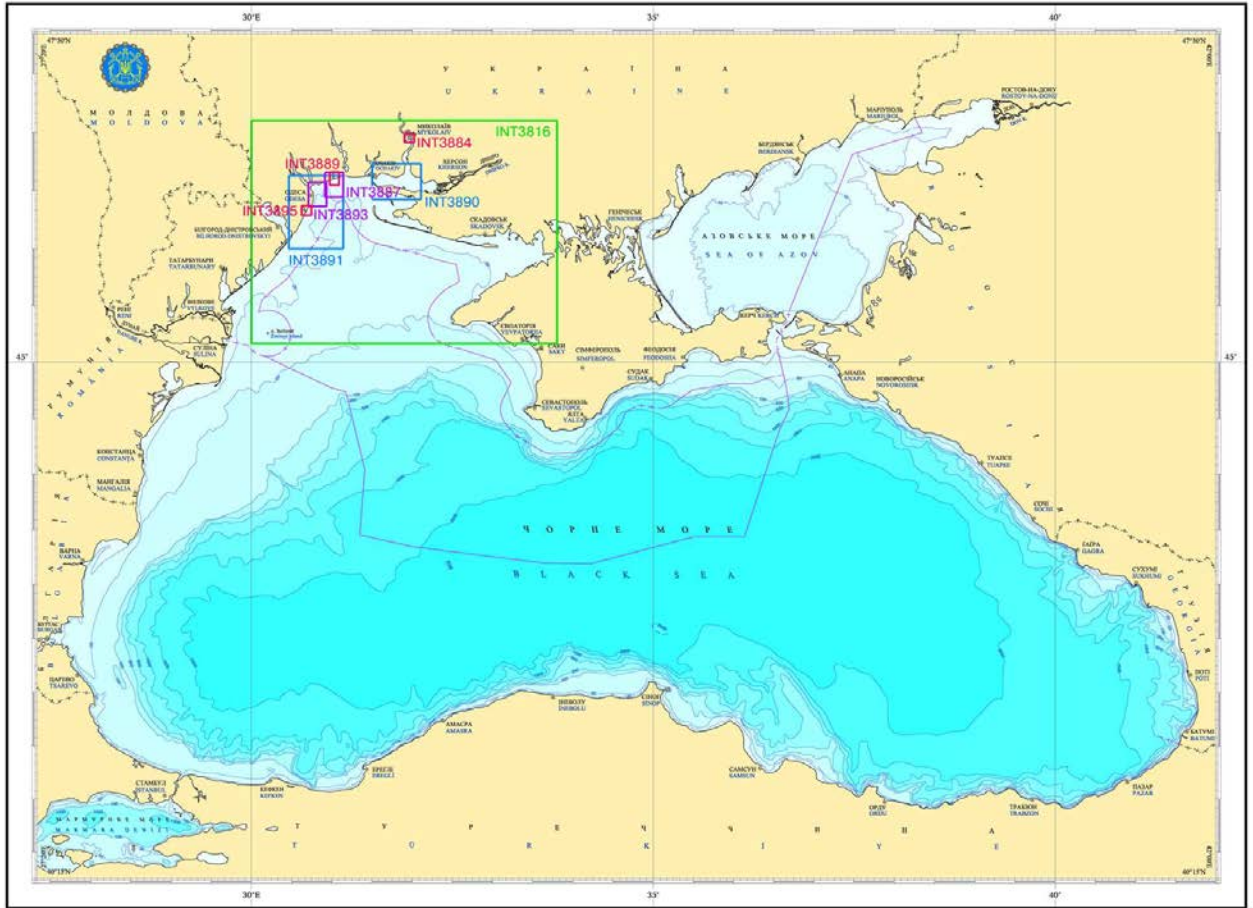
INT charts updated in 2017

Approved by the Region F Coordinator and being prepared for issue in 2018:

3405	INT 3890	UA	50 000	Ochakiv to Pivdennyi Buh River
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It has been scheduled work on the following INT charts to be updated in 2018:

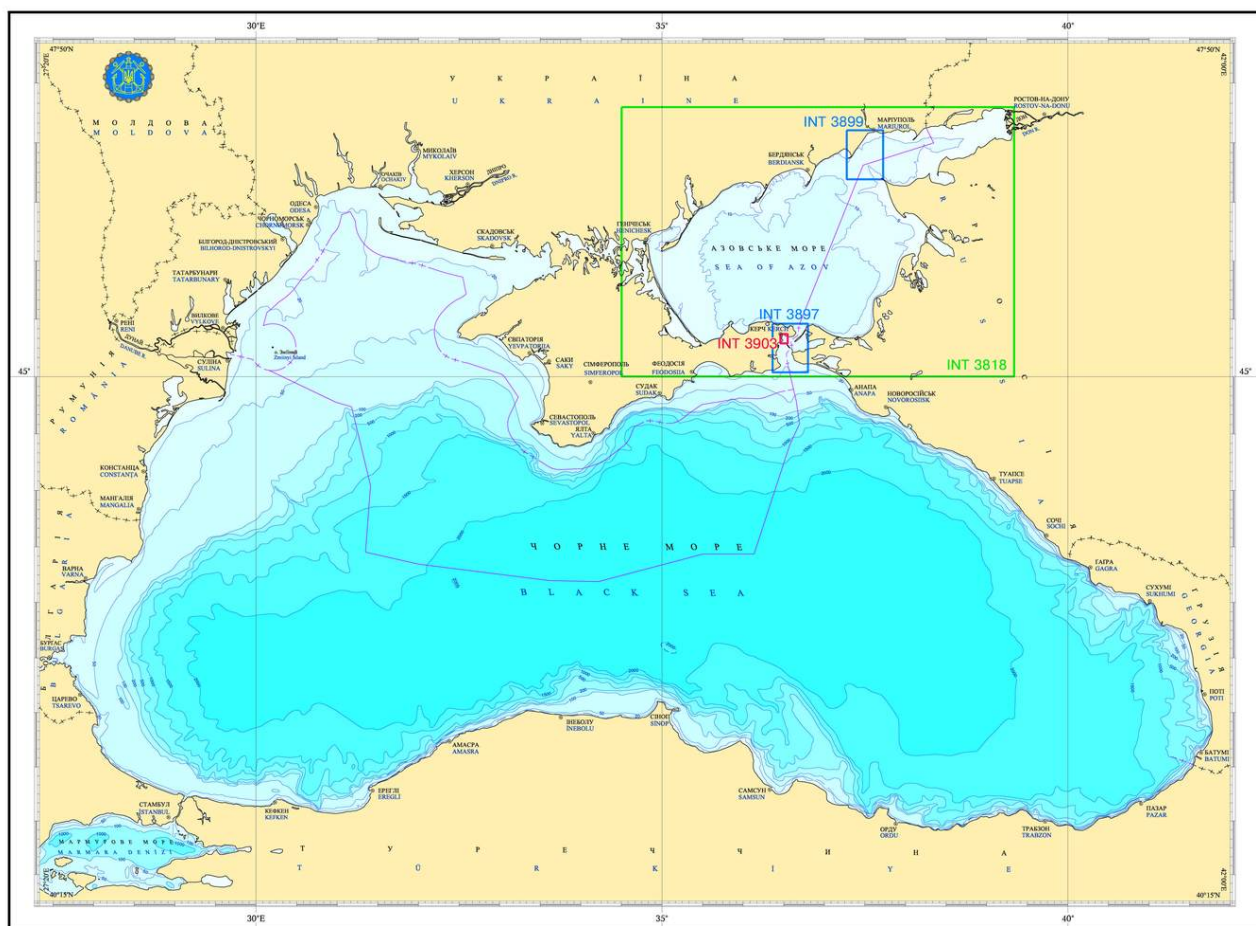
- № 3226 INT3816 "Zmiinyi Island to Tarkhankut Cape", 1:300 000
- № 3615 INT3884 "Mykolaiv Port", 1:10 000
- № 3407 INT3891 "Approaches to Odesa, Chornomorsk and Yuzhnyi Ports", 1:75 000
- № 3502 INT3887 "Approaches to Yuzhnyi Port", 1:25 000
- № 3503 INT3893 "Approaches to Odesa Port", 1:25 000
- № 3605 INT3889 "Yuzhnyi Port", 1:12 500
- № 3606 INT3895 "Chornomorsk Port with approaches", 1:10 000



INT charts to be updated in 2018

4 more INT charts have been under consideration of the Region F Coordinator:

3417	3897	UA	50 000	Kerchenska Strait
3421	3899	UA	50 000	Approaches to Mariupol Port
3632	3903	UA	10 000	Kerch Port
3229	3818	UA	350 000	Sea of Azov



INT charts being under consideration of the Region F Coordinator

*e. National paper charts*

24 paper charts of the national portfolio have been updated since July 2017.

*f. Other charts, e.g. for leisure craft*

- No. 3002 'Protected Areas and Objects in Ukrainian Waters of the Black Sea and the Sea of Azov';
- No. 3003 'World Time Zones Chart';
- Album of Nautical Charts 'Odesa to Bosphorus Strait. Navigational and Hydrographic Overview'.

An archive of the Ukrainian NtMs issued in Ukrainian and English is available on the SHSU web-site in the section *Cartographic Safety*, > *Notices to Mariners* > *Ukrainian NtM Database* ([http://charts.gov.ua/pm\\_arhive\\_en.htm/](http://charts.gov.ua/pm_arhive_en.htm/))

#### **4. New publications & updates**

*a. New publications*

- 'Oceanography'
- 'Cartographic Support for Navigation'
- 'Navigational Support of Sailing'
- 'Nautical Hydrography'
- 'Navigational Hydrometeorology' (in Russian language).

*b. Updated publications*

Re-issued:

- No. 910 'List of Current Temporary and Preliminary Notices to Mariners of the State Hydrographic Service of Ukraine' (2018).

*c. Means of delivery, e.g. paper, digital*

Publications are delivered in paper form.

Notices to Mariners are provided on the users' requests either in paper or in digital form.

The technology "Print-on-Demand" has been implemented for production, maintenance and dissemination among users of paper navigational nautical charts from national portfolio.

## **5. MSI**

*a. Existing infrastructure for transmission*

General supervision over MSI dissemination has been fulfilled by the National Coordinator – the State Hydrographic Service of Ukraine, through its Centre for Navigational and Hydrographic Information operating in Kyiv. Informing mariners on changes in navigational conditions and regime of navigation in the sea area of Ukraine is carried out by means of:

- broadcasting of coastal warnings in English via NAVTEX at frequencies 518 and 490 kHz;
- broadcasting of coastal warnings in English and Russian via radiotelephone at frequency 2650 kHz;
- transmission to ship-owners and mariners via Internet of daily Bulletins of the latest navigational information including: texts of coastal warnings for the past 24 hours, current coastal warnings and NAVAREA III navigational warnings for 031 region (the Black Sea and the Sea of Azov), 24-hour weather forecast, ice conditions, storm warnings for the past 24 hours, as well as other information concerning safety of navigation;
- dissemination of Notices to Mariners.

Coastal warnings (navigational information) in NAVTEX mode are transmitted by Odesa-NAVTEX and Berdiansk-NAVTEX stations.

Coastal warnings are transmitted on schedule only for their operative range, while *vital* and *important* coastal warnings (including information about distresses, drifting mines and storm warnings) are transmitted out of schedule.

The Maritime Safety Information is posted on the SHSU web-site. Current coastal warnings are available on the SHSU web-site in the MSI section: <http://hydro.gov.ua/msi/msiENG.php>.

427 coastal warnings were issued, 2529 meteorological warnings (weather forecasts, storm and ice warnings) were transmitted and 12 messages were forwarded to the NAVAREA Coordinator in 2017.

Operational point of contact for Ukraine's National Coordinator within NAVAREA:

COUNTRY	TELEPHONE	FACSIMILE	EMAIL
UKRAINE	+380 44 292 41 20 +380 50 411 84 73	+380 44 292 41 20	<a href="mailto:navtex@ukr.net">navtex@ukr.net</a> <a href="mailto:navtexukr@gmail.com">navtexukr@gmail.com</a> <a href="mailto:navigation@hydro.gov.ua">navigation@hydro.gov.ua</a> Web: <a href="http://hydro.gov.ua">http://hydro.gov.ua</a>

NAVTEX Coverage:

Country	NAVTEX Stations	Telephone	Fax	Email	Status
UKRAINE	Berdiansk [G] [U]	+380 50 411 20 13 +380 6153 372 29	+38 0629 40 78 58	<a href="mailto:mayak1878@gmail.com">mayak1878@gmail.com</a>	operational
	Odesa [C] [X]	+380 48 746 84 81 +380 48 746 80 87 +380 50 490 15 47	+380 48 773 18 72	<a href="mailto:cngi@hydro.od.ua">cngi@hydro.od.ua</a>	operational

Nation/Area	Service MSI		GMDSS	
Ukraine	a. Local warnings b. Coastal warnings c. Navarea warnings d. Information about ports	Yes Yes Yes Yes	a. Master plan b. A1 Area c. A2 Area d. A3 Area e. NAVTEX f. SafetyNET	Yes Yes Yes No Yes No

Currently there are 3 independent AIS networks in Ukraine:

- SHSU - 15 stations;
- Delta-Pilot Branch within State Enterprise «Ukrainian Sea Ports Authority» - 10 stations;
- Maritime Search and Rescue Service within State Enterprise «Ukrainian Sea Ports Authority» - 3 stations.

Implementation of the automated system for navigational situation monitoring in Ukrainian waters has allowed to the State Hydrographic Service of Ukraine to complete the following tasks:

- to broadcast differential corrections from Differential Reference Stations via AIS channels;
- to broadcast vital NAVTEX navigational warning, distress and disasters alerts and storm warnings via AIS channels;
- to use AIS as AtoN.

*b. New infrastructure in accordance with GMDSS Master Plan*

NtR

*c. Problems encountered*

NtR

*d. Problems encountered*



NtR

## 6. C-55 latest update (Tables)

The table below describes the hydrographic surveys for the depth ranges 0-200m and > 200m (---) out to the limits of Exclusive Economic Zone:

Nation/ Area	A	B	C	Amplifying notes including significant gaps in coverage
<b>Ukraine</b>	75%/100%	25%/0%	0%/0%	High-priority tasks: a. Regional routes: water areas of sea ports and their approach channels, in particular in the north-western part of the Black Sea, Kerchenska Strait and approaches to it. b. Inland waterways routes: surveys for inland charts of the Dnipro, Danube and Pivdennyi Buh rivers.

In accordance with the IHO C-55 Annex B, the latest update on the status of Ukrainian charts portfolio coverage in Ukrainian zone of responsibility in the International Charting Region F is as follows:

Nation/Area	Offshore passage/ Small			Landfall and Coastal passage/ Medium			Approaches and ports/ Large			Amplifying notes
	A	B	C	A	B	C	A	B	C	
<b>Ukraine</b>	100%	-	100%	100%	-	100%	100%	-	99%	Ukraine does not produce RNCs. A number of large-scale charts needs to be updated.

## 7. Capacity Building

### a. *Offer of and/or demand for Capacity Building*

According to the Standards of Competence for Hydrographic Surveyors (M-5 IHO Publication) the SHSU has implemented the program of training and advanced training for hydrographic surveyors using facilities of the Odesa Maritime Academy. However, the State Hydrographic Service of Ukraine has been constantly looking for supplementary ways of its personnel training, such as visiting by our hydrographic surveyors various specialized courses under the auspices of the International Hydrographic Organization.

### b. *Training received, needed, offered*

During the period from 26 June to 15 December 2017, two SHSU employees (1 cartographer and 1 hydrographic surveyor) have taken part at the theme-focused training course 'Hydrography for Charting and Disaster Management (Internationally Accredited Category B)', which took place in Japan and was organized by the Japan International Cooperation Agency (JICA).

From 4 September to 15 December 2017, our nautical cartographer has participated at the 9<sup>th</sup> training course in Marine Cartography and Data Assessment (Internationally Accredited Category B), which was organized by the IHO and funded by the Nippon Foundation and took place in the United Kingdom Hydrographic Office in Taunton.

The HYPACK training seminar on hydrographic survey software took place in Odesa in November 2017. The seminar was presented by the engineering staff of HYPACK Inc. at the Odesa Maritime Academy.

2 hydrographic surveyors took part at the Multibeam Echosounder and Side Scan Sonar Systems Workshop that was organized by the International Hydrographic Organization and the Turkish Navy Office of Navigation, Hydrography and Oceanography in Istanbul, Turkey, in 2016.

*c. Status of national, bilateral, multilateral or regional development projects with hydrographic component (in progress, planned, under evaluation or study):*

To date the SHSU has concluded the agreement on exchange of navigational information with the United Kingdom Hydrographic Office. For the purpose of the ENC's distribution, the agreements have been signed with PRIMAR, C-MAP Italy S.r.l., Navionics S.r.l., Tresco Ltd, Periskal CVBA, Transas Marine and Garmin companies.

*d. Definition of bids to IHO CBC*

The State Hydrographic Service of Ukraine is in want of training its personnel through participation at the following courses/workshops/seminars:

Short courses:

- Port and Shallow Water Survey Course;
- Hydrographic Data Management;
- Advanced ENC and ENC Production;
- ENC Validation;
- S-100 and Product Specifications;
- Cartographic Data Management;
- Law of the Sea Workshop.

Long courses:

- Category “B” Hydrographic Programme;
- Category “B” Nautical Cartography Programme.

## **8. Oceanographic Activities**

*a. General*

The SHSU uses a data buoy with the purpose of monitoring of meteorological and oceanographic findings aimed to safety of navigation support in approaches to the ports of Odesa, Chornomorsk and Yuzhnyi.



Measurements of currents direction and velocity, as well as the water hydrological structure have been taken at several sea ranges that are located in the north-western part of the Black Sea along the Ukraine's coastal line and in the area of the Danube mouth.

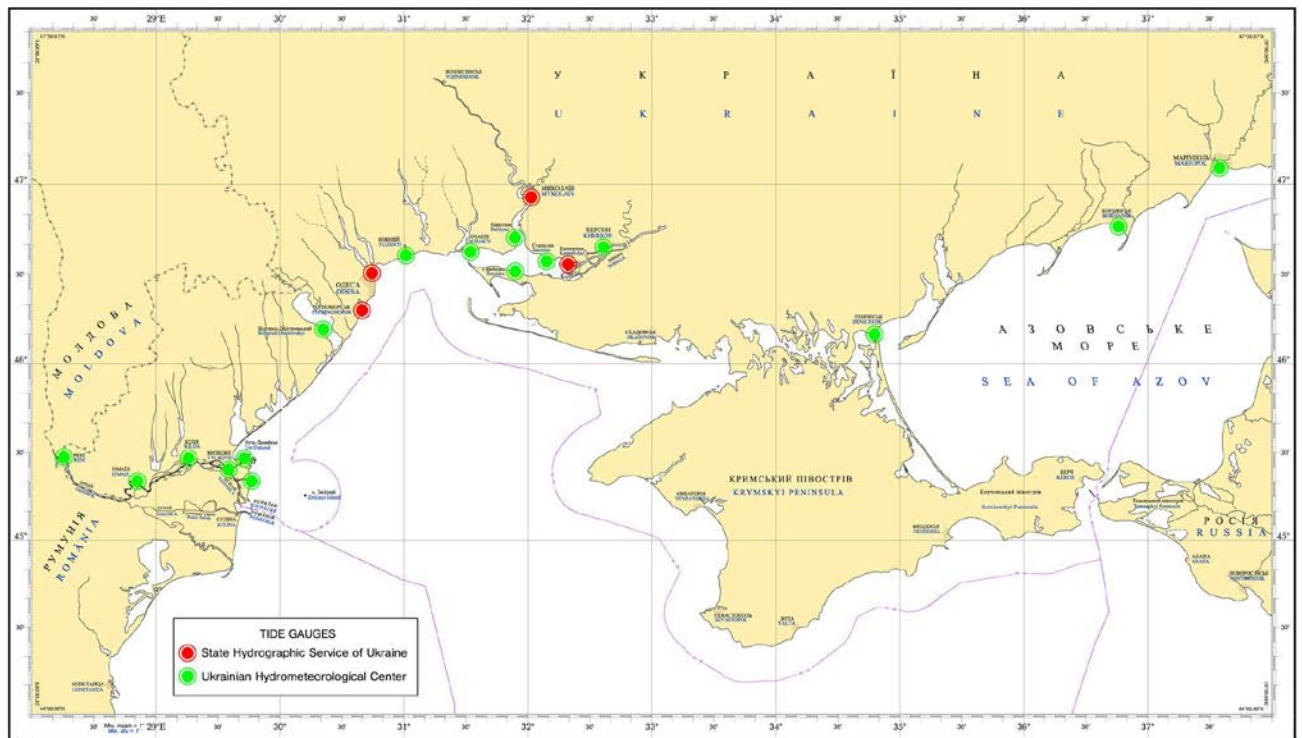
*b. GEBCO/IBC's activities*

NtR

*c. Tide gauge network*

It has been put in use the automatic tide gauges designed for continuous monitoring of sea level on the coast of the Black Sea in 2016.

SHSU uses hydrological probes for performance of oceanographic researches.



*d. New equipment*

Valeport Model 106 current meters  
 CTD profiler (hydrological probe) MIDAS CTD+  
 Valeport TideMaster-D automatic tide gauges.



MIDAS CTD+ profiler

*e. Problems encountered*

NtR

**9. Other activities**

*a. Participation in IHO Working Groups*

The employees of the State Hydrographic Service of Ukraine take part in the activities within MBSHC and BASWG.

*b. Meteorological data collection*

There is a formal agreement between the State Hydrographic Service of Ukraine and the Ukrainian Hydrometeorological Center of the State Emergency Service of Ukraine (UkrHMC) covering the issues of usage of meteorological and hydrological information for the Black and Azov Seas and inland waterways.

Using the data buoy, the SHSU collects meteorological data (air temperature, atmospheric pressure, wind velocity and direction, visibility) in approaches to the ports of Odesa, Chornomorsk and Yuzhnyi.

*c. Geospatial studies*

NtR

*d. Disaster prevention*

NtR

*e. Environmental protection*

NtR

*f. Astronomical observations*

NtR

*g. Magnetic/Gravity surveys*

NtR

*h. MSDI Progress*

NtR

*i. Overlapping issues: national ENC's*

Ukraine adheres to the territorial principle in the issue of official ENC's. Therefore, in order to harmonize coverage by official electronic charts of Ukrainian zone of jurisdiction, the SHSU is developing a system of ENC cells from the 1st to the 6th usage bands within its own zone of jurisdiction in the Black and Azov Seas.

The zone of Ukrainian jurisdiction is limited by: the line of the continental shelf border and the exclusive maritime economic zone (with Turkey and with Romania); the line established by the domestic legislative acts (with the Russian Federation).

Such norm is stipulated by the valid national legislation, therefore the SHSU being a state institution must abide by it.

In addition, subject to the IHO S-65 Publication, section «The Hydrographic Office Responsibilities for Producing ENC's Publication», the hydrographic offices must bear responsibility for digital data and its subsequent updating for waters of national jurisdiction.

Compliance with this principle by all the Black Sea states could ensure a good progress in reduction and complete avoidance of the ENC overlaps between producing countries.

As to the overlaps between Ukrainian ENC's, it should be stated that Ukraine has implemented a system of ENC cells of the 1st, 2nd, 3rd, 4th and 5th usage bands (102 cells in total). Thus the implementation of ENC cells of the 5th (during 2018) and 6th (during 2019) usage bands will eliminate any overlapping between Ukrainian ENC's.

*j. Risk evaluation in relation to national ENC's overlapping*

The MBSHC MSs should have provided their own qualification of the risk level based on their own appreciation of navigational criticality till the 20<sup>th</sup> MBSHC conference, in accordance with the ICC3/06 action approved by the 3rd Region F ICCWG meeting.

The table below shows the evaluation of navigational criticality by Ukraine:

RENC Membership	ENC1	ENC2	Usage Band	IC-ENC Overall Severity of Risk	UKR appreciation of navigational criticality	Comment

PRIMAR - IC-ENC	UA1F0005	IT100350	1	LOW	LOW	
PRIMAR - IC-ENC	UA1F0005	TR100010	1	LOW	MEDIUM	
PRIMAR - IC-ENC	UA1F0006	IT100350	1	LOW	LOW	
PRIMAR - IC-ENC	UA1F0006	TR100010	1	LOW	MEDIUM	
PRIMAR - IC-ENC	UA2BD008	GB202232	2	LOW	LOW	min. overlap less than 1m
PRIMAR - IC-ENC	UA2BD009	RU2M2LB0	2	LOW	LOW	
PRIMAR - IC-ENC	UA2BD010	RU2M2LB0	2	LOW	LOW	
PRIMAR - IC-ENC	UA2BE009	RU2M2LB0	2	LOW	LOW	
PRIMAR - IC-ENC	UA2BE009	TR200012	2	LOW	LOW	
PRIMAR - IC-ENC	UA2BE010	RU2M2LB0	2	LOW	MEDIUM	full cover of UA Cell
PRIMAR - IC-ENC	UA3AD368	RU3MFLJ0	3	LOW	MEDIUM	full cover of UA Cell navigable area
PRIMAR - IC-ENC	UA3AD369	RU3MFLJ0	3	LOW	MEDIUM	full cover of UA Cell navigable area
PRIMAR - IC-ENC	UA3AD397	RU3MFLJ0	3	MEDIUM	LOW	overlap is more than 50%
PRIMAR - IC-ENC	UA3AD398	RU3MFLJ0	3	MEDIUM	MEDIUM	full cover of UA Cell
PRIMAR - IC-ENC	UA3AD399	RU3MFLJ0	3	LOW	MEDIUM	full cover of UA Cell
PRIMAR - IC-ENC	UA3AD424	RU3MBLB0	3	ACCEPT	ACCEPT	low land overlap
PRIMAR - IC-ENC	UA3AD425	RU3MBLB0	3	ACCEPT	ACCEPT	low land overlap
PRIMAR - IC-ENC	UA3AD426	RU3MBLB0	3	LOW	LOW	
PRIMAR - IC-ENC	UA3AD426	RU3MBLJ0	3	LOW	LOW	min. overlap 130m
PRIMAR - IC-ENC	UA3AD427	RU3MBLJ0	3	MEDIUM	MEDIUM	could contain inconsistency
PRIMAR - IC-ENC	UA3AD427	RU3MFLJ0	3	MEDIUM	MEDIUM	could contain inconsistency
PRIMAR - IC-ENC	UA3AD454	RU3MBLB0	3	LOW	LOW	min. overlap 130m
PRIMAR - IC-ENC	UA3AD455	RU3MBLB0	3	MEDIUM	MEDIUM	full cover of UA Cell
PRIMAR - IC-ENC	UA3AD456	RU3MBLB0	3	MEDIUM	MEDIUM	cover 95% of UA Cell
PRIMAR - IC-ENC	UA3AD456	RU3MBLJ0	3	LOW	LOW	min. overlap 130m
PRIMAR - IC-ENC	UA3AD457	RU3MBLJ0	3	MEDIUM	MEDIUM	full cover of UA Cell

PRIMAR - IC-ENC	UA3AD484	RU3MBLB0	3	<b>LOW</b>	<b>LOW</b>	min. overlap 130m
PRIMAR - IC-ENC	UA3AD485	RU3MBLB0	3	<b>LOW</b>	<b>LOW</b>	
PRIMAR - IC-ENC	UA3AD486	RU3MBLB0	3	<b>LOW</b>	<b>LOW</b>	
PRIMAR - IC-ENC	UA3AD486	RU3MBLJ0	3	<b>LOW</b>	<b>LOW</b>	min. overlap 130m
PRIMAR - IC-ENC	UA3AD487	RU3MBLJ0	3	<b>LOW</b>	<b>LOW</b>	near 50% overlap
PRIMAR - IC-ENC	UA4CB900	RO405006	4	<b>LOW</b>	<b>LOW</b>	min. overlap 97m
PRIMAR - IC-ENC	UA4CC766	RU4MJLN0	4	<b>LOW</b>	<b>LOW</b>	
PRIMAR - IC-ENC	UA4CC767	RU4MJLN0	4	<b>LOW</b>	<b>MEDIUM</b>	full cover of UA Cell navigable area
PRIMAR - IC-ENC	UA4CC796	RU4MJLN0	4	<b>LOW</b>	<b>LOW</b>	
PRIMAR - IC-ENC	UA4CC797	RU4MJLN0	4	<b>LOW</b>	<b>MEDIUM</b>	full cover of UA Cell
PRIMAR - IC-ENC	UA4CC883	RU4MFLJ0	4	<b>MEDIUM</b>	<b>MEDIUM</b>	could contain inconsistency
PRIMAR - IC-ENC	UA4CC884	RU4MFLJ0	4	<b>MEDIUM</b>	<b>MEDIUM</b>	could contain inconsistency
PRIMAR - IC-ENC	UA5ECM39	RU5MELJ0	5	<b>MEDIUM</b>	<b>MEDIUM</b>	could contain inconsistency

## 10. Conclusions

- 1 In 2016-2017 the State Hydrographic Service of Ukraine has successfully ensured the fulfillment of international obligations of Ukraine as pertaining to aids to navigation and, in particular, in development of aids to navigation system through implementation of new navigational, hydrographical and charting methods, techniques and technologies.
- 2 All SHSU divisions and branches have been supplied with modern watercraft and facilities for hydrographic surveying, GNSS instrumentation for performance of hydrographic surveys in conformity with the IHO standards.
- 3 The high-priority tasks include hydrographic soundings in the areas of recommended and actual vessel traffic routes, harbour waters and approaches to ports, heavy traffic areas and critical shallow waters.
- 4 The important condition for hydrographic surveys is a need in resurveying for the purposes of nautical charts re-edition and/or updating.
- 5 At the same time, due to the Russian Federation's occupation and annexation of the part of Ukrainian territory since March 2014, the State Hydrographic Service of Ukraine has not had access to Ukraine's inland sea waters and territorial sea in the area of the Crimean Peninsula. According to the Law of Ukraine No. 1207-VII 'On Securing the Rights and Freedoms of Citizens and the Legal Regime on the Temporarily Occupied Territory of Ukraine' as of April 15, 2014, these waters have been defined as temporarily occupied territories.

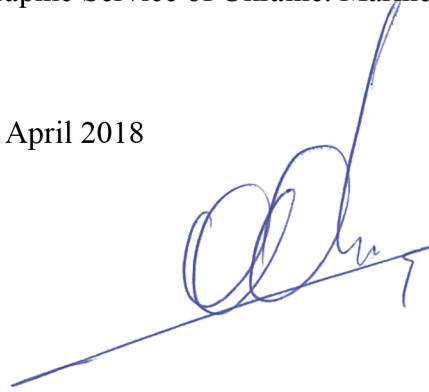
The sea ports of Kerch, Sevastopol, Feodosiia, Yalta, Yevpatoriia will remain closed until the restoration of the constitutional order of Ukraine within the territory of the Autonomous Republic of Crimea and the City of Sevastopol in accordance with the Order of the Ministry of Infrastructure of Ukraine No 255 of June 16, 2014.

However, in order to keep national charts and publications updated and to monitor changes in navigational and hydrographic situation in the area of the Kerchenska Strait and the Autonomous Republic of Crimea, the SHSU arranges remote sensing of the earth surface in the area for the purpose of obtaining modern high-accuracy data.

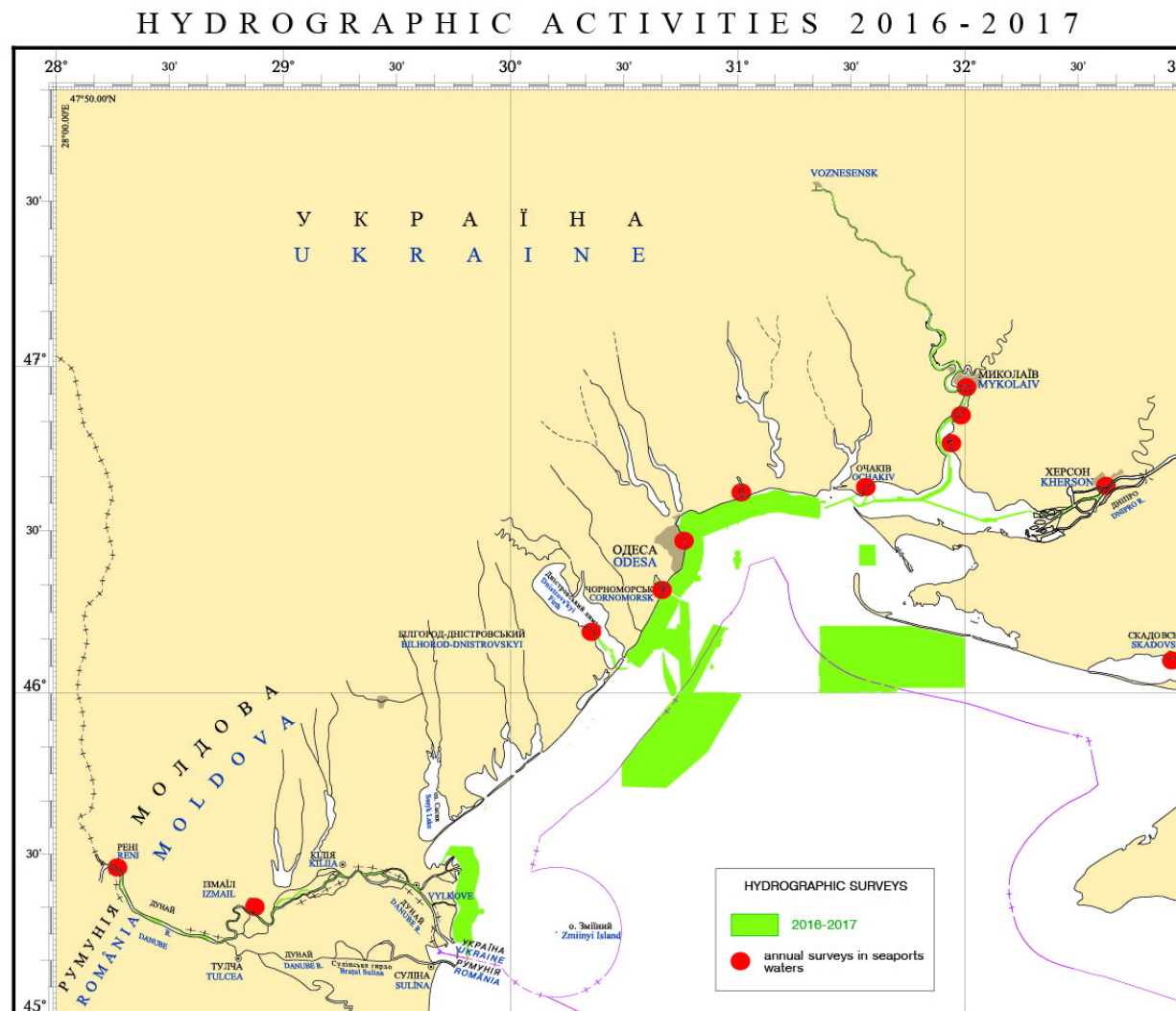
Aids to navigation on the Crimean coast have been temporarily out of control of the State Hydrographic Service of Ukraine. Mariners are requested to exercise caution.

**Date:** 24 April 2018

**Signature:**

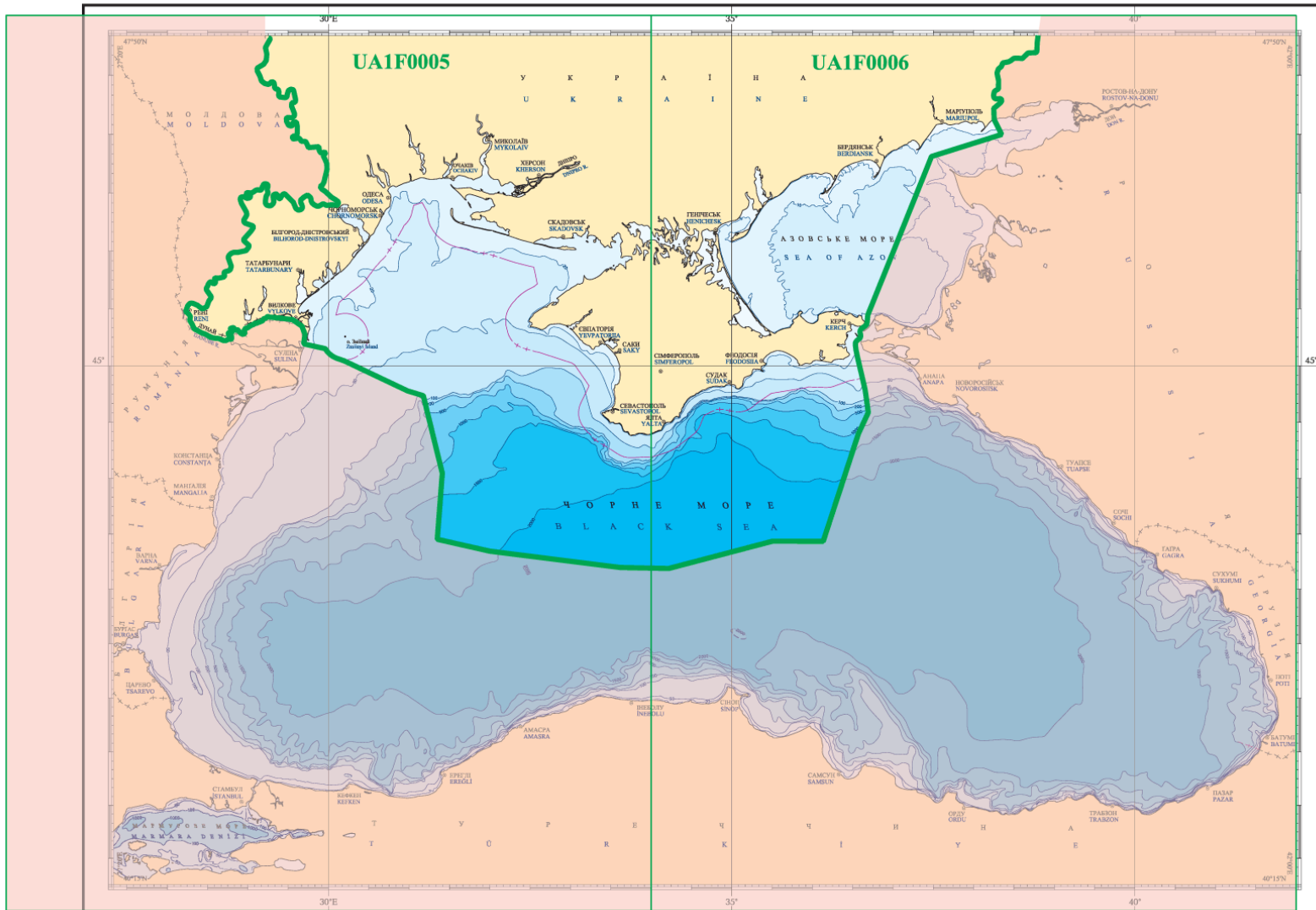
A handwritten signature in blue ink, consisting of several loops and a long vertical stroke, positioned above a horizontal line.

Annex A - Hydrographic Surveys 2016-2017

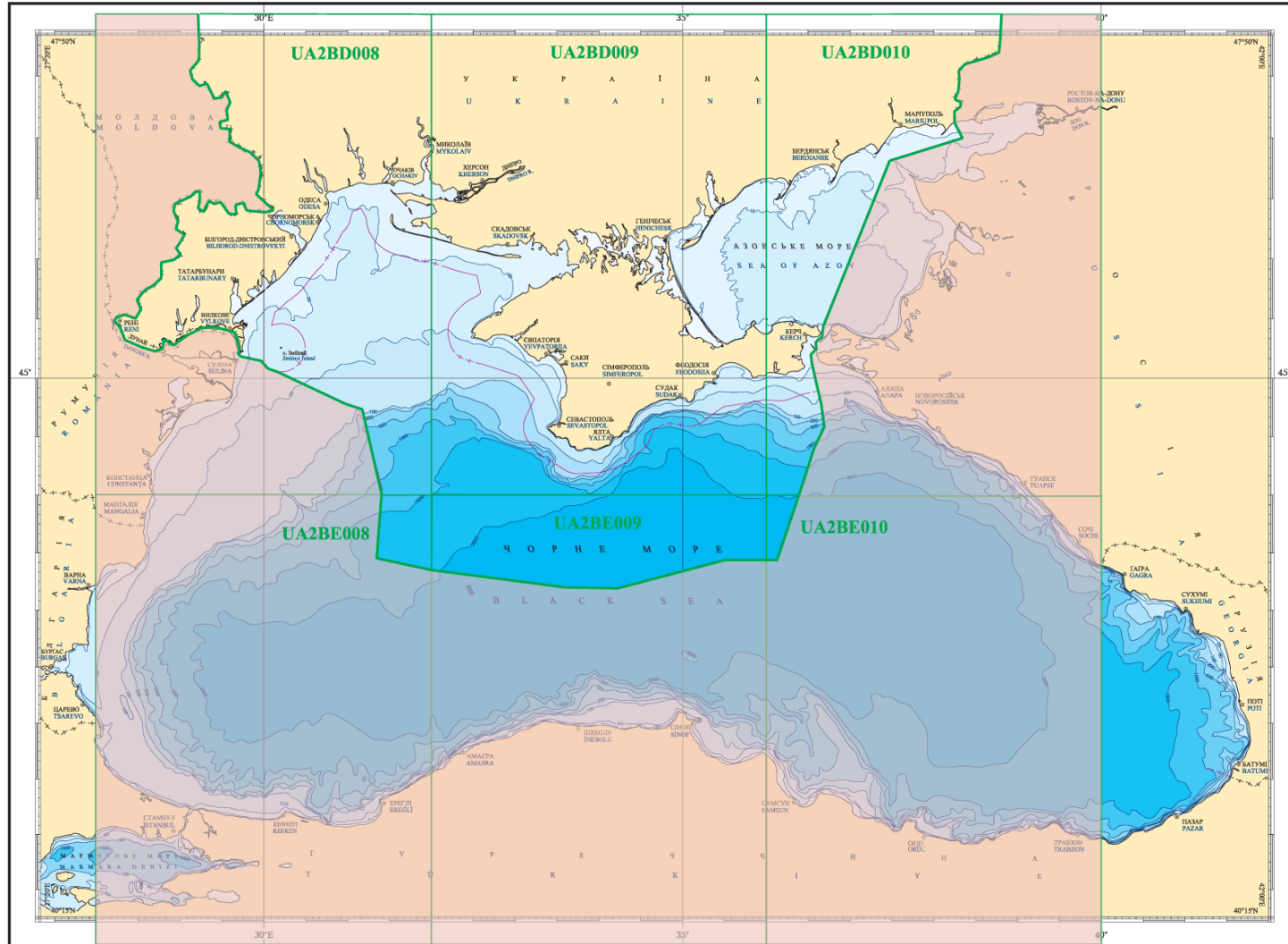




### Usage Band 1 Coverage. Overview



### Usage Band 2 Coverage. General







### Usage Band 5 Coverage. Harbour

