

HELLENIC NAVY HYDROGRAPHIC SERVICE



XVIIIth MEDITERRANEAN AND BLACK SEAS HYDROGRAPHIC COMMISSION

NATIONAL REPORT OF GREECE

Istanbul - Turkey, 25-27 September 2013

1. Hydrographic Service

General

The Hellenic Navy Hydrographic Service (HNHS) is the governmental body of the Hellenic Republic responsible for conducting hydrographic and oceanographic surveys for the benefit of International and National Navigation as well as for the operational needs of the Hellenic Navy. The primary purpose of conducting hydrographic surveys is to produce and update nautical charts and other nautical publications aiming at the safety of human life at sea and the protection of the environment around Greece.

In 10 July 2013 Commodore George Matarangas HN was appointed as the new Director (Hydrographer) of HNHS.

2. Surveys

Coverage of new surveys

During the period 2011-2012, an extensive systematic program of surveys was conducted. The three hydrographic vessels of the HNHS had been working for 375 days on surveying operations. A total area of 2.825 km² has been surveyed, covering national waters in the Aegean and Ionian seas. The operations focused primary on harbors and port approaches due to their importance to the safety of navigation. The main operations are depicted in the attached chart Annex A.

New technologies and / or equipment

NTR

3. New charts and updates

During the last two years the cartographic program of HNHS was further continued with the production of new ENC's, updates and national and international paper charts. More specifically the HNHS cartographic production status is the following:

ENCs

To date 286 ENC's have been released. The ENC's are updated on a monthly basis. The present status of the HNHS ENC production program is shown in the following table:

Usage Band	Number of Cells Planned	Number of Cells Produced	%
1 - Overview	1	1	100%
2 - General	2	2	100%
3 - Coastal	83	83	100%
4 - Approach	32	21	66%
5 - Harbour	45	35	78%
6 - Berthing	169	144	86%

Charts presenting the Usage Bands coverage are attached at Annex B.

ENC distribution method

HNHS is a member of IC-ENC and PRIMAR for the distribution of its ENC's.

International charts

NTR

National ENC's charts

MAP #	Chart #	Title	Scale 1:
411/6	411/6	Rafina Harbour	2500
313/2	313/2A	Oreoi Channel	20000
	313/2A1	Glyfa Bay	5000
	313/2A2	Agiokampos Harbour	5000
	313/2A3	Neos Pyrgos Harbour	5000
	313/2A4	Oreoi Harbour	5000
	313/2B	Agios Serafeim Harbour	5000
	313/2Γ	Kamena vourla Harbour	5000
	313/2Δ	Agios Georgios Bay	5000
	313/2E	Ag. Konstantinos Harbour	5000
	313/2Z	Loutron Aidipsou Port	5000
	313/2H	Arkitsa Harbour	5000
3131	3131	Oreoi Channel to Arkitsa Pt.	50000
	3131A	Achladi Harbour - Factory Terminal	7500
	3131B	Pefki Harbour	5000
415/3	415/3	Kimolos Straits	15000
422/5	422/5	Agios Georgios and Poros Bays	10000
	422/5A	Agios Georgios Harbour	2500
451/4	451/4B	Kos Marina	2500
	451/4A	Kos Harbour	2500
	451/4	Approaches to Kos Harbour and Marina	7500
334/2	334/2	Mesta Bay and Harbour	3000

A diagram of the New Charts is attached at ANNEX C.

National paper charts

Chart Number	Title	Scale 1:	New Edition New Chart
3131	North Evvoikos Gulf Oreoi Channel to Arkitsa Pt	50.000 7.500 5.000	N.C
313/2	Bays and Ports of North Evvoikos Gulf From Oreoi Channel to Arkitsa Pt.	20.000 5.000	N.C
311/2	Approaches Nea Moudania Harbour and Nea Potidaia Canal	15.000 2.500 2.500	N.C

Historical Charts

The Hellenic Navy Hydrographic Service has initiated a project of reproduction of historical charts. The historical charts folio will include important historical maps, which have a excessive value for the Service.

Chart Number	Title	Scale 1:	Edition
6	Evripos Channel , Stenon Nias Entrance Chalkidos Avlis Mpourtzi	5.000	1918
15	Kydoniai (Aivali) and Moschonisoï (Ekatonisoï)	40.000	1925
61	S.E Coast Of Greece Dodecanese Isds	400.000	1946

4. New publications & updates

New publications

Greek Pilot vol. C´ - Greek version - Edition 2011
Greek Pilot vol. D´ - Greek version – Edition 2012
Greek Pilot vol. C´ - English version – Edition 2011

Updated publications

Greek Pilot vol. A´ - Supplement No 8/2013
Greek Pilot vol. B´ - Supplement No 5/2013

All publications are available at HNHS's selling spots or through associated companies/shops.

5. MSI

Existing infrastructure for transmission

HNHS is the National Coordinator (NAVAREA III) for the areas covering Greek and adjacent seas and collects all the relevant Maritime Safety Information (MSI) which ocean-going vessels require for (their) safe navigation. For this purpose, it collects and elaborates all the relevant navigational, meteorological and other safety and urgent information, forming the corresponding NAVTEX bulletins. These bulletins are forwarded, in English and in Greek language, to the three Hellenic NAVTEX Stations (IRAKLEIO – KERKYRA - LIMNOS), for further promulgation.

On 16th September 2009, HNHS National Coordinator authority, as part of the NAVTEX service (GMDSS – Application), informed NAVAREA III Coordinator about its intention to establish a National NAVTEX Service, broadcasting MSI by means of NBDP via our existing NAVTEX stations on International adopted FRQ 490 KHz and 4209,5 KHz using Greek language.

On 14th FEB 2012 HNHS informed NAVAREA III and IMO NAVTEX Coordinating Panel that GREECE announces full operation on NATIONAL NAVTEX Service on FRQ 490 KHz using Greek language from 1st FEB 2012.

In the last two years (2011-2012) a total of 25 Navigational Warnings (NAVHELLEN) were delivered to the NAVAREA III Coordinator for further promulgation.

IRAKLEIO NAVTEX STATION [H] – [Q]

During its operation in 2011 and 2012 a total of 6473 NAVTEX bulletins have been transmitted, containing 1329 Navigational warnings (NAVWARNS), 2932 Meteorological – Forecasts, 891 Meteorological warnings (GALEWARNS) and 34 Search and Rescue messages (SARWARNS).

KERKYRA NAVTEX STATION [K] – [P]

During its operation in 2011-2012 a total of 6115 NAVTEX bulletins have been transmitted, containing 783 Navigational warnings (NAVWARNS), 2932 Meteorological – Forecasts, 735 Meteorological warnings (GALEWARNS) and 35 Search and Rescue messages (SARWARNS).

LIMNOS NAVTEX STATION [L] – [R]

During its operation in 2011 and 2012 a total of 6039 NAVTEX bulletins have been transmitted, containing 708 Navigational warnings (NAVWARNS), 2930 Meteorological – Forecasts, 691 Meteorological warnings (GALEWARNS) and 31 Search and Rescue messages (SARWARNS).

The Hellenic National NAVTEX Service is depicted in Annex D.

6. S-55

The S-55 database is frequently updated for the Greek area of responsibility.

7. Capacity Building

Training received, needed, offered

Domestic training

HNHS personnel have been trained in various ENC construction issues and Quality Control procedures.

Foreign training

One petty Officer attended the course “Hydrographic Data Processing and Marine Cartography including specialism in Electronic Navigational Chart” and one petty officer attended specifically Module 3 (The Electronic Navigational Chart) of the same course, both offered by UKHO within the framework of the IHO Capacity Building Project.

One HNHS officer obtained a Master of Professional Studies in Geospatial information Sciences (G.I.S.), at the University of Maryland At College Park (MD. USA).

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

HNHS has signed bilateral arrangements with the HOs of Cyprus, Georgia, Romania, Germany, Italy, Jordan, Korea, Norway, Russia, Serbia, Slovenia, Tunisia, UK, Ukraine, Bulgaria and USA.

8. Oceanographic Activities

General:

The mission of the HNHS in the area of Oceanography includes conduct of oceanographic surveys in the Hellenic seas and the Eastern Mediterranean Sea embodying the results into relevant studies to support the Greek Navy and other national defense bodies by providing the required data and information for the tactical exploitation of the marine environment. Additionally, its work program includes supplying oceanographic data and conduct of surveys on behalf of third parties both from the private and public sector.

Activities

- Conduct of several oceanographic cruises using the hydrographic/oceanographic vessels of the H.N.H.S. for the assessment of the marine environment including the acquisition of physical and geological data along a network of sampling stations designed for the areas of interest to the Hellenic Navy. All data and information gathered is processed and used to support naval operations in relation to anti-submarine, mine and amphibious warfare.
- Continuous measurement of sea level with tide gauges in a network of 21 permanent stations, located at several Greek ports around the coastline of Aegean and Ionian Seas. Nine stations have been upgraded to transmit sea level and sea surface temperature

data in GSM, while four of them they also provide the sea level in real time mode through the HNHS web page. .

- Prediction of the wave field based on the prevailing wind speeds and directions in a specific area in order to provide the Ministry of Mercantile Marine with information to assess the navigational conditions for specific vessel types in different areas.
- The tidal gauge network is depicted in the attached chart of Annex E.

Other Activities

Participation in IHO Working Groups

HNHS participates in the following IHO Commissions, Committees, Sub-Committees and Working Groups.

Working Groups:

IRCC, HSSC, MBSHC, HCA, WWNWS, CSPCWG, ,LAWG, TSMAD.

Disaster Prevention

Following the decision of IOC/UNESCO to develop a Regional Tsunami Warning Center (RTWC) at the Northeastern Atlantic, Mediterranean and Connected Seas area, Greece has already started working on the creation of a National Tsunami Warning Center (NTWC). A number of National Agencies and Institutions contribute to this effort under the supervision of the Seismological Institute of the National Observatory of Athens.

Environmental Protection

HNHS in cooperation with other national organizations is responsible for the collection of any new mammal observation data in order to update the existed database.

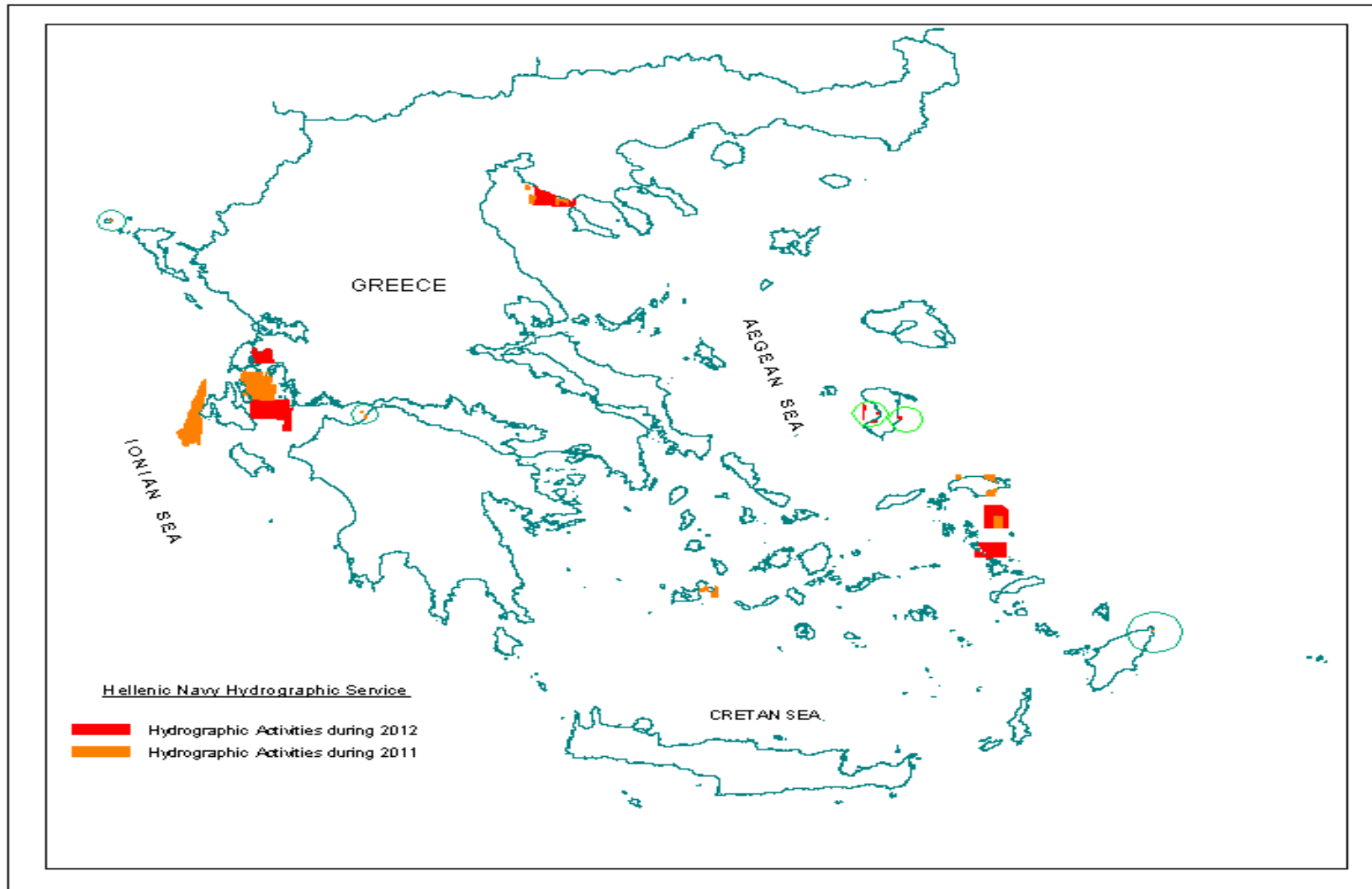
National SDI

HNHS participate in the national SDI of Greece, which was established in 2010 under the Ministry of Environment, contributing with spatial data.

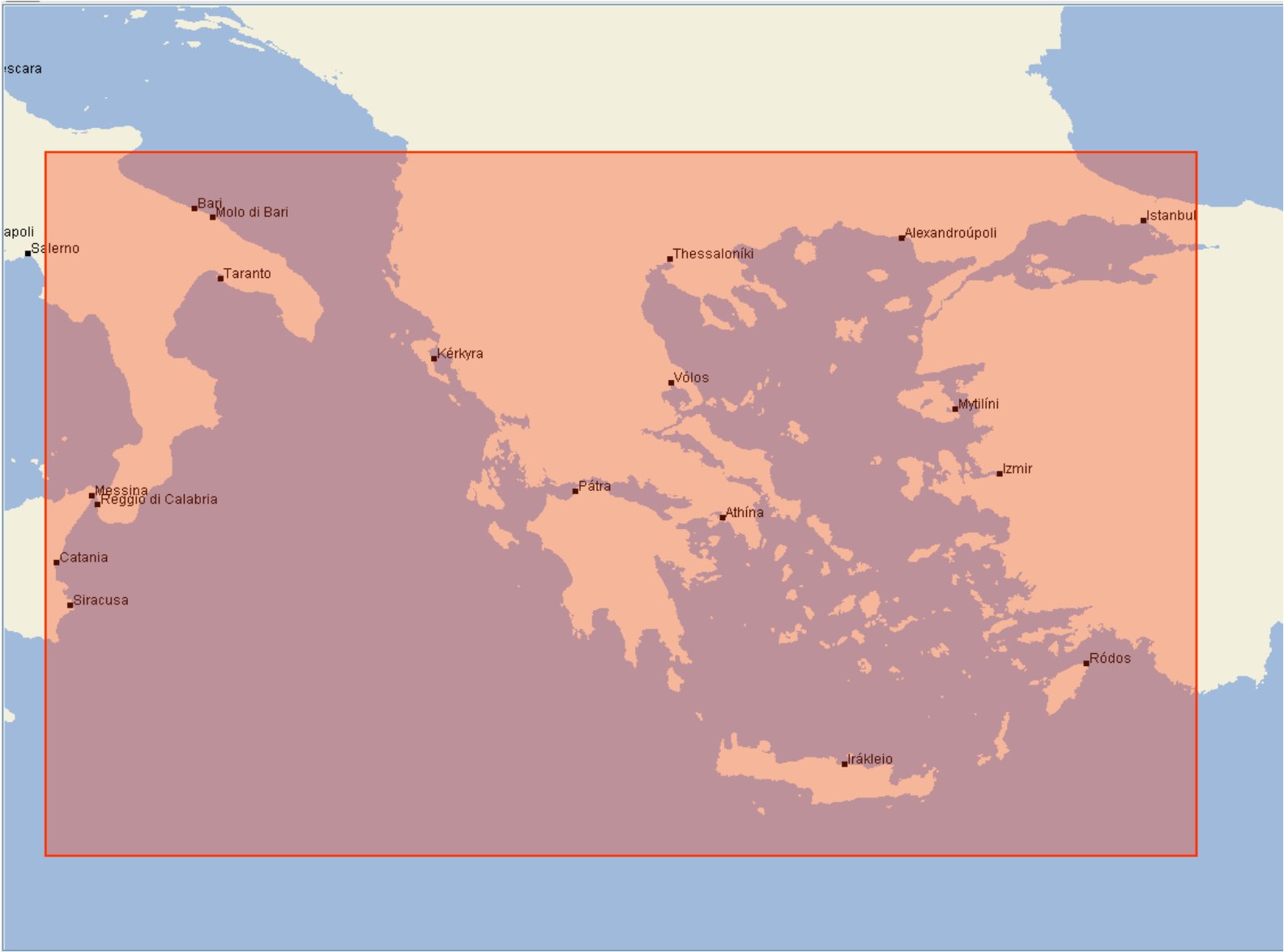
Cooperation with International – National Organizations:

- IOC (Intergovernmental Oceanographic Committee): Providing of Near Real Time Tide Gauge Data from four tide gauge stations (www.ioc-sealevelmonitoring.org/list.php).
- ESEAS (European Sea level Service): Member since 2002. Collaboration of 18 countries which provide sea level related information from different sources (www.es eas.org).
- PSMSL (Permanent Service for Mean Sea Level): Global Data bank for long term sea level change information from tide gauges (www.psmsl.org/data/obtaining/map.html).

- National Organization of Sustainable Development (NOSD):
In collaboration with other National Organisations for accomplishment of adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts, and changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.
- Cooperation with the National Technical University of Athens (NTUA) - Dionysos Satellite Observatory (DSO) and the Institute of Geodynamics-National Observatory of Athens (NOA) in the project 'HELPOS" (Hellenic Plate Observing Systems)
- Cooperation with the National Technical University of Athens (NTUA) – Dionysos Satellite Observatory (DSO) in the project of upgrading the network of Hellenic tide gauges.



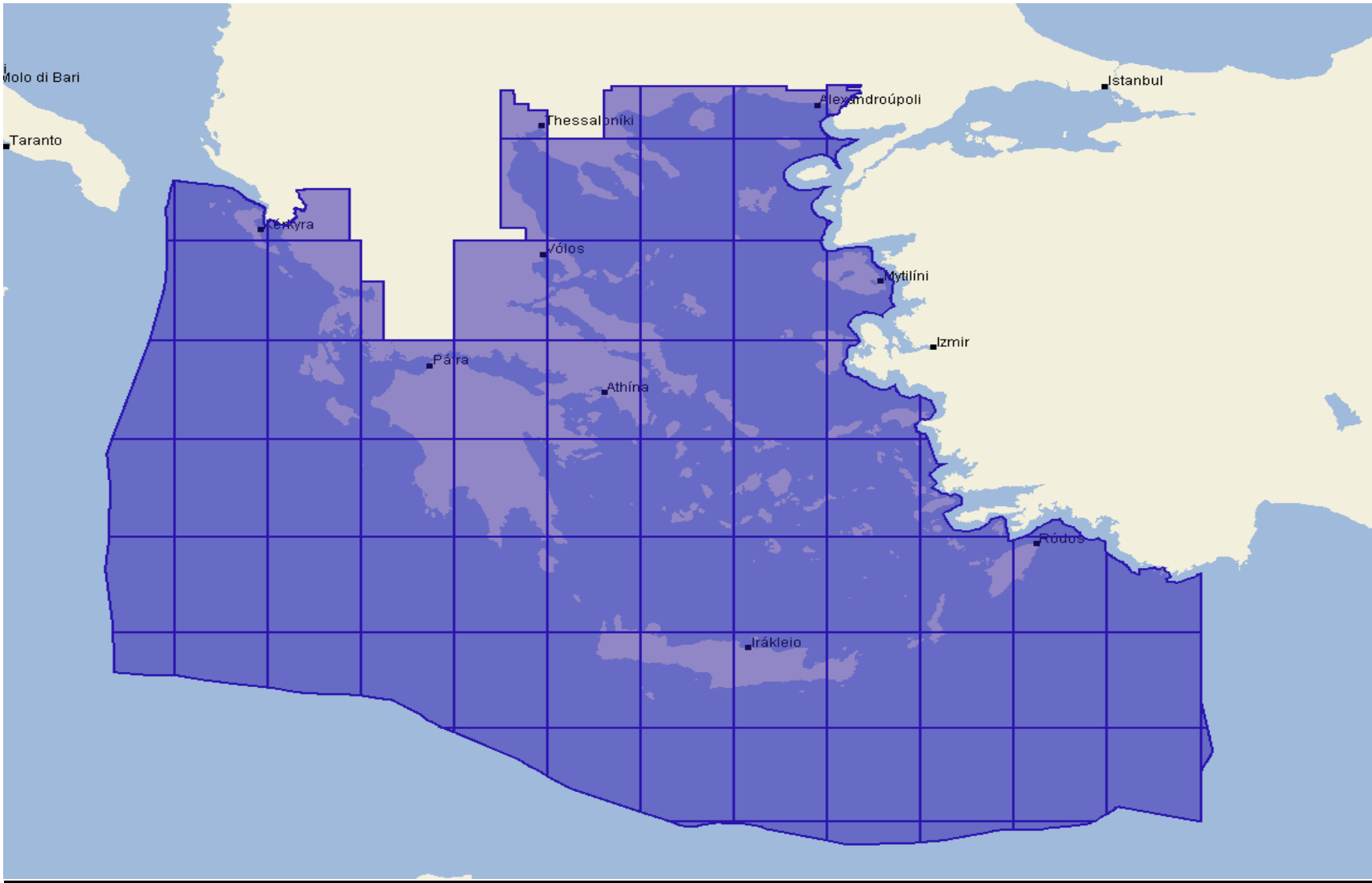
Hydrographic Activities 2011-12



Greek ENC of Usage Band 1 – Overview



Greek ENCs of Usage Band 2 – General



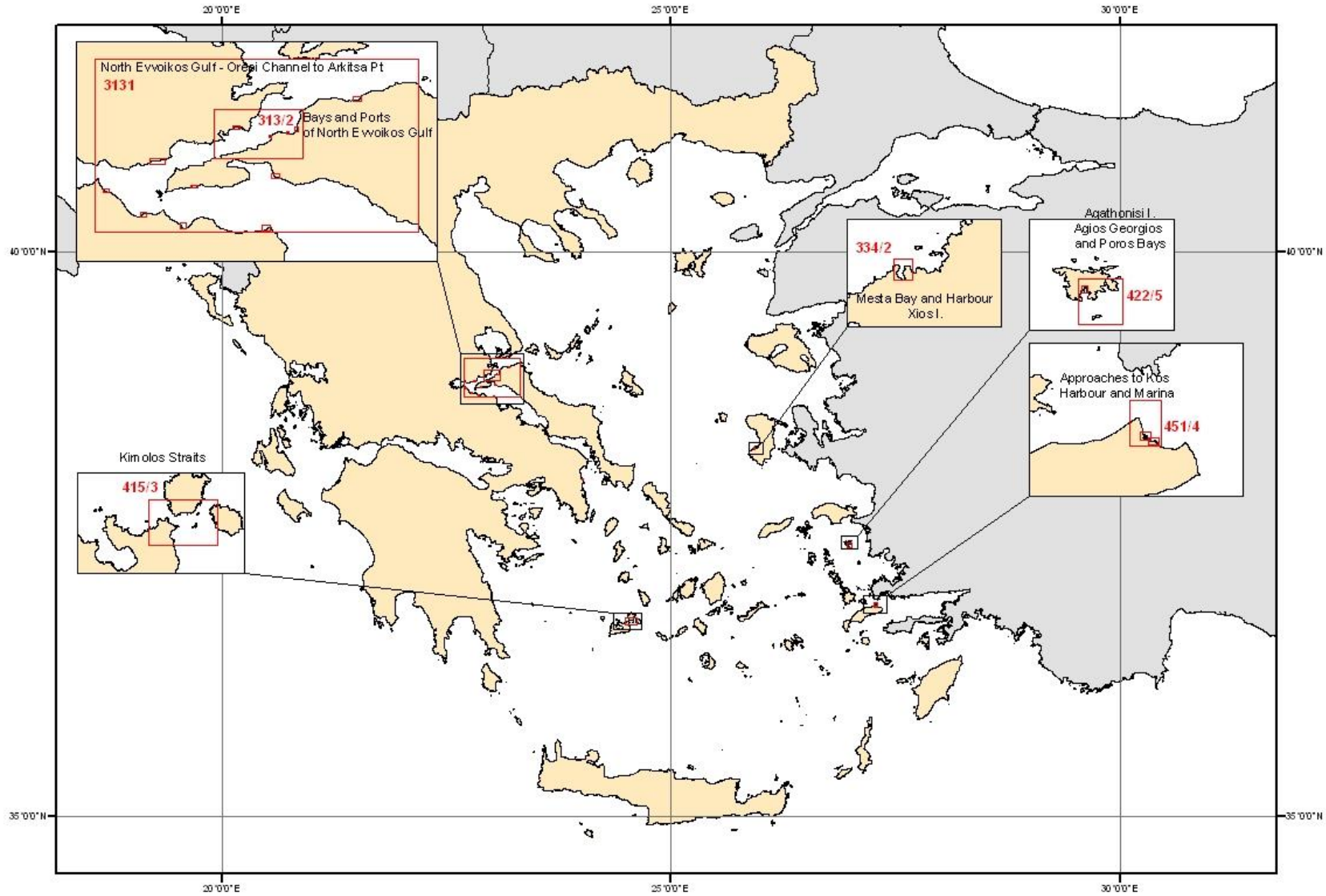
Greek ENCs of Usage Band 3 – Coastal



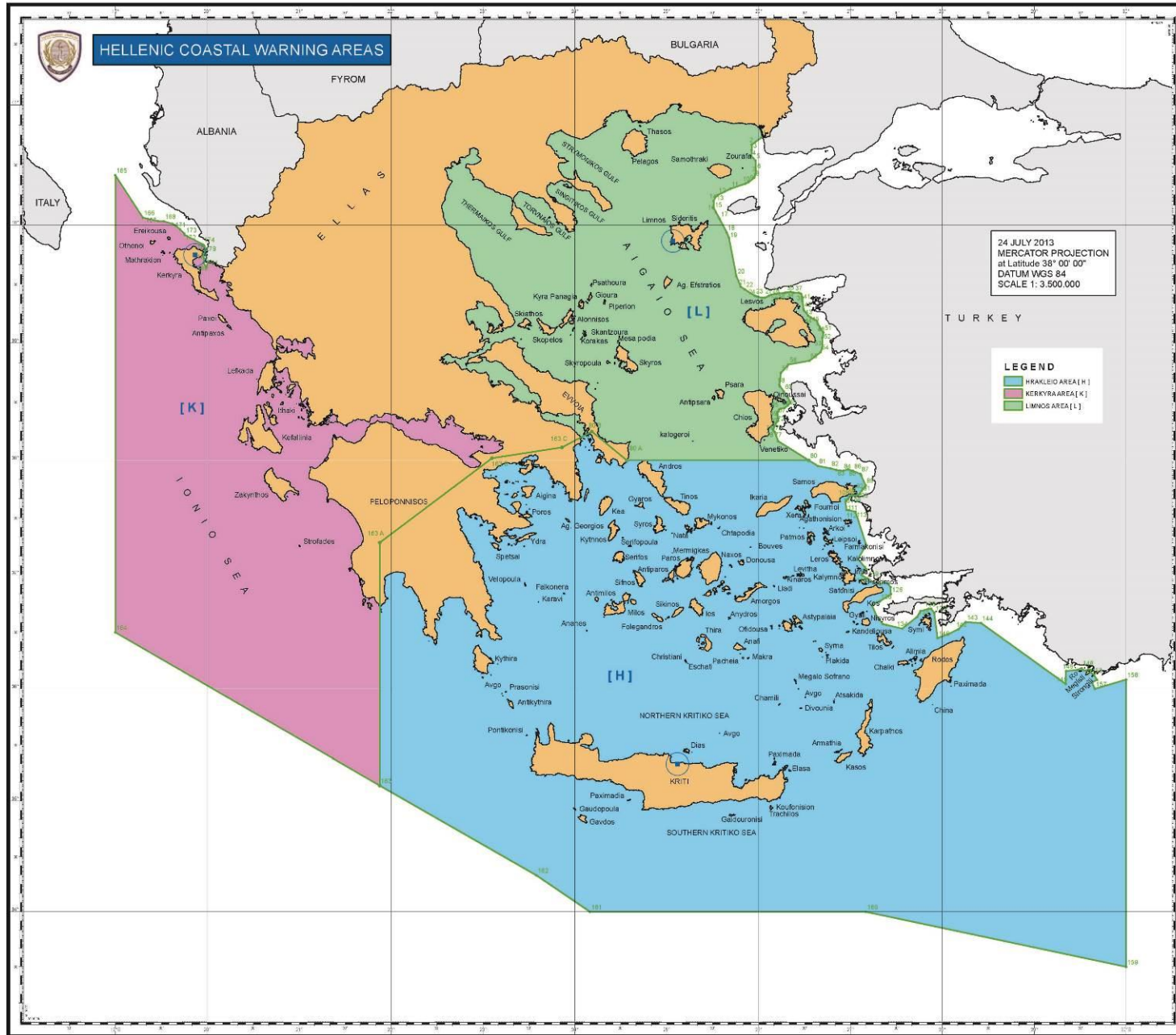
Greek ENCs of Usage Band 4 – Approach



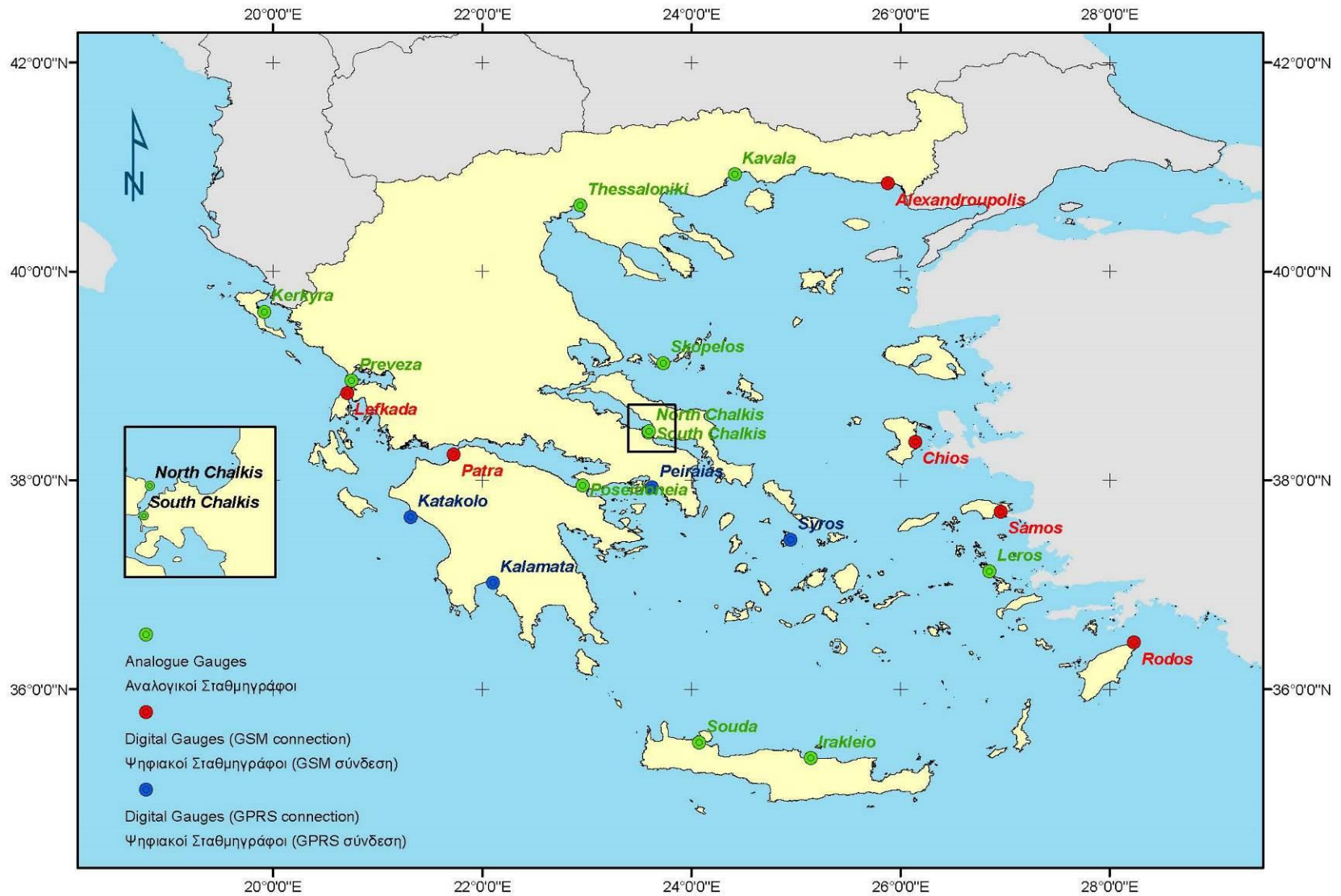
Greek ENCs of Usage Band 5 & 6 – Harbor & Berthin



New National Paper Charts



Hellenic Coastal Warning Areas / NAVTEX Service



Tide Gauge network

HNHS maintains a Tide Gauge Network of 21 (11 analogue and 10 digital) gauges.