

HELLENIC NAVY HYDROGRAPHIC SERVICE



**XVIIth MEDITERRANEAN AND BLACK SEAS
HYDROGRAPHIC COMMISSION**

NATIONAL REPORT OF GREECE

Athens - Greece, 1-3 June 2011

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 April 2010 Commodore Alexandros Theodosiou HN was appointed as the new Director (Hydrographer) of HNHS.

2. Surveys

Coverage of new surveys

During the period 2009-2010, an extensive systematic program of surveys was conducted. The three hydrographic vessels of the HNHS had been working for 760 days on surveying operations. A total area of 22.220 km² has been surveyed, covering national and International waters in the Aegean and Ionia seas. The main operations are depicted in the attached chart Annex A.

New technologies and / or equipment

Maritime GIS

A pilot project was implemented (2009-11) for the transition of the production of the HNHS's products (ENC's, paper charts, bathymetric diagrams, etc) from the Marine GIS. The purposes of the pilot project were:

- a. Training and acquisition of experience of the users (cartographers) in the new system.
- b. The planning of the production procedures
- c. The creation of technical guides for all the procedures related to the production of the HNHS's productions.
- d. The customization for the system parameters with the cooperation of ESRI and problem's solution
- e. Production of some ENC's, paper charts, etc, only for testing and validation of the new production system, prior to having data to the public.

The final goal of the utilization of Marine GIS is the centralized management of the cartographic data of HNHS, the automation of production and the synchronization of the products.

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 275 ENC's and 1728 ER files have been released. The present status of the HNHS ENC production program is shown in the following table:

Usage Band	Number of Cells Planed	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 - Harbor	45	32	71%
6 - Berthing	169	136	80%

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

National No	INT No	Title	Scale 1:	New Edition New Chart
411	3728	SOUTH EVVOIKOS GULF KYMI BAY TO KAFIREAS STRAIT	100.000	N.C
412	3760	SARONIKOS GULF	100.000	N.C
3111	3772	APPROACHES TO THESSALONIKI GULF AND HARBOUR	50.000	N.C
109	309	IONIO – AIGAIO SEAS STRETTO DI MESSINA TO MARMARA DENIZI	175.000	N.E

National paper charts

Chart Number	Title	Scale 1:	New Edition New Chart
422	AMORGOS I. TO SAMOS I. AND OPPOSITE COASTS OF ASIA MINOR	150.000	N.C
452	RODOS I. TO MEGISTI I. (KASTELLORIZO) AND OPPOSITE COASTS OF ASIA MINOR	150.000	N.E
45	KASOS I. TO MEGISTI I. (KASTELLORIZO) AND OPPOSITE COASTS OF ASIA MINOR	250.000	N.E
334/1	CHIOS HARBOUR	5.000	N.C
451/3	RODOS HARBOUR	5.000	N.C

A diagram of the New Charts is attached at ANNEX C

4. New publications & updates

New publications

Greek Pilot Vol. D' – English version - Edition 2010

Updated publications

Greek Pilot Vol. A' - Supplement No 7/2010
Greek Pilot Vol. B' - Supplement No 4/2010
Greek Pilot Vol. C' - Supplement No 9/2011
Greek Pilot Vol. D' – Supplement No 1/2011

All publications are available at HNHS's selling offices 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 mariners 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, 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.

IMO NAVTEX Coordinating Panel approved the establishment of a National NAVTEX Service for Greece and HNHS notified the NAVAREA III Coordinator, that it has beginning trials on National NAVTEX Service since 1st October 2009.

In the last two years (2009 – 2010) a total of 23 Navigational Warnings (NAVHELLEN) were delivered to the NAVAREA III Coordinator for further promulgation.

IRAKLEIO NAVTEX STATION (H)

During its operation in 2009 and 2010 a total of 5900 NAVTEX bulletins have been transmitted, containing 1221 Navigational warnings (NAVWARNS), 2920 Meteorological-Forecasts, 884 Meteorological warnings (GALEWARNS) and 103 Search and Rescue messages (SARWARNS).

KERKYRA NAVTEX STATION (K)

During its operation in 2009 – 2010 a total of 5088 NAVTEX bulletins have been transmitted, containing 521 Navigational warnings (NAVWARNS), 2913 Meteorological-Forecasts, 661 Meteorological warnings (GALEWARNS) and 33 Search and Rescue messages (SARWARNS).

LIMNOS NAVTEX STATION (L)

During its operation in 2009 and 2010 a total of 4772 NAVTEX bulletins have been transmitted, containing 612 Navigational warnings (NAVWARNS), 2680 Meteorological-Forecasts, 567 Meteorological warnings (GALEWARNS) and 56 Search and Rescue messages (SARWARNS).

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's personnel has been trained in various ENC construction issues and Quality Control procedures. Especially, Digital Cartography Division's (DCD) personnel have also attended seminars in 7Cs software (ENC tools).

Foreign training

One HNHS's officer participated in the International Management and Engineering Program (IMEP), for the Hydrographer's category B' diploma, at Naval Contracting Battalion Center (NCBC-Gulfport, Mississippi) USA.

NTR

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 Slovenia, Cyprus, Georgia, Romania, Germany, Italy, Jordan, Korea, Norway, Russia, Serbia, Slovenia, Tunisia, UK, Ukraine, Bulgaria and USA. Discussions are in progress with Bulgaria, Croatia, Egypt, France and Israel.

8. Oceanographic Activities

General

The mission of the HNHS in the area of Oceanography includes:

- Conducting oceanographic surveys in the Hellenic seas and the Eastern Mediterranean Sea and embodying the results into relevant studies.
- Supporting the Greek Navy and other national defense bodies by providing the required data and information for the tactical exploitation of the marine environment.
- Supplying oceanographic data and conduction of surveys on behalf of third parties both from the private and public sector.
- Prediction of the wave field in Greek waters.

Activities

- Conduction of several oceanographic cruises using the hydrographic/oceanographic vessels of the HNHS 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 in order 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. Seven stations have been upgraded to output the data in digitized form, in order to be able to transmit in real time.
- 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 tide gauge network is depicted in the attached chart of Annex C.

9. Other activities

Participation in IHO Working Groups

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

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

Disaster prevention

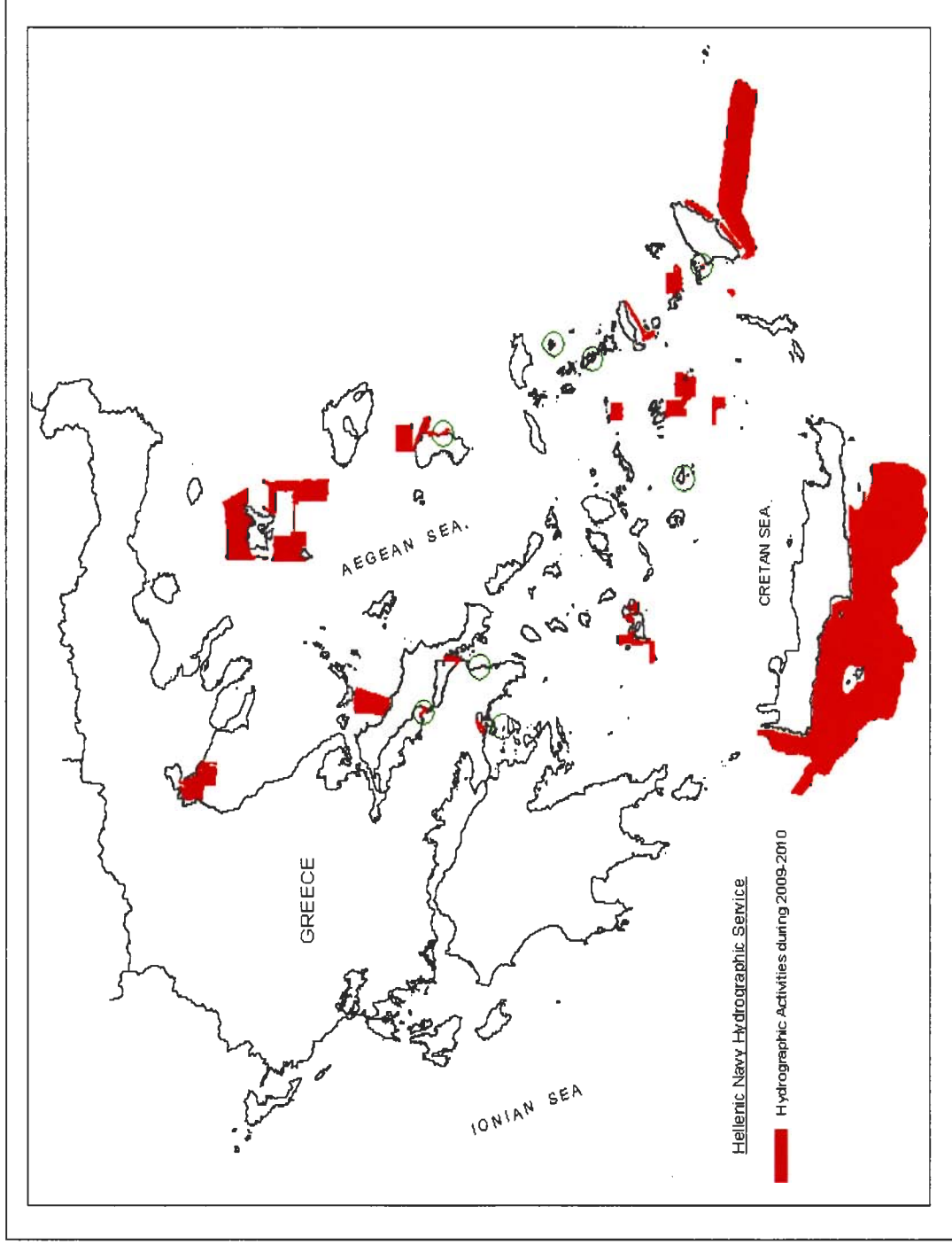
Following the decision of IOC / UNESCO to develop a Regional Tsunami Warning Center (RTWC) at the Northeastern Atlantic, Mediterranean and Connected Seas area, Greece has already started working on the creation of a National Tsunami Warning Center (NTWC). A number of National Agencies and Institutions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

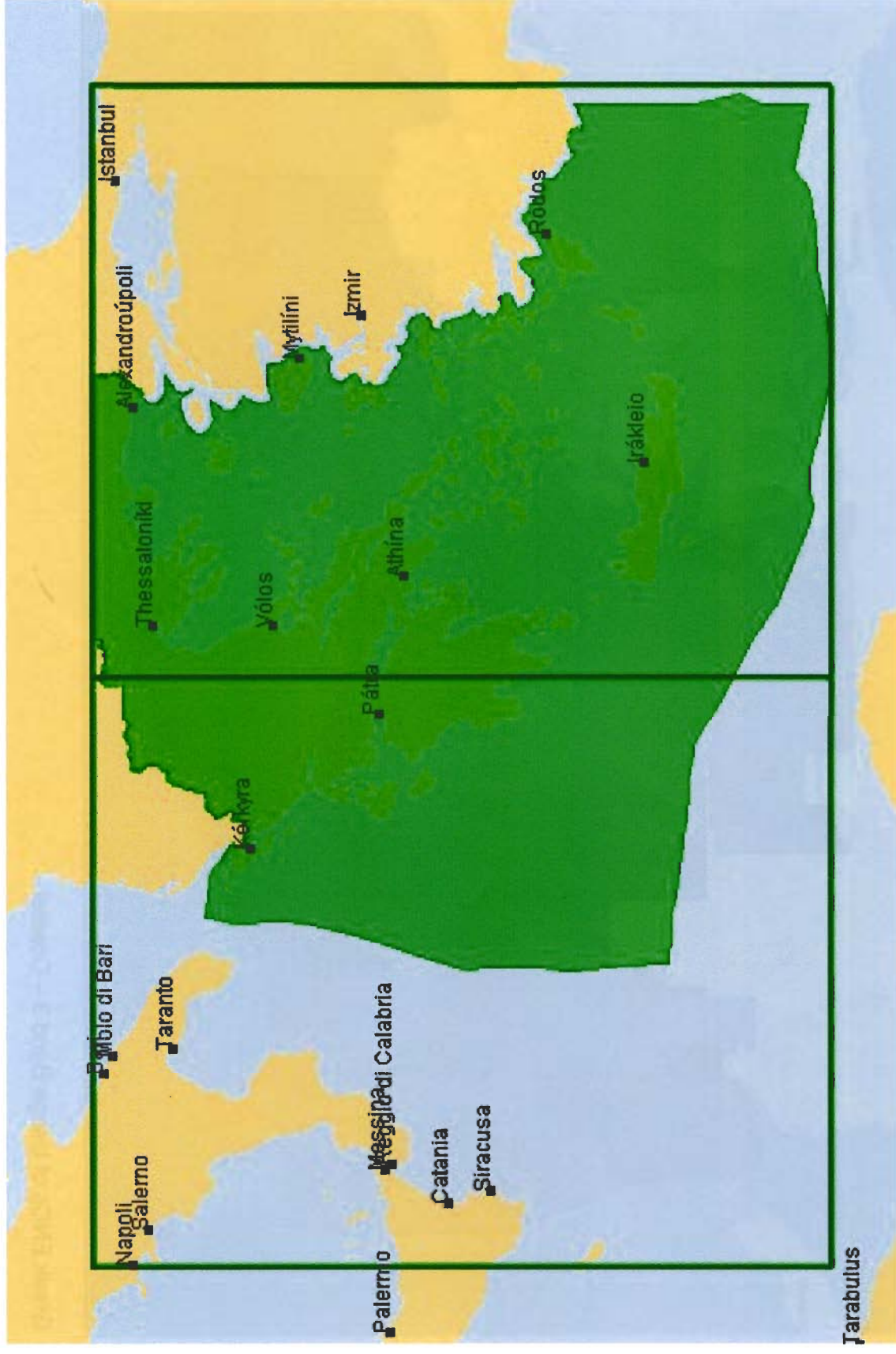
HNHS participate in the national SDI of Greece, which was established in 2010 under the Environmental Ministry, contributing mainly with bathymetric data.



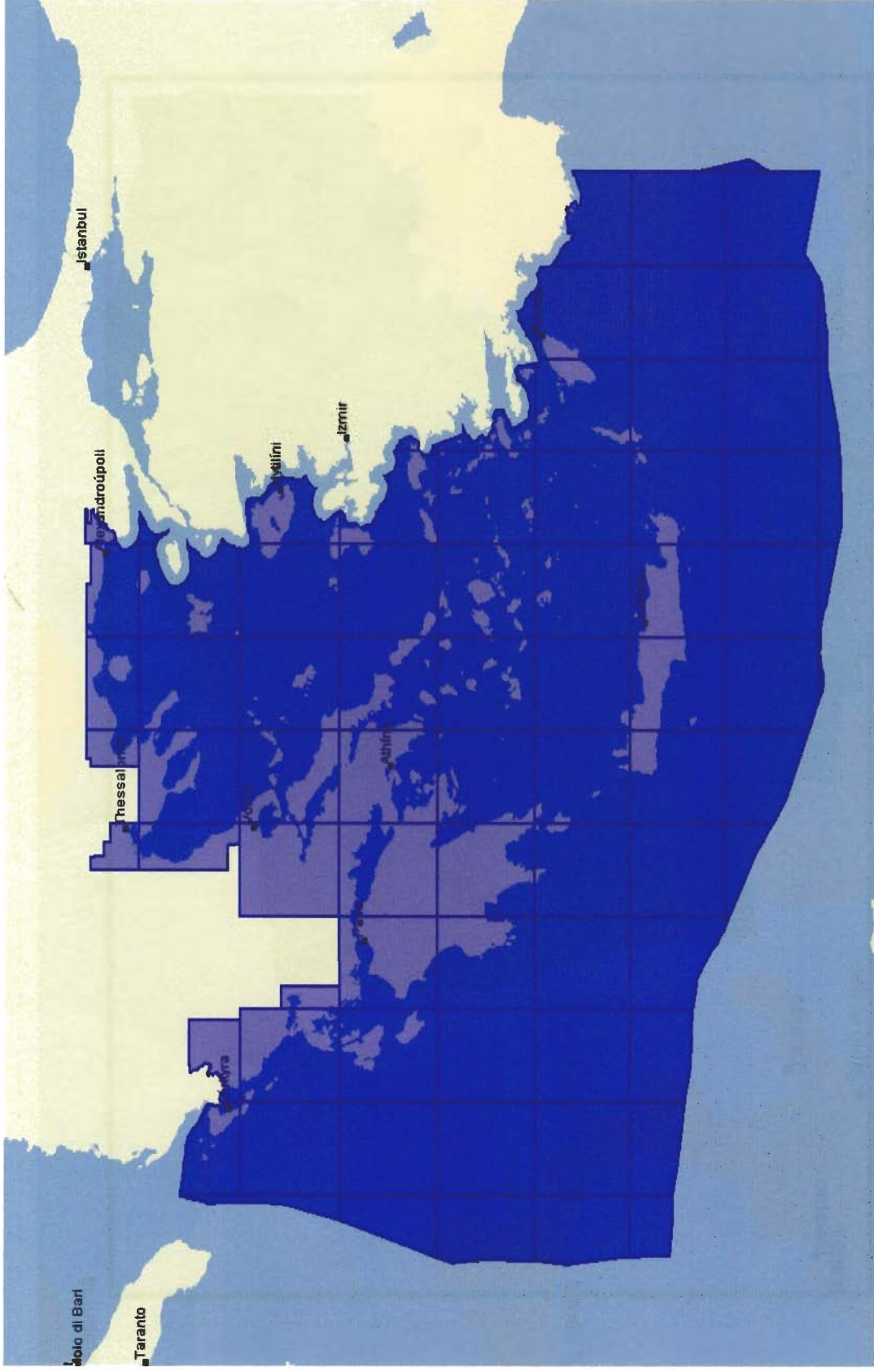
Hydrographic Activities 2009-10



Greek ENC of Usage Band 1 – Overview



Greek ENCUs of Usage Band 2 – General



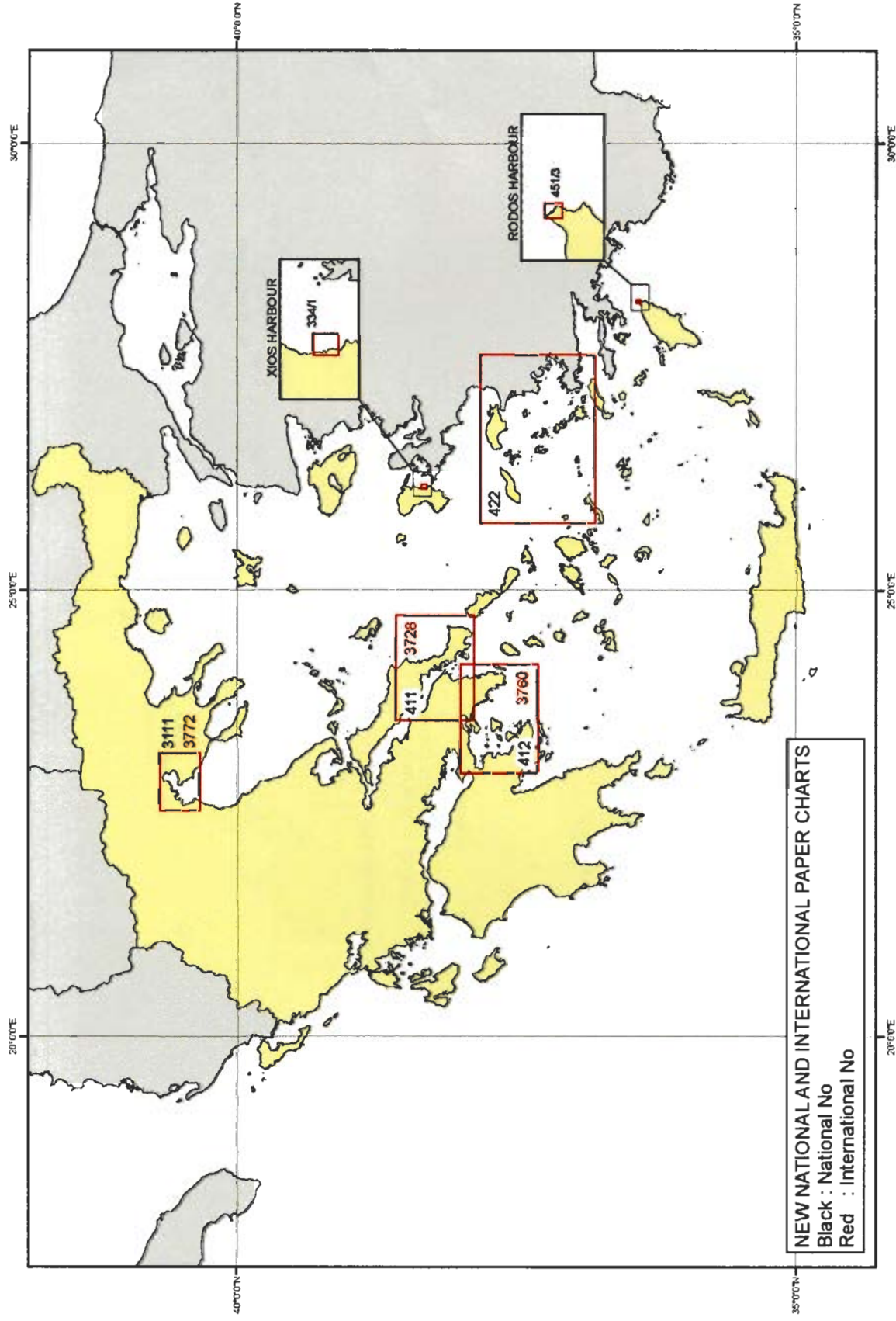
Greek ENCs of Usage Band 3 – Coastal



Greek ENCUs of Usage Band 4 – Approach



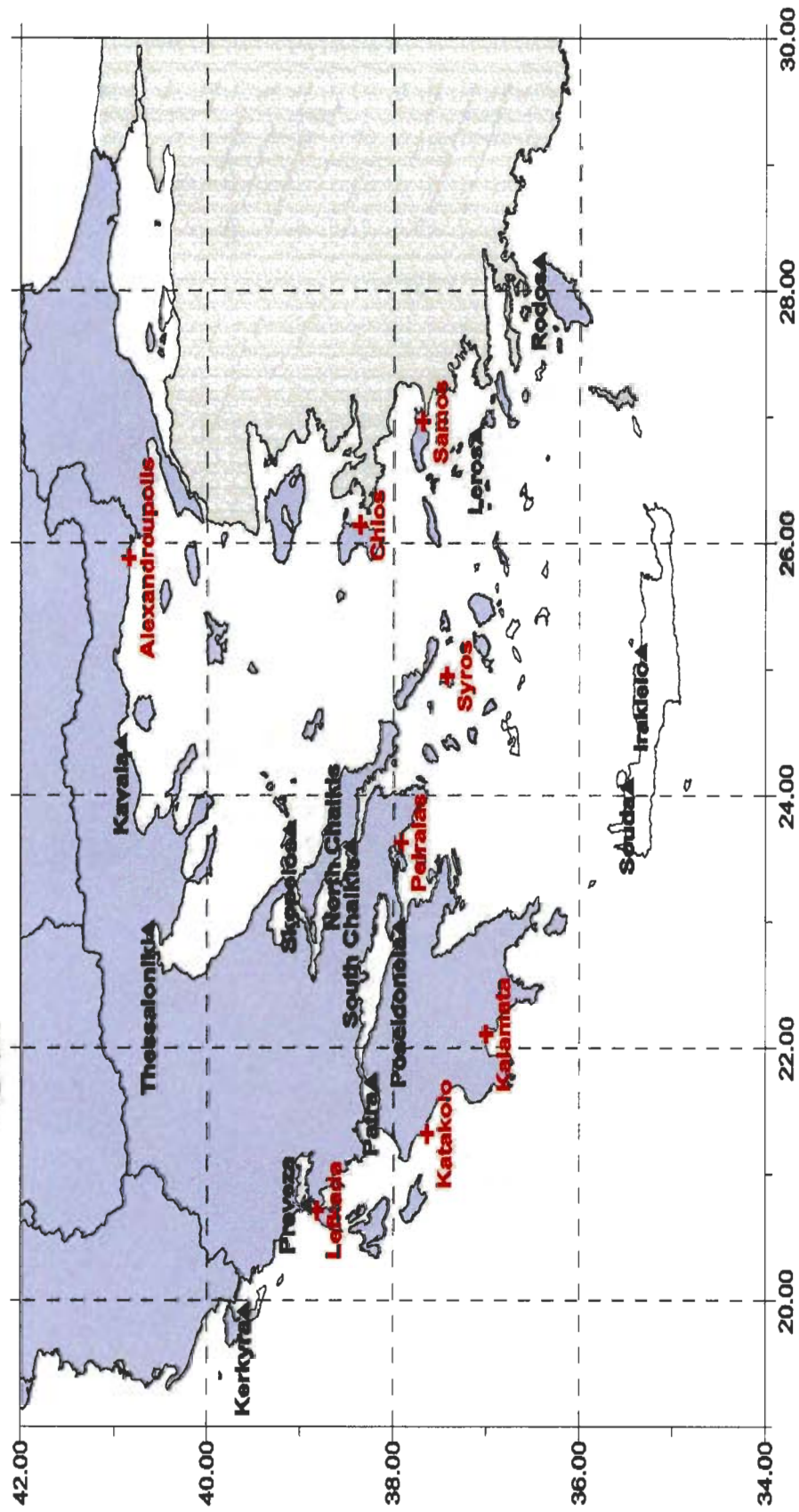
Greek ENCs of Usage Band 5 & 6 – Harbor & Berthing



Tide Gauge network

HNHS maintains a Tide Gauge Network of 21 (13 analog and 8 digital) gauges.

PERMANENT GREEK TIDE GAUGE NETWORK



* Triangle: analogue tide gauges, Cross: digital gauges with GSM connection