

HELLENIC NAVY HYDROGRAPHIC SERVICE



XVth MEDITERRANEAN AND BLACK SEAS HYDROGRAPHIC COMMISSION

CONTRIBUTION OF GREECE

Malta, 22-24 October 2007

1. Hydrographic Office: Hellenic Navy Hydrographic Service (HNHS) is the governmental body of the Hellenic Republic responsible to conduct hydrographic and oceanographic surveys for the operational needs of the Hellenic Navy, as well as for the benefit of International and National Navigational by producing and updating nautical charts and other nautical publications aiming in the safety of human life at sea and the protection of the environment around Greece.

2. Surveys: During the period 2005-2006, an extensive systematic program of surveys has been conducted by the HNHS. The main operations are depicted on the attached chart (Annex A). The three hydrographic vessels of the HNHS were deployed during this period for a total of 891 days of surveying operations, mainly in coastal areas, ports and harbor approaches complying S-44 standards of IHO. A total of 13.390 km² of surveyed area covered Greek and International waters.

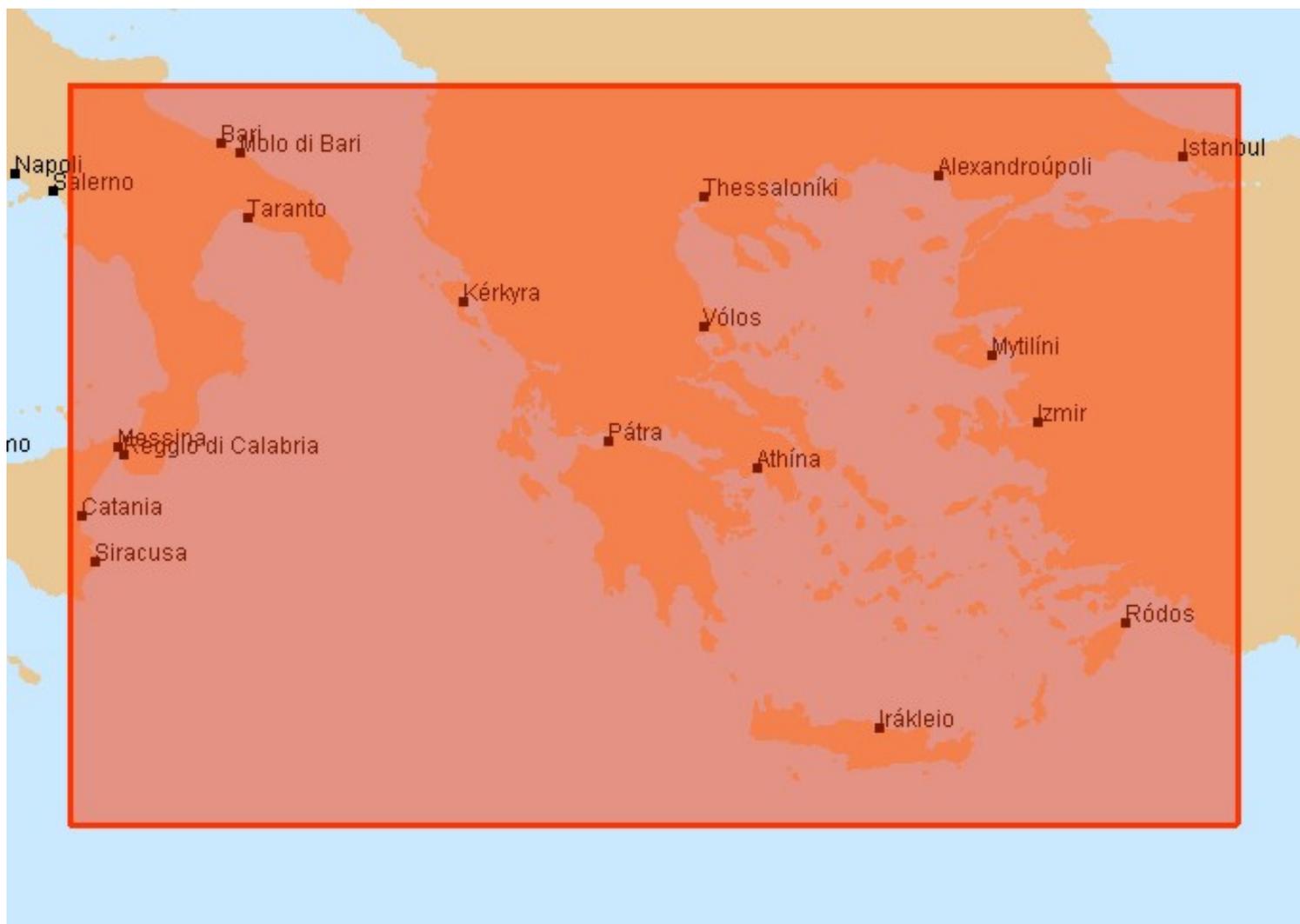
3. New Charts and Updates: ENCs

The project for the production of the Greek ENC's and their Updates has started in March 2001 by HNHS/Digital Cartography Division, covering the Greek area of responsibility.

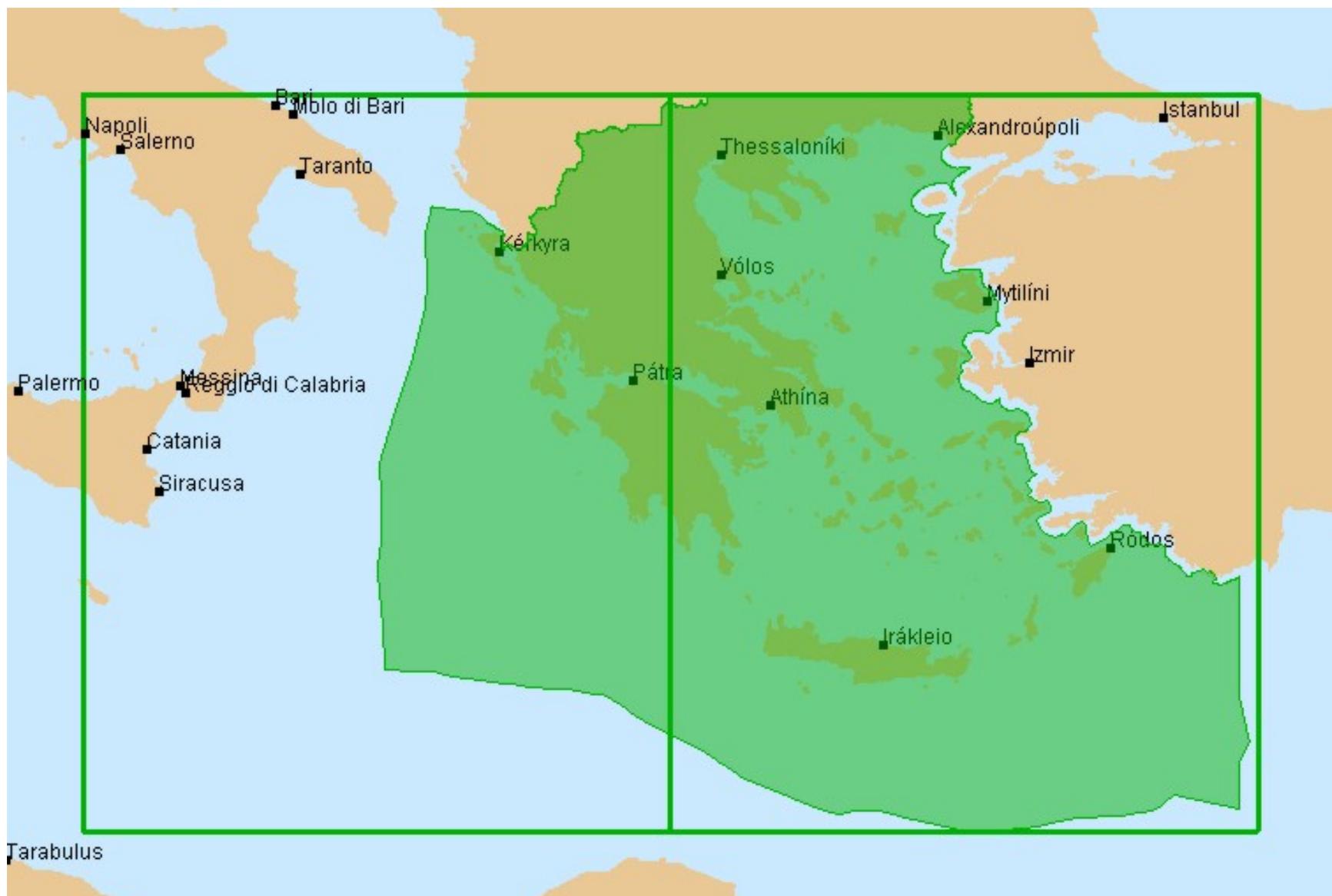
To date 254 cells have been released and according to the plans, a total of 299 cells will be available for distribution by the end of 2007.

The status of the HNHS ENC production is shown in the following table:

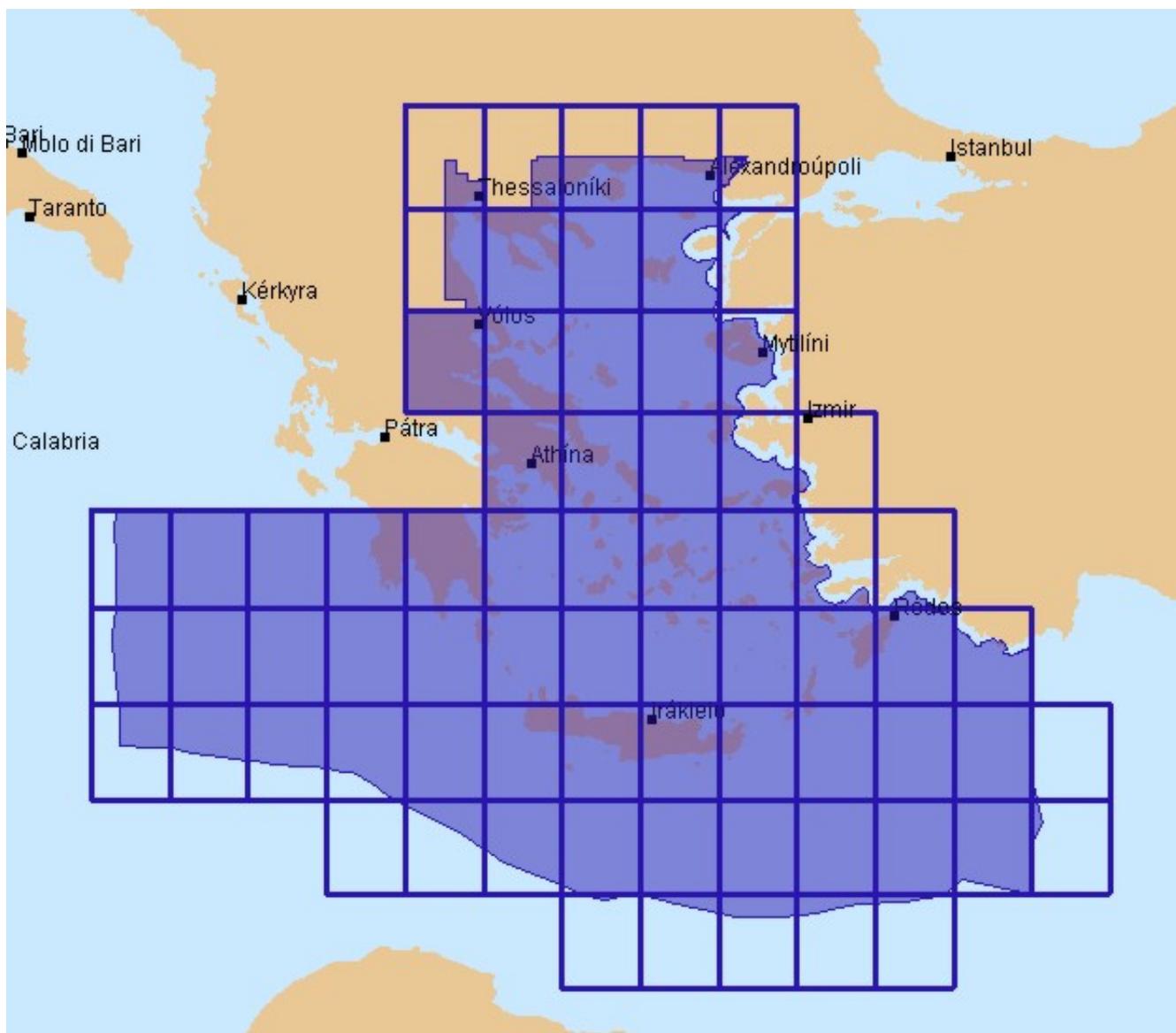
	October 2007		December 2007	
	Number of Cells	%	Number of Cells	%
Overview	1	100%	1	100%
General	2	100%	2	100%
Coastal	71	86%	78	94%
Approach	16	57%	20	72%
Harbor	32	70%	38	83%
Berthing	132	80%	160	97%
	254	78%	299	92%



Greek ENC of Usage Band 1 – Overview



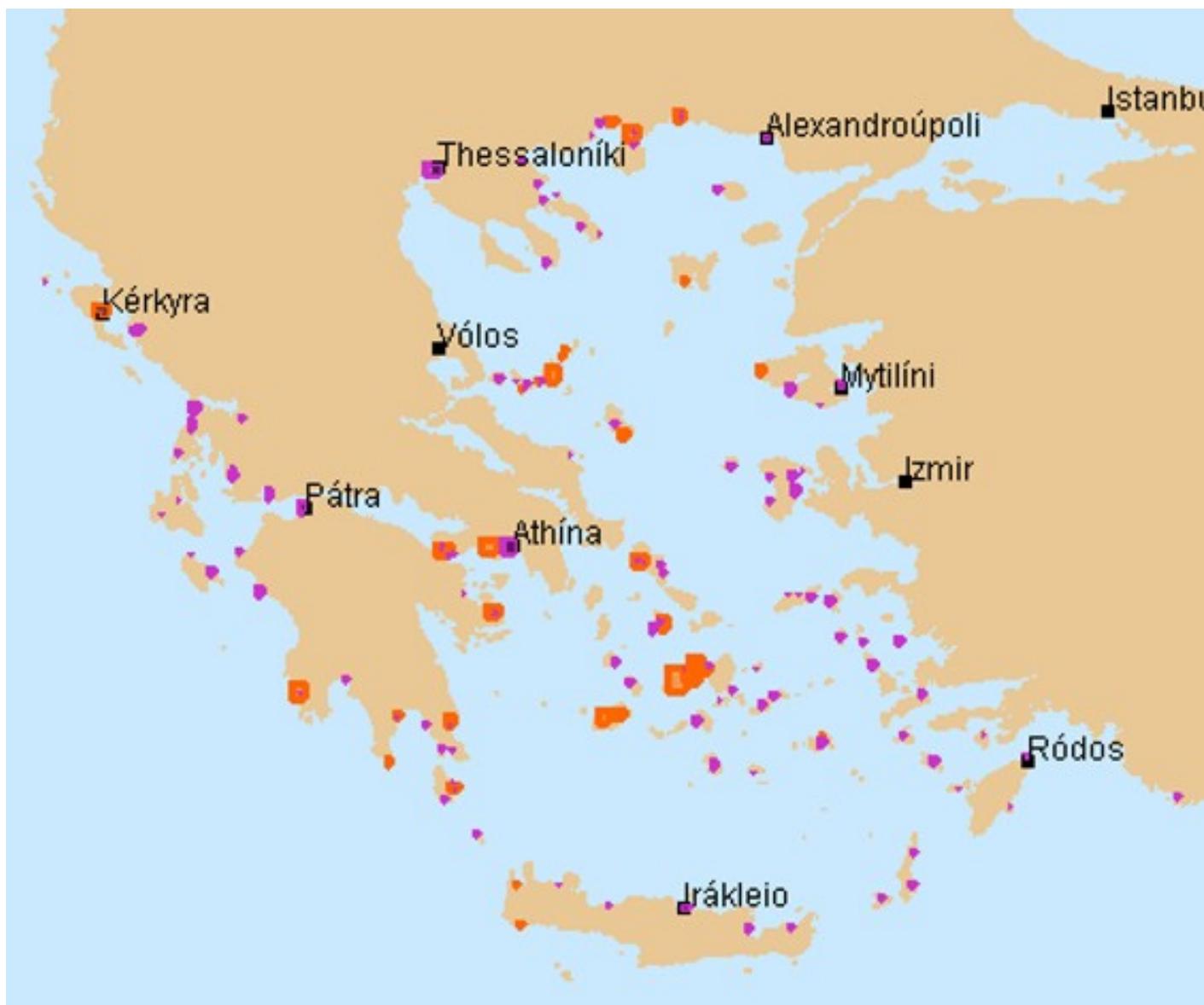
Greek ENCs of Usage Band 2 – General



Greek ENCs of Usage Band 3 – Coastal



Greek ENCs of Usage Band 4 – Approach



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

ENC Distribution method

HNHS distributes its ENCs through the RENC channel (IC-ENC and PRIMAR Stavanger). The first Greek ENCs had been released in March 2004.

International Charts

National No	INT No	Title	Scale 1:	New edition/ New chart
212	3492	OTHONOI I. TO MYTIKAS P. KERKYRA I. AND PAXOI I.	150.000	NC
423	3734	SERIFOS I TO ANAFI I.	150.000	NC
424	3736	ANAFI I. TO KOS I. AND OPPOSITE COASTS OF ASIA MINOR	150.000	NC
2111	3422	NORTHERN PART OF KERKYRA I. – OTHONOI I. AND OPPOSITE COASTS OF SHQIPERIA	75.000	NC
333	3726	KAFIREAS STRAIT TO CHIOS I.	150.000	NE

National Paper Charts

Chart Number	Title	Scale 1:	New Edition/ New Chart
4	AIGAIO SEA – SOUTHERN PART	500.000	NE
32	THRAKIKO SEA	250.000	NE
33	CAPE SOUNIO TO LESVOS I. AND OPPOSITE COASTS OF ASIA MINOR	300.000	NE
42	ANDROS I. TO CHALKI I.	250.000	NE
45	KASOS I. TO MEGISTI I. (KASTELLORIZO) AND OPPOSITE COASTS OF ASIA MINOR	250.000	NE
47	AIGAIO SEA – NORTHERNPART	500.000	NE
211	KERKYRA ISLAND – OTRANTO STRAIT	150.000	NE
422	NAXOS I. TO SAMOS I. AND OPPOSITE COASTS OF ASIA MINOR	150.000	NE
424/2	BAY AND HARBOUR OF KALYMNOS I.	50.000	NE
424/3	BAYS OF ASTYPALAIA I. (A) VATHY BAY (B) AGIOS ANDREAS BAY	10.000 7.500	NC

	(Γ) SCALA COVE (Δ) ANALIPSIS BAY (MALTEZANA)	7.500 7.500	
452	RODOS I. TO MEGISTI I. (KASTELLORIZO) AND OPPOSITE COASTS OF ASIA MINOR	150.000	NE
453	RODOS ISLAND	100.000	NE

4. New publications

Updated publications

Greek Pilot Vol. A' - Supplement No 5/2006
 Greek Pilot Vol. B' - Supplement No 6/2006
 Greek Pilot Vol. C' - Supplement No 7/2006
 Greek Pilot Vol. D' - Supplement No 8/2006
 List of Lights of Hellenic Coasts - New Edition 2006

5. MSI

The HNHS is the national Coordinator for NAVAREA III for the areas covering Greek and adjacent seas. It collects all the relevant Maritime Safety Information (MSI) which ocean-going mariners require for their safe navigation, forwarding them to the NAVAREA III Coordinator (Spanish Hydrographic Institute).

During the last two years (2005 – 2006) a total of 86 Navigational Warnings (NAVHELLEN) delivered to the NAVAREA III Coordinator.

NAVTEX

HNHS is designated also as the National Coordinator of NAVTEX Service for Greece (GMDSS Application). For this purpose, 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 Station (IRAKLEIO – KERKYRA – LIMNOS), for further promulgation by each station. Details of the activities of each station are given below.

IRAKLEIO NAVTEX STATION (H)

As operative throughout 2005 and 2006 a total of 5438 NAVTEX bulletins have been transmitted, containing 1038 Navigational warnings (NAVWARNS), 2918 Meteorological-Forecasts, 975 Meteorological warnings

(GALEWARNS) and 154 Search and Rescue messages (SARWARNS).

KERKYRA NAVTEX STATION (K)

As operative throughout 2005 – 2006 a total of 5286 NAVTEX bulletins have been transmitted, containing 349 Navigational Warnings (NAVWARNS), 2919 Meteorological-Forecasts, 781 Meteorological warnings (GALEWARNS) and 66 Search and Rescue messages (SARWARNS).

In addition for the expansion of the service area of Kerkyra station in order to cover the Albanian coastline we have provided all the details to the NAVTEX COORDINATOR NAVAREA III in order to establish communication with the Albanian Authorities (as referred in the FAX No 1457/07/30 May 07/HNHS)

LIMNOS NAVTEX STATION (L)

As operative throughout 2005 and 2006 a total of 5241 NAVTEX bulletins have been transmitted, containing 523 Navigational warnings (NAVWARNS), 2914 Meteorological-Forecasts, 761 Meteorological warnings (GALEWARNS) and 111 Search and Rescue messages (SARWARNS).

In addition, updated Notices to Mariners are provided for the mariners' convenience through the HNHS site in the Internet.

6. S-55

7. Capacity Building:

Training received, needed, offered

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

Two Egyptian Navy Officers have been trained for two weeks period in both hydrographic survey (on board

H-OS PYTHEAS) and digital mapping (HNHS).

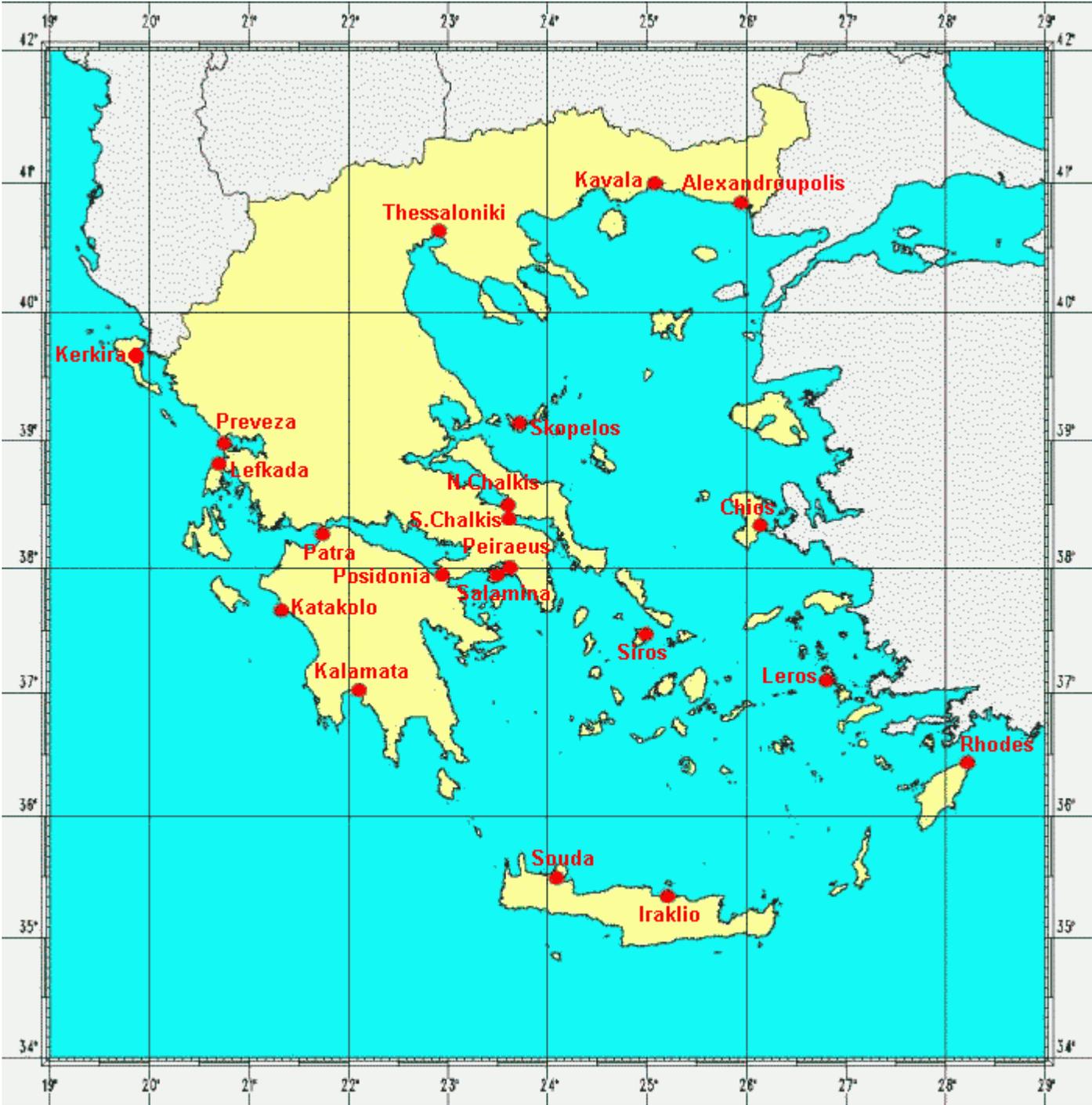
Status of national, bilateral, multilateral or regional development projects with hydrographic component. (In progress, planned, under evaluation or study)

HNHS has signed bilateral arrangements with the HOs of Albania, Georgia, Germany, Italy, Jordan, Korea, Norway, Russia, Serbia, Slovenia, Tunisia, UK, Ukraine, and USA. In progress are discussions with Bulgaria, Croatia, Cyprus, Egypt and Israel.

8. Oceanographic Activities: General

HNHS is a member organization of European Sea Level Service and participated at ESEAS-RI (European Sea-Level Service Research Infrastructure) project during time period 2002-2005. The primary technological objective of the ESEAS-RI research infrastructure was to facilitate the transnational coordination, the upgrading of the network of observing sea level sites and the standardization of the network, the operational routines, the databases and the quality control of sea level data. The primary scientific objective of the project was to study sea level variations at inter-annual to century time scales and to quantify potential future changes in mean sea level. In order to reach the above-mentioned objective the following main steps had been made:

- Quality control of the hourly tide gauge data
- Determination of vertical land movements at the tide gauges in order to decontaminate the relative sea level records for this bias, determination of sea level variations on inter decadal time scales in the North Atlantic and semi-enclosed seas
- Assessment of secular relative sea level trends for the European coasts
- Improvement for the network of ESEAS Observing Sites through updating of selected tide gauges and co-location of gauges with continuous GPS



Tide Gauge Network

Tide gauge network

HNHS maintains a Tide Gauge Network of 20 gauges. Most of the instruments are still analog recording on paper charts that need to be digitized.

New equipment

Based on the classification of the ESEAS Observing Sites and in the framework of the HNHS participation in ESEAS-RI, 3 tide gauges have been upgraded to up-to-date digital gauges. The upgrading of the tide gauges sites has improved the research utility provided by ESEAS Network in the geographical region of Aegean & Ionian Seas. The tide gauges, which have been upgraded, are those of Alexandroupolis, of Lefkas Island and of Chios Island. The upgrading of Lefkas Station also includes the installation of a Continuous GPS receiver, in order to obtain reliable estimates of vertical land movements and to assess their contribution to changes in relative sea level.

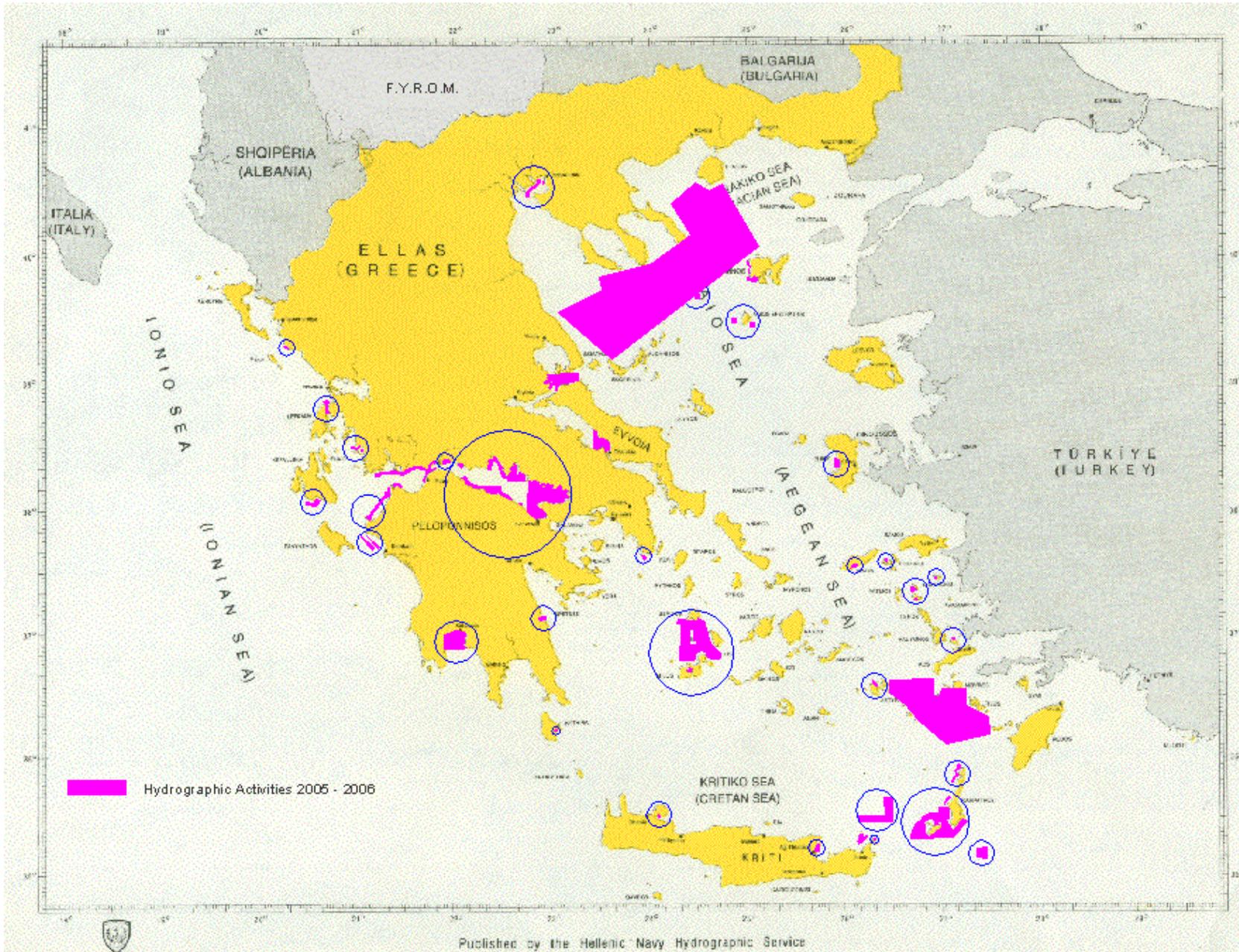
The HNHS contributes on quality control procedures and development web interfaces, discussed and defined during the ESEAS workshop meeting at POL (Proudman Oceanographic Laboratory-Liverpool).

9. Other activities:

Participation in IHO Working Groups

HNHS personnel participating in several IHO Committees and WG such as WEND, CHRIS, CSPCWG, MBSHC.

10. Conclusions:



Hydrographic Surveys 2005-2006