



MINISTÈRE DE LA DÉFENSE



Saint-Mandé, the 31 of July 2009

N° 141 SHOM/DSPRE/REX/NP

SERVICE HYDROGRAPHIQUE ET
Océanographique DE LA MARINE

Directorate of Policy, Plans &
External Relations

IA Gwladys Theuillon
☎ : 33 1 53 66 97 81
Fax : 33 1 41 74 94 25
E-mail : gwladys.theuillon@shom.fr

French national report to the 16th conference of the Mediterranean and Black Seas Hydrographic Commission (MBSHC)

-

1. Hydrographic Office: General

Since the 11th of May 2007 SHOM, whilst keeping its name, has become an *Établissement Public*, i.e. a national establishment endowed with a legal personality distinct from the French Administration. SHOM's new organisation, missions and responsibilities were developed in the previous national report.

2008 was the first full financial year during which SHOM was operated as a Public Establishment. This annual report confirms the positive appreciation on the change of statute as foreseen in 2007.

2008 was a very active period for SHOM which focused on meeting the objectives set out for surveys, research, development and production in SHOM's three core missions, i.e. national hydrographic service, environmental support to defence and support to maritime and coastal public policies.

All the year round, no efforts were spared to improve the visibility of SHOM's capabilities and activities as well as to strengthen our partnerships, with the steadfast will to meet the many and various requirements.

The strategic vision which was approved by the SHOM's Board of Directors at the end of the year and the related strategic objectives which were endorsed by its two advisory committees (the users' advisory committee of SHOM's products, surveys and services, and the steering committee on military oceanography) have the ambition to respond to these expectations. The course bearing for a new passage is set up from now on. However, the speed remains to be determined through the "objectives and means" contract, the construction of which takes longer than expected in this difficult period marked by a comprehensive review of public policies and the current financial crisis.

SHOM remains devoted to seafarers, civilian and military, and to all categories of sea users, far beyond our national boundaries, with the shared objective to contribute at its level and in its domains of excellence to the sustainable development and the protection of Planet Ocean.

.../...

The protocol of amendments to the IHO Convention was ratified by the French Parliament on the 28th of July 2007.

For information, a list of SHOM's involvement in IHO activities is provided in the Annex.

On 16 July 2009 in Le Havre, the President of the French Republic gave a very important political speech introducing the foundations of the new French maritime policy. This policy relies on the recommendations made throughout a 4-month brainstorming process by a think tank namely "*le Grenelle de la mer*", involving many stakeholders including SHOM. It includes a special focus on the development of an integrated Mediterranean maritime strategy, in line with the decisions made in Paris on 25 June 2009 at the ministerial meeting of the Union for the Mediterranean. The major objectives for the Mediterranean Sea, reflected in the Action Plan for the Mediterranean Sea, are to protect the marine environment and biodiversity, to develop marine highways, and to strengthen maritime safety. A meeting of the ministers in charge of maritime affairs is expected in 2010 to define the way forward to implement maritime policies in the region. Making benefit of this momentum, it is worth noting that a number of important recommendations of the French maritime policy depicted in a Blue Book¹ "*The commitments of the Grenelle de la mer*" could be used as key enablers by the hydrographic community within the MBSHC.

2. Surveys

2.1 Coverage of new surveys

SHOM's surveys in the MBSHC area aim at collecting nautical information with a view to improve the national chart portfolio. By comparing what exists in the bathymetric database, requirements and operational constraints, a long term survey plan is being drafted for approval by SHOM's Board of Directors and the French authorities. This plan may consist of any of the following activities:

- Cataloguing of all existing information.
- Hydrographic surveys (bathymetry, geophysics, sediments, etc.) and production of charts and nautical documents.
- Use of remote sensing (SPOT, ERS, airborne surveys, etc.) to improve the coastal cartography.
- Oceanographic modelling (tides, currents, swell, etc.).

Since the last meeting (October 2007), no extensive survey has been conducted in SHOM's MBSHC area of responsibility, however, routine checks have been performed in the ports along the French Mediterranean coasts.

In addition, the Sailing Directions have been updated and the RONIM national tidal network has been completed.

Further calibrations have been conducted in Corsica and the Marseille region with a view to extend to the Mediterranean the Litto3D[®] national programme (see § below).

Co-operative surveys have been performed in Morocco within the framework of a bilateral agreement (see § 5.3.1).

2.2 New technologies and / or equipment

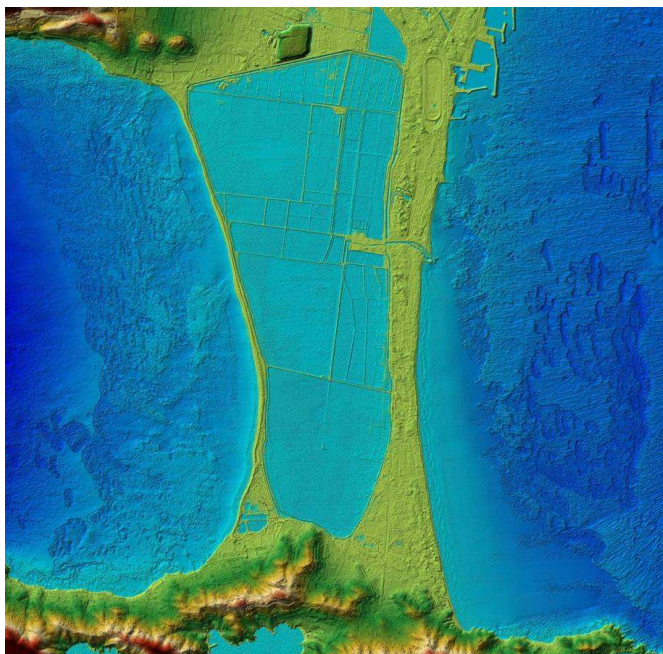
i Lidar surveys

As mentioned at § 2.1 above, SHOM is making extensive use of remote sensing, both satellite and airborne, to improve its chart portfolio. One of its current projects that might be of interest in the MBSHC area is the Litto3D[®] programme which was introduced in the previous report.

¹ The « Livre bleu » can be downloaded at <http://www.legrenelle-mer.gouv.fr/>

The main objective of Litto3D ® is to develop a high resolution DTM foundation, using a combination of MBES and lidar, for integrated coastal management applications. It is carried out by SHOM and the National Geographic Institute (IGN).

The survey of the Giens peninsula (near Toulon), performed in 2007, demonstrated the capability of bathymetric laser survey to improve the knowledge of the littoral. Bathymetric laser provides a mean to accelerate surveys in very shallow waters, in addition to MBES surveys. With a combination of multi-beam, bathymetric and topographic laser, it is possible to generate a seamless sea/land coastal digital model.



Litto3D in Giens Peninsula (vincinity of Toulon)

The most tangible progress has been the decision to give an open access to the historical seamless data Histolitt ® covering the entire coastal areas of France. The detailed coastline is already accessible to the public on the French national Geoportal.

The historical data will be gradually improved by new, more accurate surveys, as the project unfolds over the coming years. Discussions are under progress with the regional authorities along the French Mediterranean coast.

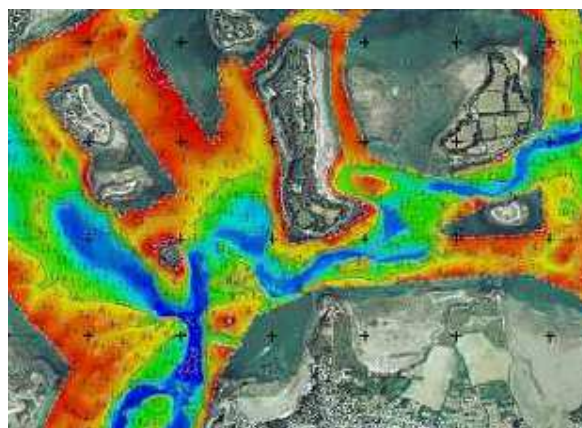
Many applications based on Litto3D® foundation are expected: impact of mean sea level raise, storm surges and tsunami warnings, integrated coastal zone management...

ii MSDI: the INFRAGEOS-H project

To meet the recommendations of the EU Blue Book on maritime spatial planning, SHOM is implementing a cross-cutting GIS to handle Navaid, tidal and bathymetric databases in compliance with international standards (INSPIRE, IHO...) and dissemination policies.

The INFRAGEOS-H functionalities comprise:

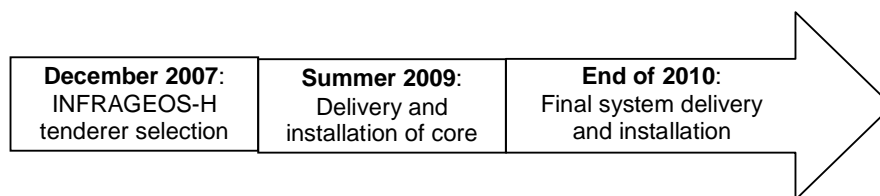
- a core of interoperable databases (GIS);
- a control and transfer system of hydrographic information;
- a workflow control system;
- a set of management and processing solutions (multilayer display, vector, raster data...);
- some tools to support web publication.



CARIS Bathy DataBase ®

The provisional schedule of implementation is as follows:

It is expected that the use of INFRAGEOS-H will boost data management 60 times faster.



INFRAGEOS-H will provide SHOM with a next-generation set of tools for tackling ever-changing information and products requirements, such as new 3D developments. It is the first step in a broader process consisting of grouping together within a coherent Geospatial Infrastructure all SHOM databases.

2.3 New ships

NTR.

2.4 Problems encountered

As many other IHO member states, France is tasked with collecting nautical information and surveying areas that would otherwise remain uncharted. It happens from time to time that SHOM only learns by accident of surveys performed by private companies, or even other HOs, in its areas of charting responsibility, and has to insist to obtain communication of IHO-compliant data relevant to INT charts and nautical information.

In the interest of the international maritime community, it is reminded that survey results should be automatically communicated to the IHO recognised charting authority (in compliance with M-3, RT A1.15 § 2 as amended²).

In addition, provision should be made in all contracts awarded to private survey companies to the effect that hydrographic data pertinent to the safety of navigation be communicated to the IHO recognised charting authority.

3. Charts and Publications

a. Charts

a.1 New charts & updates

Produced since the 15th MBSHC conference:

N° Nat.	N° INT	New chart (NC) or new edition (NE)	Scale 1:	Date	Title
5544	/	NE	50 000	Apr 2008	<i>Côte Est de Grèce – Baie et port de Thessalonique (Salonique) (new TSS)</i>
6713	/	NE	150 000	Aug 2008	<i>Côte Nord-Est de la Corse, canal de Corse (transformation into WGS84)</i>
6775	/	NE	10 000	Oct 2007	<i>Baie de Palma – De Las Illetas à l’îlot Galera (facsimile ES 4211)</i>
6803	/	NE	25 000	Aug 2008	<i>Abords de Porto Corsini (f.s. IT 219)</i>
6821	/	NE	150 000	May 2009	<i>Côte Ouest de Corse – Du Cap Corse au Golfe d’Ajaccio (transformation into WGS84)</i>

² See IHO CL 29/2009.

6822	/	NE	50 000	Aug 2008	<i>Abords Nord de Bastia (transformation into WGS84)</i>
6823	/	NE	50 000	Dec 2007	<i>Abords Sud de Bastia (transformation into WGS84)</i>
6850	/	NE	15 000 – 10 000	Mar 2009	<i>Saint-Florent, Centuri, Macinaggio (transformation into WGS84)</i>
6907	/	NE	25 000	Dec 2007	<i>Etang de Berre</i>
6911	/	NE	15 000	Apr 2009	<i>Golfe de Porto-Vecchio (transformation into WGS84)</i>
6942	/	NE	50 000	Aug 2008	<i>De punta d'Orchina au Cap Muro – Abords d'Ajaccio (transformation into WGS84)</i>
6961	3364	NE	25 000	Nov 2008	<i>Golfe de La Spezia (f.s. IT 115)</i>
6969	/	NE	50 000	Feb 2009	<i>Du Cap Corse à la Punta di l'Acciolu – Golfe de Saint-Florent (transformation into WGS84)</i>
6970	/	NE	50 000	Feb 2009	<i>De Punta di l'Acciolu à Capo Cavallo (transformation into WGS84)</i>
7024	/	NE	50 000	Nov 2008	<i>Bouches de Bonifacio (transformation into WGS84)</i>
7025	3302	NE	250 000	Mar 2009	<i>Ile de Corse (transformation into WGS84)</i>
7050	/	NE	50 000	Aug 2008	<i>De Calvi à Cargèse (transformation into WGS84)</i>
7074	3754	NE	50 000	Jul 2008	<i>De Yesilköy à Yelkenkaya Burnu – Approches Sud du Bosphore (f.s. TR 2923)</i>
7096	/	NE	10 000 – 5 000	Apr 2009	<i>Baie de Figari – Port de Bonifaccio (transformation into WGS84)</i>
7162	/	NE	50 000	Aug 2008	<i>Du Cap Muro au Cap de Feno (transformation into WGS84)</i>
7177	/	NE	40 000	Dec 2008	<i>Ile d'Elbe (f.s. IT 117)</i>
7192	/	NE	100 000	Apr 2009	<i>De Promontario Argentario à Capo Linaro (f.s. IT 6)</i>
7280	/	NE	25 000	Mar 2009	<i>Golfe d'Ajaccio (transformation into WGS84)</i>
7294	3157	NE	10 000	Nov 2007	<i>Puerto de Malaga (f.s. ES 4551)</i>
7316	/	NE	25 000	Dec 2008	<i>Golfe de Sagone (transformation into WGS84)</i>
7335	/	NC	50 000	Dec 2008	<i>Golfe de Palmas (f.s. IT 298)</i>
7390	3196	NE	10 000	Nov 2007	<i>Port de Marseille</i>
7391	/	NE	12 500	Dec 2007	<i>Abords Sud de Marseille- Des Iles du Frioul à l'Ile de Jarre</i>
7500	3386	NE	10 000	Oct 2008	<i>Port de Napoli (f.s. IT 84)</i>
7528	3392	NE	30 000	Feb 2008	<i>Abords de Palermo (f.s. IT 255, IT 256)</i>
7534	3365	NC	10 000	Nov 2008	<i>Rade de La Spezia (f.s. IT 60)</i>
7535	/	NC	5 000	Nov 2008	<i>Port de La Spezia (f.s. IT 59)</i>
7543	3549	NC	25 000	Dec 2008	<i>Abords de Port-Saïd (f.s. GB 240)</i>
7544	3548	NC	50 000	Dec 2008	<i>Approches de Port-Saïd (f.s. GB 241)</i>
7662	1901	NC	25 000	Jul 2008	<i>Barre et port de Huelva (f.s. ES 4411)</i>
7665	/	NC	50 000	Jun 2009	<i>Du Cap Negre au Cap Cerbère (f.s. ES 493)</i>

N° Nat.	N° INT	New chart (NC) or new edition (NE)	Scale 1:	Title
5220	/	NE	10 000	<i>Ports de la côte Est d'Italie</i>
6887	3352	NE	30 000	<i>Détroit de Messine (Stretto di Messina) (f.s. IT 138)</i>
7026	3152	NE	25 000	<i>Bahia de Algeciras (f.s. ES 445A)</i>
7042	3150	NE	100 000	<i>Détroit de Gibraltar (f.s. ES 105)</i>
7093	3198	NE	10 000	<i>Rade de Toulon</i>
7276	3172	NE	25 000	<i>Abords de Valencia (f.s. ES 481A)</i>
7409	/	NE	50 000	<i>De la Rade d'Agay à Monaco</i>
7608	3554	NE	12 500	<i>Port d'Alexandrie (f.s. GB 3119)</i>
7641	3681	NE	25 000 – 100 000	<i>Ports de la côte d'Israël (f.s. GB 1591)</i>
7660	/	NC	175 000	<i>Du Cap Tinoso au Cap Canet (f.s. ES 47). Replaces 4719.</i>
7663	/	NC	175 000	<i>Du Cap de Barcelona au Cap Cerbère (f.s. ES 49A). Replaces 4827, 7505.</i>
7664	/	NC	175 000	<i>Du Cap Tortosa au Cap de Tossa (f.s. ES 48C)</i>
XXXX	/	NC	100 000	<i>De Capo Smilazzo à roccella Ionica (f.s. IT 23). Replaces 2113.</i>

Planned in 2010-2012:

N° Nat.	N° INT	New chart (NC) or new edition (NE)	Scale 1:	Title
7658	/	NC	350 000	<i>Estrecho de Gibraltar y Mar de Alborán (f.s. ES 45). Replaces 4717, 1711, 6611.</i>
7659	/	NC	350 000	<i>Del cabo de Gata al cabo de las Huertas y del cabo Milonia al cabo Ivi (f.s. ES 46). Replaces 4718, 3678.</i>
7661	/	NC	425 000	<i>De cabo de la Nao a Barcelona con las islas Baleares (f.s. ES 48). Replaces 4720, 5505.</i>
7338	309	NE	1 118 000	<i>Du détroit de Messine (Stretto di Messina) à la Mer de Marmara (Marmara Denizi) (f.s. GR 109)</i>
XXXX	/	NC	25 000	<i>Canale di San Pietro (f.s. IT 294). Replaces 5345.</i>
XXXX	/	NC	5 000	<i>Iraklion (f.s. GR 443 et GR 4431). Replaces 6709.</i>

a.2 ENC's

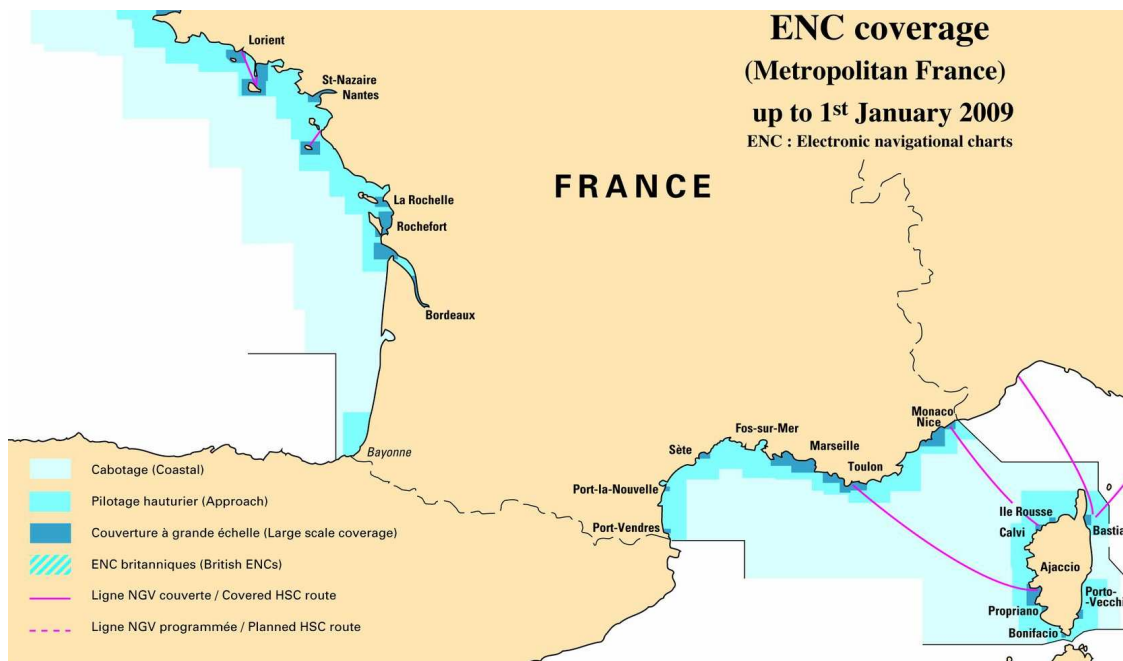
On the 15th of July 2009, SHOM had produced some 283 ENC's at an approximate rate of 40 per year. The full collection should eventually reach a figure of the order of 850 ENC's.

Europe approaches are well covered, taking into account commercial and passengers sailing requirements. Production in non European waters (areas of international responsibilities, overseas territories) is progressing. Main harbours in overseas territories are now well covered at large scales.

In line with the WEND task group recommendation, France produces its small scale ENC cells as closely as possible to INT chart schemes.

To comply with IMO regulations on ECDIS carriage requirements, all High Speed Crafts lines in French waters have been covered with ENC from 2008.

The SHOM ENC coverage in Southern Metropolitan France is depicted in the chartlet below, where existing ENC are represented in blue and High Speed Crafts routes are represented in pink:



Produced since the 15th MBSHC conference:

Area	Usage Band	Fr paper chart Nr	Observations
<i>Accès port Popriano</i>	5	6851	
<i>Accès port Bonifacio</i>	5	7096	
<i>Accès port Porto Vecchio</i>	5	6911	
<i>Corse Sud - Bouches de Bonifacio</i>	4	6942, 7162, 7024, 6929, 6855	
<i>Accès port Tanger</i>	4	7433	
<i>Liban</i>	5	7514 (insert D)	Tyr
<i>Côtes Méditerranée Est</i>	4	7408, 7409, 7443	
<i>Côtes Méditerranée Est</i>	5	6610, 6612	
<i>Côtes Méditerranée Est</i>	6	7200 (insert A),	
<i>Côtes Méditerranée Ouest</i>	4	6693, 7053	
<i>Corse Ouest</i>	4	7050	
<i>Corse Est</i>	4	6855	

An agreement was concluded with Italy in July 2008 to avoid data overlaps or gaps in the production of ENCs (usage bands 3 and 4) in the Menton and Bonifacio areas. The regular grid used for the production of usage band 3 ENCs will be replaced by the paper chart scheme in 2009 in order to reduce updating work (3 cells instead of 17 cells).

Planned in 2010 – 2011:

Zone / Area	Gamme d'utilisation Usage Band	N° carte imprimée FR Fr paper chart Nr	Observations
<i>Côtes de Méditerranée est</i>	5	7205, 6838, 7267, 6616, 6615, 7282, 7393	
<i>Corse est</i>	4	6823	
<i>Corse nord</i>	4	6969, 6822	
<i>Ports de plaisance - Méditerranée</i>	6	7205, 6838, 7267, 6612 (Insert A), 6616, 7282, 7393	

a.3 RNCs

NTR.

a.4 INT Charts

See item a.1.

a.5 National paper charts

See item a.1.

a.6 Other charts e.g. for pleasure crafts

The charts in the list below are available in a specific format for pleasure crafts.

N° Nat.	N° INT	Publication or edition date	Scale 1:	Title
3007L		2007	272000	<i>De la Pointe de La Estaca au Rio Miño</i>
3388L		2007	681000	<i>Du Rio Minho au Rio Guadiana</i>
4717L		2007	250000	<i>De Gibraltar à la Pointe del Sabinal</i>
4719L		2007	242000	<i>De Carthagène à Valence</i>
6665L		2007	25000	<i>Rias de Ferrol, Ares, Betanzos et A Coruña</i>
7042L	3150	2007	100000	<i>Détroit de Gibraltar (f.s. ES 105)</i>
7300L	1812	2008	350000	<i>De Cabo de São Vicente au Détroit de Gibraltar (f.s. ES 44)</i>
7595L		2007	25000	<i>Ria de Vigo (f.s. ES 416B)</i>
7598L	1808	2007	200000	<i>De Puerto de San Ciprian à Cabo Finisterre (f.s. ES 41A)</i>
4719L		2007	242000	<i>De Carthagène à Valence</i>
7298L		2007		<i>Ports et mouillages entre la frontière franco-espagnole et Tarragona</i>
6612L		2007	20000	<i>De Cassis à Bandol – Baie de La Ciotat</i>
6684L	3192	2007	25000	<i>Golfe et port de Fos</i>
6767L		2007	49900	<i>De Fos-sur-Mer à Marseille</i>
6907L		2007	25000	<i>Etang de Berre</i>
7004L		2007	15000	<i>Golfe d'Aigues-Mortes – Ports de Palavas-les-Flots, Carnon-Plage et des Saintes-Maries-de-la-Mer</i>
7054L		2007	50000	<i>De l'embouchure de l'Aude à Sète</i>

7091L		2007	25000	<i>Abords de Toulon</i>
7200L		2007	25000	<i>Du Cap d'Antibes au Cap Ferrat – Baie des Anges – Rade de Villefranche</i>
7205L		2007	15000	<i>Golfe de La Napoule – Golfe Juan – Iles de Lérins – Abords de Cannes</i>
7298L		2007		<i>Ports et mouillages entre la frontière franco-espagnole et Tarragona</i>
7390L	3196	2007	10000	<i>Port de Marseille</i>
7391L		2007	12500	<i>Abords Sud de Marseille – Des Iles du Frioul à l'Île de Jarre</i>
7406L		2007	50000	<i>De Marseille à Toulon</i>
7407L		2007	50200	<i>De Toulon à Cavalaire-sur-Mer – Iles d'Hyères</i>
7442L	3191	2007	20000	<i>De Villefranche-sur-Mer à Menton</i>
7505L		2007	93700	<i>Du Cabo de Tossa au Cap Cerbère (f.s. ES 876)</i>
6822L		2008	50300	<i>Abords Nord de Bastia</i>
6823L		2008	50600	<i>Abords Sud de Bastia</i>
6851L		2007		<i>Ports d'Ajaccio et de Propriano</i>
6855L		2007	51000	<i>Du phare d'Alistro à Solenzara</i>
6856L		2007	15000	<i>Abords et port de Bastia</i>
6911L		2007	15000	<i>Golfe de Porto-Vecchio</i>
6929L		2007	50000	<i>Abords de Porto-Vecchio – De l'anse de Favone aux îles Lavezzi</i>
6942L		2008	50000	<i>De Punta d'Orchina au Cap Muro – Abords d'Ajaccio</i>
6980L		2007		<i>L'Île Rousse – Sant'Ambrogio - Calvi</i>
7025L	3302	2007	250000	<i>Île de Corse</i>
7050L		2008	50000	<i>De Calvi à Cargèse</i>
7162L		2008	50000	<i>Du Cap Muro au Cap de Feno</i>
7175L		2007	100000	<i>De l'île d'Elbe à Promontorio Argentario (f.s. IT 5)</i>
7189L		2007	25000	<i>Golfes d'Olbia et d'Aranci – Iles Tavolara et Molara (f.s. IT 322)</i>
7190L		2007	25000	<i>Golfe de Congianus – De Capo Ferro à Capo Figari (f.s. IT 323)</i>
7191L		2007	25000	<i>Archipel de la Maddalena (f.s. IT 324)</i>
7316L		2007	25000	<i>Golfe de Sagone</i>
7442L	3191	2007	20000	<i>De Villefranche-sur-Mer à Menton</i>
7266L		2007	175000	<i>De Nísos Sámos à Nísos Ródos</i>
7272L	3416	2007	250000	<i>Iles Ioniennes (Íonioi Nísioi) – De Nísos Othonoi à Nísos Zákynthos (f.s. GR 21)</i>
7284L		2007	85000	<i>De Argolikós Kólpos à Níos Póros</i>
7342L		2007	175000	<i>De Nísos Sými à Kas – Nísos Ródos</i>
7266L		2007	175000	<i>De Nísos Sámos à Nísos Ródos</i>
7342L		2007	175000	<i>De Nísos Sými à Kas – Nísos Ródos</i>

Sediment charts (G charts) produced since the last conference:

N° Nat.	Publication or edition date	New chart (NC) or new edition (NE)	Scale 1:	Title
6822G	2009	NC	50300	Abords Nord de Bastia
6823G	2009	NC	50600	Abords Sud de Bastia
6969G	2009	NC	50300	Du Cap Corse à la Punta di l'Acciolu – Golfe de Saint-Florent
6970G	2009	NE	50500	De Punte di l'Acciolu à Capo Cavallo

a.7 ENC Distribution method

All French ENCs are distributed by PRIMAR RENC. A proposal was made by PRIMAR at the ENC session of the 4th EIHC to develop a RENC-to-RENC concept. Views from MBSHC ENC producers would be highly appreciated.

a.8 Problems encountered

France has informed the MBSHC's Chair and Members of its intention to resign as MEDINTCHART Coordinator at the 16th conference of the MBSHC (Letter n° 204 SHOM/DSPRE dated 17 Nov 2008). Since the 15th meeting of MBSHC, no information related to MEDINTCHART activity was received.

Meanwhile, MBSHC Members are invited to note that a new scheme for INT charts covering the Strait of Gibraltar was defined in 2008 by the EAHC in accordance with M-11 guidelines, and finally adopted in 2009. MBSHC Members have been informed by MEDINTCHART CL n° 01/2009 dated 15 July.

b. Publications

b.1 New publications

Type	Nr	Title
IN	D6	<i>Africa (Northern coast): The Levant: between Eagan Sea and Suez Canal (2008)</i>
IN	D2.1	<i>France (Southern coast):from the Spanish frontier to Cap de l'Aigle (2009)</i>
IN	D1	<i>Gibraltar Strait - Spain (South and Eastern coasts, the Balears) (2008) Corrections manual n°3</i>
IN	D4	<i>Italy (Southeastern coast) – Adriatic Sea (2008) Corrections manual n°2</i>
LL	DD	<i>The West Mediterranean (Southern and Eastern parts)- Adriatic Sea (2007 et 2009)</i>
LL	DC	<i>The West Mediterranean (Northern part) (2008 et 2009)</i>
LL	DE	<i>Eastern Mediterranean and Black Seas (2009)</i>
RSX	92.1	<i>Maritime radiocommunications – Volume 1 : Europe – Greenland – the Mediterranean(2008)</i>
RSX	93.2	<i>Radiocommunications for maritime traffic monitoring and piloting – Volume 2 : Western Europe and the Mediterranean (2009)</i>
RSX	96.1	<i>Marine weather broadcast stations – Volume 1 : Europe, Africa and Asia (2008)</i>

DIV	095	<i>Tide table 2009 – Vol 1 – French ports</i>
DIV	095	<i>Tide table 2009 – Vol 2 – Overseas ports</i>
DIV	105	<i>Tide table 2010 – Vol 1 – French ports</i>
DIV	105	<i>Tide table 2010 – Vol 2 – Overseas ports</i>

IN : Sailing directions

RSX : Radio stations

LL : List of Lights

DIV : Miscellaneous

b.2 Updated publications – Editions

NTR.

b.3 Means of delivery e.g. paper, digital

SHOM aims at generating by digital means its entire paper production. This should be achieved by using international standards such as XML and following closely the recommendations of experts such as the IHO Standardization of Nautical Publications Working Group (SNPWG) in which SHOM participates.

b.4 Problems encountered

An important regulation corpus has been developed for the establishment and use of ENC's while the equivalent standardisation for nautical books is still lagging. As a result, the rules of use of these documents are not clearly established.

In order to provide the most efficient service to the French Navy seafarers, an internal study has been launched to adapt the coverage of SHOM's original nautical publications (starting with the List of Lights and Radiocommunications as the maintenance costs for these publications are pretty heavy). One of the objectives is to provide better products (updated, comprehensive information) in the main areas of responsibilities (national waters and areas where France is the "SOLAS" charting authority under bilateral agreement).

4. MSI

NTR.

5. Capacity Building

5.1 Offer of and/or demand for Capacity Building

France participates in the IHO Capacity Building sub-committee and supports the IHO Regional Hydrographic Commissions of which SHOM is a member, especially the Southern Africa and Islands Hydrographic Commission (SAIHC), the Eastern Atlantic Hydrographic Commission (EAHC), the South-West Pacific Hydrographic Commission (SWPHC), the Meso American and Caribbean Sea Hydrographic Commission (MACHC) and the Mediterranean and Black Sea Hydrographic Commission (MBSHC).

5.2 Training received, needed, offered

France has implemented with Morocco a transfer of hydrographic and cartographic responsibilities mechanism, based on training programs, consulting and including practical experience at sea. An agreement has been signed in January 2008 for the period 2008-2013. Following trainings are currently ongoing.

	Year	Student
Training in France for senior officers	2009	1 (Hydro)
	2010	1 (ENC)
Cat.B Hydrographic course (18 months)	2009	1
Cat.A Hydrographic course (2 years)	2008	1
Cartographic course (9 months)	2010	3

Initial training capabilities provided by SHOM are described in its yearly report available on www.shom.fr.

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

5.3.1 Transfer of responsibilities in accordance with the SOLAS convention

Algeria: A data exchange and SOLAS-like agreement with France is under consideration at governmental level.

Morocco: France signed in 2008 an international agreement with Morocco in order to formalise the existing co-operation and sharing of hydrographic responsibilities in accordance with the SOLAS convention. The two first nautical co-produced charts with double seals (France and Morocco) will be published this year. A survey has been conducted in March 2009 by the hydrographic ship *BH2 Laplace* in Moroccan territorial waters and another one is scheduled in 2011.

Lebanon: A technical visit was conducted by France on behalf of IHO in February 2009. Following main recommendations have been made during this visit:

- to create of a National Hydrographic Committee,
- to start Lebanon's participation in IHO meetings (such as MBSCH conferences) and application process for full IHO Membership,
- to increase bilateral co-operation with France (SOLAS agreement).

Tunisia: A draft agreement proposed by France is under consideration by Tunisia.

5.3.2 Other co-operations

Croatia: A data exchange A3.4-type agreement was signed in November 2008.

Greece: A data exchange A3.4-type agreement with France is under consideration.

Romania: A technical visited was conducted by France on behalf of IHO in July 2008. Recommendations include:

- the creation of a National Hydrographic Committee,
- the increase of hydro surveys,
- the training of the hydrographic staff,
- the development of regional co-operation.

A bilateral agreement between SHOM and the Maritime Hydrography Directorate (MHD) is under consideration.

5.3.3 Co-operation with adjacent regional hydrographic commissions (EAtHC)

France signed two international agreements in the EAtHC area: one with Togo (December 2008) and one with Senegal (February 2009) in order to formalise the existing co-operation and sharing of hydrographic responsibilities in accordance with the SOLAS convention. More agreements are expected to be signed shortly with other Western African countries and Madagascar.

5.3.4 Improving the relationship with the European Union

In order to develop a MoU between the IHO and the European Commission, the IHO North Sea Hydrographic Commission has established the European Union Maritime and Marine Policy Working Group (EUM2WG). The objective is to raise the awareness of the European Maritime Task Force and DGs (ENV, TRAN, RECH, MARE) on the IHO EU Member States capabilities to support maritime policies.

The EUM2WG is investigating the possibility of setting up a Task Group of active members across IHO EU Member States (MBSHC, NSHC, BSHC, NHC) to deal with EU matters. This proposal consists, actually, of extending participation rather than limiting the group to NSHC members only. Therefore Member States of the MBSHC will be invited soon to participate in the development of this MoU.

The maritime perspectives of the Union for the Mediterranean are mentioned in section 1.

6. S-55 Latest update

The S-55 database for French areas of responsibilities is updated by SHOM on a yearly basis.

Separate entries are now available for France areas in each IHO region. A regular annual updating process has been put in place for periodic updates (last update in May 2009).

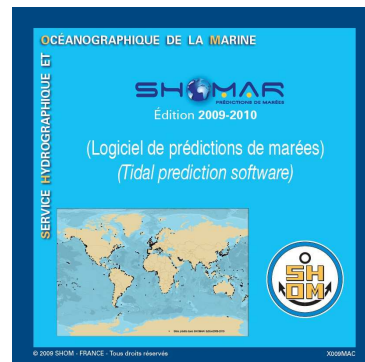
7. Oceanographic activities

It is worth noting that SHOM is responsible in France for tide predictions, and collect all sea level data available. In support of this activity, it maintains a digital tide gauge network as part of the French contribution to the IOC Tsunami Alert System scheduled in a first phase for the Indian Ocean, and meant to be further extended to the rest of the world. Work is in progress to enhance the permanent SHOM's tide gauge performances (real-time data transmission) and to increase the network coverage in more appropriate locations. Tide gauges of Nice and Marseille transmit their data in real-time.

Last July, a governmental important decision was made to establish a national tsunami warning centre for the North-Eastern and Western Mediterranean sea. This centre is supposed to cooperate with other institutes in the Western Mediterranean basin. It should be operational at the end of 2011. North African coastal states may have been approached by IOC to expand the real-time tide gauges network in support of tsunami warning systems.

Together with IOC and in accordance with recommendation MBSHC15-3, SHOM is ready to provide any support needed in such matters (technical specifications for purchasing, installation and maintenance operations).

A new edition of the tidal prediction software SHOMAR was released by SHOM in 2009. Tide characteristics can be computed for 1075 ports in France and in French overseas territories or for major harbours of Coastal States where France has signed SOLAS-type bilateral agreements.



*SHOMAR software –
Tide prediction*

The development of operational coastal oceanography is an important component of the environmental support package to the decision aids on maritime and coastal policies raised in the French Blue Book. New technologies, sensors and demonstrators like Previmer (<http://www.previmer.org/>) now make it feasible. A roadmap for the development of a national service in coastal operational oceanography was elaborated with SHOM partners in 2008 and will be consolidated in 2009-2010: it is planned for instance that SHOM will provide real time services for sea state, sea levels, sea surface currents measured by HF radars, ... and associated forecasts and predictions. This project is a national complement required under the European initiative of the Marine Services component of the GMES programme. France (Ifremer, Météo-France, SHOM, and other partners) is heavily involved in the development of GMES Marine Core Services through the *My Ocean* project coordinated by Mercator Ocean (http://www.mercator-ocean.fr/html/mercator/collaborations/myocean_en.html).

8. Conclusions

After a number of meetings of the IHO Capacity Building (Sub-)Committee and other Regional Hydrographic Commissions, it looks that the concept developed by France to establish State-to-State bilateral agreements in order to support SOLAS, Chap. V, Reg. 9 obligations on hydrographic services, with the final goal to transfer the full responsibility to the Coastal State is becoming more and more efficient. Due to the very high level of such agreements, it is also a major step forward to raise the importance of hydrography at the political level for every country. It is finally one of the best way to put into practice the new definition of hydrography adopted at the 4th EIHC³ when Coastal States can accept as a tangible example to take over their responsibilities with the establishment of National Hydrographic Committees, embracing all the disciplines and stakeholders together.

Considering this capacity building issue, considering the sensitive maritime boundaries issues pending in the MBSHC region, it seems that one of the most important challenge this commission has to face to, is to ensure that a consistent, coherent and comprehensive ENC coverage will be publicly available by 2012 for the main international shipping routes, approaches and harbours. A gap and risk analysis should be conducted as soon as possible in order to identify the most efficient technical ways and means to address them.

³ “Hydrography is the branch of applied sciences which deals with the measurement and description of the physical features of oceans, seas, coastal areas, lakes and rivers, as well as with the prediction of their change over time, for the primary purpose of safety of navigation and in support of all other marine activities, including economic development, security and defence, scientific research, and environmental protection”

ANNEX

SHOM's participation to IHO Regional Hydrographic Commissions, Committees, Sub-Committees & Working Groups

Name	Chair Vice chair	Member	Observations
LAWG		✓	Legal Advisory Working Group
FC	✓	✓	Vice-chairman of Finance Committee
HSSC		✓	Hydrographic Services and Standards Committee, formerly known as the Committee on Hydrographic Requirements for Information Systems (CHRIS)
TSMAD		✓	Transfer Standard Maintenance and Application Development
DPSWG		✓	Data Protection Scheme Working Group
DIPWG		✓	Digital Information Portrayal Working Group, former C&SMWG
SNPWG		✓	Standardisation of Nautical Publications Working Group
CSPCWG		✓	Chart Standardisation and Paper Chart Working Group
DQWG		✓	Data Quality Working Group -Last meeting in 1996
MSDIWG		✓	Marine Spatial Data Infrastructure Working Group
TWLWG	✓	✓	Tidal and Water Level Working Group
HDWG		✓	Hydrographic Dictionary Working Group
EUWG	✓	✓	ENC Updating Working Group
IRCC	✓	✓	SHOM director general has been elected first chairman of the Inter Regional Coordination Committee at the 4 th Extraordinary IH conference
NSHC		✓	North Sea Hydrographic Commission
MBSHC		✓	Mediterranean and Black Seas Hydrographic Commission
EA ^t HC		✓	Eastern Atlantic Hydrographic Commission
SWPHC	✓	✓	South-West Pacific Hydrographic Commission

MACHC		✓	MESO American & Caribbean Sea Hydrographic Commission
SAIHC		✓	7 th Conference of Southern Africa and Islands Hydrographic Commission to be held in the French Department of la Réunion
NIOHC		✓	North Indian Ocean Hydrographic Commission
HCA		✓	Hydrographic Commission on Antarctica
WWNWS		✓	World-Wide Navigational Warning Service Sub-Committee formerly known as the Promulgation of Radio Navigational Warnings Sub-Committee (PRNW)
CBSC		✓	Capacity Building Sub-Committee (ex-CBC)
GEBCO		✓	Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of Oceans (GEBCO)