

NATIONAL REPORT ITALY

1. Hydrographic Office/Service

The Italian Navy Hydrographic Institute (IIM) and is in charge of all the official nautical documentation published in Italy. It performs regular surveys of the Italian coasts and seas - over 550,000 square kilometers of seawaters and more than 7,800 kilometers of coastline – to collect data for nautical publications and charts, both paper and electronic. These products, together with nautical information data diffused nationally and internationally, represent the official documentation required for the safety of navigation by national and international standards.

2. Surveys

a) Coverage of new surveys

In 2018, systematic surveys have been conducted mainly along the Eastern coast of Italy (Adriatic Sea), Sicily and Sardinia Island, and the Tyrrhenian Sea:

- Adriatic Sea: Taranto, Ancona, Tremiti Island;
- Sardinia: Olbia, Cagliari;
- Sicily: Augusta, Milazzo, Graham Bench;
- Tyrrhenian Sea: Scoglio d’Africa.

b) New technologies and /or equipment

- IIM carried out, in cooperation with a private company, a LiDAR coastal bathymetric survey in Sardinian marine areas;
- the multibeam system installed on board the IIM hydrographic R.H.I.B. was updated with MBES ITER Bathyswath 2;
- Hydrographic launches were updated with the installation on board of the new version of the system Kongsberg Seatex Seapath 380 for positioning and heading measurements.

c) New ships

- The IIM is supporting the Italian Navy General Staff in the drawing up of technical-operational specifications for a new major hydro-oceanographic unit.

d) Problems encountered

Survey activities were carried out regularly.

3. New charts and updates

IIM has changed its chart production system based on a product-oriented philosophy to a more suitable data-centric architecture. This system allows a more efficient paper charts, ENC's, Nautical publications and NtMs production, from the same database. This transition is a complex and long process, almost completed.

IIM is also searching for the best option to automatize the Pilots/Sailing Directions (“*Portolano del Mediterraneo*”) in order to obtain an interactive and modern product.

Since 2017 IIM executes topo-bathymetric airborne LIDAR coastal surveys from 0 to 50 m of depth (in the Adriatic area and main Islands areas) for hydrographic and marine geohazard management.

a) ENC's

The status of ENC production in the region is:

<i>Usage Bande</i>	<i>Produced Cells</i>	<i>Planned Cells</i>	<i>%</i>
1	1	1	100
2	2	2	100
3	43	44	98
4	19	23	83
5	57	76	75
6	3	5	60
Total	125	151	83

Since the 20th conference, the following ENC cells have been produced:

– New ENC's:

<i>Name</i>	<i>Edition (date)</i>	<i>Scale</i>	<i>Title</i>	<i>Nav Purpose</i>	<i>N.E/N.C.</i>
2017					
IT300947	2^ (2017)	1 : 180 000	Strait of Sicilia offshore Including Etc.	Coastal	N.E.
IT300949	3^ (2017)	1 : 180 000	(Central) Tyrrenia Sea, offshore Etc.	Coastal	N.E.
IT300043	4^ (2017)	1 : 90 000	Capo Figari to Capo di Monte Santu	Coastal	N.E.
IT600059	3^ (2017)	1 : 4 000	La Spezia Harbor	Harbor	N.E.
IT50252A	2^ (2017)	1 : 4 000	San Vito lo Capo Harbour	Harbour	N.E.
IT50252B	2^ (2017)	1 : 4 000	Castellamare del Golfo Harbour	Harbour	N.E.
IT300948	2^ (2017)	1 : 180 000	Strait of Sicilia offshore etc..	Coastal	N.E.
IT50252B	2^ (2017)	1 : 4 000	Castellammare del Golfo Harbour	Harbour	N.E.
IT50252A	2^ (2017)	1 : 4 000	San Vito Lo Capo Harbour	Harbour	N.E.
IT50258A	2^ (2017)	1 : 5 000	Mazara del Vallo Harbour	Harbour	N.E.
IT50258B	2^ (2017)	1 : 5 000	Sciacca Harbour	Harbour	N.E.
IT50258C	2^ (2017)	1 : 5 000	Marsala Harbour	Harbour	N.E.
IT40204A	2^ (2017)	1 : 22 000	Tremiti Isles	Approach	N.E.
IT50204B	2^ (2017)	1 : 4 000	Tremiti Isles Anchorages	Harbour	N.E.
IT50204C	2^ (2017)	1 : 4 000	Pianosa Isles	Harbour	N.E.
IT400100	2^ (2017)	1 : 45 000	Mortola Cape to Riva Ligure	Approach	N.E.
IT400119	2^ (2017)	1 : 12 000	Giglio Island	Approach	N.E.
IT500213	3^ (2017)	1 : 3 000	San Benedetto del Tronto Harbour	Harbour	N.E.
IT400264	3^ (2017)	1 : 22 000	Porto Empedocle roads	Approach	N.E.
IT50074C	2^ (2017)	1 : 4 000	Porto Santo Stefano Port	Harbour	N.E.
IT500311	4^ (2017)	1 : 8 000	Cagliari Harbour	Harbour	N.E.
IT300920	3^ (2017)	1 : 180 000	(Northern) Ionian Sea and Etc..	Coastal	N.E.
IT400123	4^ (2017)	1 : 22 000	Approach to Civitavecchia	Approach	N.E.
2018					
IT600281	5^ (2018)	1 : 4000	La Maddalena and Santo Stefano Roads	Berthing	N.E.
IT500149	2^ (2018)	1 : 8000	Gallipoli Harbour	Harbour	N.E.
IT500071	5^ (2018)	1 : 8000	Piombino Roads and Harbour	Harbour	N.E.
IT50196B	3^ (2018)	1 : 4 000	Monopoli Harbour	Harbour	N.E.
IT300917	3^ (2018)	1 : 180 000	Ionian Sea, offshore between Etc....	Coastal	N.E.
IT300947	3^ (2018)	1 : 180 000	Strait of Sicilia offshore Etc....	Coastal	N.E.
IT50082D	2^ (2018)	1 : 4 000	Casamicciola Harbour	Harbour	N.E.
IT50082C	2^ (2018)	1 : 4 000	Marina Grande di Procida Harbour	Harbour	N.E.
IT500057	2^ (2018)	1 : 4 000	Chiavari and Lavagna Harbour	Harbour	N.E.
IT500099	3^ (2018)	1 : 12 000	Gioia Tauro Harbour	Harbour	N.E.
IT300020	4^ (2018)	1 : 90 000	Licata to Avola	Coastal	N.E.
IT300947	3^ (2018)	1 : 180 000	Strait of Sicilia offshore Etc....	Coastal	N.E.
IT500060	4^ (2018)	1 : 8 000	Roads of La Spezia	Harbour	N.E.
IT300019	3^ (2018)	1 : 90 000	Torre Salsa to Licata	Coastal	N.E.

IT300020	5^ (2018)	1 : 90 000	Licata to Avola	Coastal	N.E.
IT500212	4^ (2018)	1 : 4 000	Ortona Harbour	Harbour	N.E.
IT80082A	2^ (2018)	1 : 4 000	Ischia Harbour	Harbour	N.E.
IT80082B	2^ (2018)	1 : 4 000	Forio Harbour	Harbour	N.E.
IT300948	3^ (2018)	1 : 180 000	Strait of Sicilia offshore Etc....	Coastal	N.E.
IT400222	6^ (2018)	1 : 45 000	Approach to Venezia	Approach	N.E.
IT400299	4^ (2018)	1 : 22 000	Approach to Cagliari	Approach	N.E.
IT400107	5^ (2018)	1 : 22 000	From Nervi to Sestri Levante	Approach	N.E.
IT400129	5^ (2018)	1 : 22 000	Ischia and Ptochida Channels	Approach	N.E.
IT50214D	3^ (2018)	1 : 4 000	Pesaro Harbour	Harbour	N.E.
IT300033	3^ (2018)	1 : 90 000	Lake of Lesina to Pescara Including Etc.	Coastal	N.E.
IT200435	4^ (2018)	1 : 700 000	Adriatic sea and Ionian sea	General	N.E.
IT100350	3^ (2018)	1 : 1 500 000	Mediterranean Sea eastern basin	Overview	N.E.
IT300037	7^ (2018)	1 : 90 000	Viserba to Po delle Tolle	Coastal	N.E.
IT300036	7^ (2018)	1 : 90 000	Numana to Rimini	Coastal	N.E.
IT500318	2^ (2018)	1 : 8 000	Olbia Port - Sardinia	Harbour	N.E.
IT500096	2^ (2018)	1 : 8 000	Salerno Approaches	Harbour	N.E.
IT400322	3^ (2018)	1 : 22000	Olbia and Gulf of Aranci Etc..	Approach	N.E.
IT500211	2^ (2018)	1 : 4 000	Pescara Harbour	Harbour	N.E.
IT400298	4^ (2018)	1 : 45 000	Gulf of Palmas	Approach	N.E.
IT50322B	1^ (2018)	1 : 4 000	Port of Golfo Aranci	Harbour	N.C.
IT300002	6^ (2018)	1 : 90 000	Albenga to Bogliasco	Coastal	N.E.
IT300001	4^ (2018)	1 : 90 000	Cape Mortola to Alassio	Coastal	N.E.
IT300005	6^ (2018)	1 : 90 000	Piombino Channel to Argentario Ecc.	Coastal	N.E.
IT300011	3^ (2018)	1 : 90 000	Cape Tirone to Briatico	Coastal	N.E.
IT300909	3^ (2018)	1 : 180 000	Southern Ligurian Sea Etc....	Coastal	N.E.
IT400132	3^ (2018)	1 : 22 000	Approach to Salerno	Approach	N.E.
IT300009	3^ (2018)	1 : 90 000	Terracina to Torre Patria Including Etc..	Coastal	N.E.
IT200434	3^ (2018)	1 : 700 000	Tirrenyan Sea and Strait of Sicilia	General	N.E.
IT500198	3^ (2018)	1 : 4 000	Barletta Harbour	Harbour	N.E.
IT500076	2^ (2018)	1 : 12000	Civitavecchia Harbour	Harbour	N.E.
IT300007	4^ (2018)	1 : 90 000	Cape Linaro to Anzio	Coastal	N.E.
IT400117	6^ (2018)	1 : 45 000	Elba Islands	Approach	N.E.
IT400129	6^ (2018)	1 : 22 000	Ischia and Procida Channels	Approach	N.E.
2019					
IT400115	4^ (2019)	1 : 22 000	Approach to La Spezia	Approach	N.E.
IT500053	4^ (2019)	1 : 8 000	Savona – Vado Port	Harbour	N.E.
IT500052	3^ (2019)	1 : 4 000	Imperia Harbour	Harbour	N.E.
IT500051	3^ (2019)	1 : 4 000	Sanremo Harbour	Harbour	N.E.
IT500071	6^ (2019)	1 : 8 000	Piombino Roads and Harbour	Harbour	N.E.
IT500084	4^ (2019)	1 : 8 000	Napoli Harbour	Harbour	N.E.
IT500062	5^ (2019)	1 : 8 000	Livorno Harbour	Harbour	N.E.
IT500061	3^ (2019)	1 : 4 000	Marina di Carrara Harbour	Harbour	N.E.
IT50074B	2^ (2019)	1 : 4 000	Giglio Port – Giglio Harbour	Harbour	N.E.
IT500072	2^ (2019)	1 : 8 000	Roads of Portoferraio	Harbour	N.E.
IT50074A	2^ (2019)	1 : 4 000	Ercole –Cala Galera Port	Harbour	N.E.
IT400325	4^ (2019)	1 : 22 000	Western Archipelago of Maddalena Etc..	Approach	N.E.
IT300001	5^ (2019)	1 : 90 000	Cape Mortola to Alassio	Coastal	N.E.
IT300042	6^ (2019)	1 : 90 000	Castelsardo to Gulf of Congianus	Coastal	N.E.
IT300008	4^ (2019)	1 : 90 000	Torre Astura to Circeo Cape and Etc..	Coastal	N.E.
IT300003	6^ (2019)	1 : 90 000	Pieve Ligure to S. Rossore	Coastal	N.E.
IT300006	4^ (2019)	1 : 90 000	Ansedonia to Civitavecchia Etc..	Coastal	N.E.
IT300004	7^ (2019)	1 : 90 000	San Rossore to Torre Populonia Ecc..	Coastal	N.E.
IT300002	7^ (2019)	1 : 90 000	Albenga to Bogliasco	Coastal	N.E.
IT50215B	2^ (2019)	1 : 4 000	Cesenatico Port	Harbour	N.E.
IT50215D	2^ (2019)	1 : 4 000	Cervia Port	Harbour	N.E.
IT50215C	2^ (2019)	1 : 4 000	Rimini Harbour	Harbour	N.E.
IT300040	6^ (2019)	1 : 100 000	Water between Corsica and Tuscany Etc.	Coastal	N.E.
IT300043	5^ (2019)	1 : 100 000	Capo Figari to Capo di Monte Santu	Coastal	N.E.
IT300041	3^ (2019)	1 : 100 000	Alistro to Bocche di Bonifacio	Coastal	N.E.

IT300044	3^ (2019)	1 : 100 000	Point of Pedra Longa to Capo Ferrato	Coastal	N.E.
IT500150	2^ (2019)	1 : 8 000	Corigliano Calabro Harbour	Harbour	N.E.
IT300914	3^ (2019)	1 : 180 000	(Central) Tyrrhenian Sea offshore Etc..	Coastal	N.E.
IT300010	6^ (2019)	1 : 100 000	Licola to Agnone including Ischia Ecc..	Coastal	N.E.
IT300011	4^ (2019)	1 : 100 000	Acciaroli to Diamante	Coastal	N.E.
IT300913	3^ (2019)	1 : 180 000	(Northern) Tyrrhenian Sea offshore Etc.	Coastal	N.E.
IT300912	5^ (2019)	1 : 180 000	(Central) Tyrrhenian Sea offshore Etc.	Coastal	N.E.
IT50215E	2^ (2019)	1 : 5 000	Porto Garibaldi Port	Harbour	N.E.
IT50215A	2^ (2019)	1 : 4 000	Cattolica Harbour	Harbour	N.E.
IT600154	3^ (2019)	1 : 4 000	Taranto Harbour Arsenale	Harbour	N.E.
IT300045	3^ (2019)	1 : 100 000	Seno di Quartu to P.ta S.Giusta	Coastal	N.E.
IT50319A	1^ (2019)	1 : 4 000	Porto Cervo Port	Harbour	N.C.
IT50319D	1^ (2019)	1 : 4 000	Palau Port	Harbour	N.C.
IT40116A	2^ (2019)	1 : 22 000	Gorgona Island	Approach	N.E.
IT40116B	3^ (2019)	1 : 22 000	Capraia Island	Approach	N.E.
IT50083B	2^ (2019)	1 : 8 000	Port of Bagnoli	Harbour	N.E.
IT300049	3^ (2019)	1 : 90 000	Cape of Argentiera to Point Etc.	Coastal	N.E.
IT300048	4^ (2019)	1 : 90 000	Capo Mannu to Capo Ferro	Coastal	N.E.
IT300047	3^ (2019)	1 : 90 000	Port of Masua to Sturraggia Cape Etc.	Coastal	N.E.
IT300046	5^ (2019)	1 : 90 000	Quartu S.Elena (Cagliari) to Nebida Ecc.	Coastal	N.E.
IT300911	3^ (2019)	1 : 180 000	Sardinia Sea offshore Cape of Etc.	Coastal	N.E.
IT400323	3^ (2019)	1 : 22 000	Congianus Gulf	Approach	N.E.
IT50083D	2^ (2019)	1 : 80 000	Port of Baia	Harbour	N.E.
IT50083C	2^ (2019)	1 : 80 000	Port of Miseno	Harbour	N.E.
IT50083A	2^ (2019)	1 : 80 000	Port of Pozzuoli	Harbour	N.E.
IT500134	2^ (2019)	1 : 4 000	Vibo Valentia Harbour	Harbour	N.E.
IT500146	2^ (2019)	1 : 4 000	Crotone Harbour	Harbour	N.E.
IT50145B	4^ (2019)	1 : 4 000	Reggio Calabria Harbour	Harbour	N.E.
IT50145A	3^ (2019)	1 : 4 000	Villa San Giovanni Harbour	Harbour	N.E.
IT500094	1^(2019)	1 : 4.000	Torre Annunziata Harbour	Harbour	N.E.

– In progress:

<i>Name</i>	<i>Scale</i>	<i>Title</i>	<i>Nav Purpose</i>	<i>N.E/N.C.</i>
IT500095	4.000	Castellammare di Stabia Harbour	Harbour	N.E.
IT600059	4.000	La Spezia Harbour	Berthing	N.E.
IT400100	45.000	Mortola Cape to Riva Ligure	Approach	N.E.
IT50319A	5.000	Porto di Porto Cervo	Harbour	N.C.
IT60319D	4.000	Porto di Palau	Berthing	N.C.
IT500282	12.000	Anchorage between La Maddalena Ec..	Harbour	N.E.
IT500063	4.000	Viareggio Harbour	Harbour	N.E.
IT500225	8.000	Venezia – Marghera Nord	Harbour	N.E.
IT400249	30.000	Panarea and Stromboli Islands	Approach	N.E.
IT500193	8.000	Bari Harbour	Harbour	N.E.
IT50196A	5.000	Molfetta Harbour	Harbour	N.C.
IT50196B	5.000	Monopoli Harbour	Harbour	N.C.
IT600224	3.000	Arsenale di Venezia	Berthing	N.E.
IT500153	5.000	Purto di Taranto Stazione Navale	Harbour	N.E.
IT500245	10.000	Milazzo Harbour and Road	Harbour	N.E.
IT500271	8.000	Augusta Harbour	Harbour	N.E.

b) ENC Distribution method

Italian cells are distributed through IC-ENC and Jeppesen Official ENC Service.

c) RNCs

N.A.

d) INT charts published

The status of INT charts production in the region is:

<i>Scale</i>	<i>Produced INT charts</i>	<i>Planned INT charts</i>	<i>%</i>
Small	1	1	100
Medium	6	8	75
Large	7	6	86
Total	14	15	93,3

The Italian Hydrographic Institute and the Tunisian Hydrographic Office are co-producing two INT charts (paper chart and ENC) of the Strait of Sicily (INT 3210 and INT 3212); Hydrographic Expert meetings are organized regularly during the year. INT 3210 is already published.

Since the 20th conference, the following INT Charts have been produced:

– **INT Charts published:**

<i>INT n.</i>	<i>National n.</i>	<i>Title</i>	<i>N.E/N.C.</i>
2017			
3210	948	Da Benzart a K'Libia Trapani e Pantelleria	N.C.
2018			
3199	2056	Da Cap D'Antibes a Cap Ferret	N.E.
3191	257	Porto di Trapani	N.E.
3369	62	Porto di Livorno	N.E.
3395	99	Porto di Gioia Tauro	N.E.
3464	222	Litorale di Venezia	N.E.
1	1111	Simboli abbreviazioni T. in uso nelle Carte Nautiche	N.E.
2019			
3386	84	Porto di Napoli	N.E.
3118	908	Da Fos-Sur-Mer a Capo Mele	N.E.
3302	910	Isola di Corsica	N.C.
3387	96	Rada di Salerno	N.L.E.

– **INT Charts in progress:**

<i>INT n.</i>	<i>National n.</i>	<i>Title</i>	<i>N.E/N.C.</i>
3461	193	Port di Bari	N.E.
3350	326	Bocche di Bonifacio	N.E.

e) National paper charts

Since the 20th conference the following National Charts have been produced:

– **National Charts published:**

<i>National n.</i>	<i>Title</i>	<i>N.E/N.C.</i>
2017		
1555	Mar Tirreno Meridionale	N.C.
1561	Stretto di Sicilia	N.C.
1563	Mare Adriatico Settentrionale	N.C.
252	Porti Minori della Sicilia	N.E.
258	Porti Minori della Sicilia Marsala Mazzara del Vallo Sciacca	N.E.
204	Isole Tremiti e Pianosa	N.E.
119	Isola del Giglio	N.E.
213	Porto di San Benedetto del Tronto	N.C.

264	Rada di Porto Empedocle	N.C.
311	Porto di Cagliari	N.E.
947	Da Ras El Melah a Cap Africa – e Isole Pelagie	N.E.
2018		
71	Rada e Porto di Portofino	N.E.
299	Litorale di Cagliari	N.E.
33	Dal Lago di Lesina a Ortona e IsoleTremiti	N.E.
36	Da Ancona a Rimini	N.E.
116	Isole di Capraia e Gorgona	N.E.
924	Da Porto Corsini all’ Isola di Pag	N.E.
211	Porto di Pescara	N.E.
1	Da Cannes a Imperia	N.E.
2019		
198	Porto di Barletta	N.E.
319	Porti di Palau e Porto Cervo	N.C.
116	Isole di Capraia e Gorgona	N.E.
150	Porto di Corigliano Calabro	N.L.E.
154	Porto di Taranto	N.L.E
78	Porti di Gaeta e Formia	N.L.E
45	Da C.o Carbonara a C.o Spartivento	N.L.E
61	Porto di Marina di Carrara	N.L.E
281	Rade di La Maddalena e S. Stefano	N.L.E
2	Da Imperia a Portofino	N.L.E
134	Porto di Vibo Valentia Marina	N.L.E
145	Porti di Reggio di Calabria e Villa S. Giovanni	N.L.E
146	Porto di Crotona	N.L.E
94	Porto di Torre Annunziata	

– **In progress:**

<i>National n.</i>	<i>Title</i>
95	Porto di Castellammare di Stabia
59	Porto della Spezia
100	Da Capo Ferrat a San Lorenzo al Mare
319	Porti Minori e Ancoraggio della Sardegna nord-orientale
282	Ancoraggi tra La Maddalena e la costa nord della Sardegna
63	Porto di Viareggio
318.	Porto di Olbia
53	Savona – Vado-
291	Porto di Oristano
290	Porto di Alghero
225	Venezia –Margerita Nord
249	Isole di Panarea e Stromboli
196	Porti Minori delle Puglie
224	Arsenale di Venezia
146	Porto di Crotona
153	Porto di Taranto –Stazione Navale
245	Rada e Porto di Milazzo
271	Rada e Porto di Augusta
2	Da Imperia a Portofino
17	Da Capo Rama a Marsala
24	Da Roccella Ionica a Capo Rizzuto
25	Da Capo Rizzuto a Punta Alice
16	Da Capo Rama a Capo Zafferano e Isola di Ustica
26	Da Punta Alice a Foce del Sinni
35	Dalla Foce del Tronto ad Ancona

f) Other charts, e.g. for pleasure craft

Since the 20th conference, the following pleasure craft paper charts have been produced:

– **New editions of pleasure craft paper charts:**

<i>Number</i>	<i>Title</i>	<i>Scale 1:</i>	<i>Edition date</i>
2017			
7404	Da Marina di Meta a Sorrento	1:30 000	Lug-17
7337	Isola del Giglio	1:30 000	Lug-17
7091	Da Punta Pietre Nere a Torre Petacciato	1:100 000	Set-17
7117	Da Capo D'Orso a Punta Sabatino	1:100 000	Set-17
7118	Da Capo Coda Cavallo a Cala Liberotto	1:100 000	Set-17
7397	Isola d'Ischia (Ovest)	1:30 000	Set-17
7398	Isola d'Ischia (Est)	1:30 000	Set-17
7399	Canale d'Ischia e Canale di Procida	1:30 000	Nov-17
7400	Golfo di Pozzuoli	1:30 000	Nov-17
7091	Da Punta Pietre Nere a Punta Petacciato	1:100 000	Nov-17
7090	Da Foce di Capoiale a P.ta Pietre Nere	1:100 000	Dic-17
7464	Litorale di Catania	1:30 000	Dic-17
2018			
7108	Da Casteldimezzo a Cesenatico	1:100 000	Gen-18
7109	Da Bellaria a Marina di Ravenna	1:100 000	Gen-18
7110	Dalle Valli di Comacchio a Scardovari	1:100 000	Gen-18
7532	Litorale di Monfalcone	1:30 000	Gen-18
7101	Dalla St.e di Montenero a P.ta Cavalluccio	1:100 000	Gen-18
7415	Stretto di Messina Reggio Calabria	1:30 000	Gen-18
7416	Stretto di Messina –Villa San Giovanni	1:30 000	Gen-18
7045	Da S. Stefano di Camastra a Capo Piraino	1:100 000	Mar-18
7431	Isola di Filicudi	1:30 000	Mar-18
7432	Isola di Alicudi	1:30 000	Mar-18
7455	Da Capo Rossello a San Leone	1:30 000	Mar-18
7456	Da San Leone a Punta Bianca	1:30 000	Mar-18
7339	Litorale di Civitavecchia Installazioni	1:30 000	Mar-18
7340	Litorale di Civitavecchia	1: 30 000	Mar-18
7345	Da Punta Falcone a Porto Liscia	1:30 000	Mar-18
7023	Da Tor Vaianica a Capo d'Anzio	1:100 000	Mar-18
7058	Da Capo della Secca a Punta Bianca	1:100 000	Apr-18
7112	Da Porto Levante a Lido	1:100 000	Apr-18
7512	Porto di Malamocco	1:50 000	Apr-18
7511	Litorale di Chioggia	1:50 000	Mag-18
7013	Isola d'Elba	1:100 000	Mag-18
7021	Da Punta Sant'Agostino a Ladispoli	1:100 000	Mag-18
7091	Da Punta Pietre Nere a Punta Petacciato	1:100 000	Giu-18
7113	Da Lido a Caorle	1:100 000	Giu-18
7322	Canale di Piombino	1:30 000	Giu-18
7011	Da Marina di Cecina a Piombino	1:100 000	Giu-18
7014	Da Piombino a Castilione della Pescaia	1:100 000	Giu-18
7309	Da Chiavari a Riva Trigoso	1:30 000	Giu-18
7059	Da Punta Bianca a Punta delle Duerocche	1:100 000	Lug-18
7060	Da Castello di Falconara a Scoglitti	1:100 000	Lug-18
7061	Da Punta Braccetto a Punta Raganzino	1:100 000	Lug-18
7062	Da Punta Religione a Marzamemi	1:100 000	Lug-18
7089	Da Torre di M. Pucci a Torre Calarossa	1:100 000	Lug-18
7490	Isole Tremiti	1:18 000	Lug-18
7105	Da Porto S.Elpidio a Sirolo	1:100 000	Lug-18
7106	Da Portonovo a Senigallia	1:100 000	Lug-18
7107	Da Senigallia a Casteldimezzo	1:100 000	Lug-18
7108	Da Casteldimezzo a Cesenatico	1:100 000	Lug-18
7355	Litorale di Cagliari	1:30 000	Lug-18

7356	Litorale di Cagliari installazioni	1:30 000	Lug-18
7399	Canale d'Ischia e Canale di Procida	1:30 000	Lug-18
7400	Golfo di Pozzuoli	1:30 000	Lug-18
7090	Da Foce di Capoiiale a P.ta Pietre Nere	1:100 000	Ago-18
7451	Isola di Lampedusa versante Ovest	1:20 000	Ago-18
7452	Isola di Lampedusa versante Est	1:20 000	Ago-18
7453	Isola di Linosa	1:20 000	Ago-18
7119	Da Cala Ginepro a Cala Longa	1:100 000	Set-18
7339	Litorale di Civitavecchia installazioni	1:30 000	Set-18
7340	Litorale di Civitavecchia	1:30 000	Set-18
7063	Da Fiume Tellaro a Capo Santa Croce	1:100 000	Set-18
7012	Isola Capraia	1:100 000	Set-18
7321	Isola di Capraia	1:30 000	Set-18
7128	Da Punta sa Calada Bianca a Isola Mal di Ventre	1:100 000	Set-18
7357	Da Capo Spartivento a Punta delle Canne	1:50 000	Ott-18
7087	Da Margherita di Savoia a Mattinatella	1:100 000	Ott-18
7088	Da Punta Grugno a Peschici	1:100 000	Ott-18
7001	Da Capo Mortola a Capo Berta	1:100 000	Ott-18
7002	Da Imperia a Ceriale	1:100 000	Ott-18
7078	Da Torre Chianca a Torre Mozza	1:100 000	Ott-18
7079	Da Torre Suda a Torre di Andrano	1:100 000	Ott-18
7398	Isola di Ischia (Est)	1:30 000	Ott-18
7399	Canale d'Ischia e Canale di Procida	1:30 000	Ott-18
1111D	Carta dei simboli abbreviazioni, termini in uso Ecc..	//////////	Nov-18
7368	Golfo di Oristano	1:40 000	Nov-18
7371	Da Punta Arutas a Rocca Tunda	1:40 000	Nov-18
2019			
7397	Isola d'Ischia (Ovest)	1:30 000	Gen-19
7081	Da S. Cataldo a Casalabate	1:100 000	Gen-19
7070	Da Soverato a Capo Rizzuto	1:100 000	Gen-19
7104	Da Villarosa a Porto S. Giorgio	1:100 000	Gen-19
7111	Dal Po di Goro a Porto Levante	1:100 000	Gen-19
7003	Da Loano a Savona	1:100 000	Gen-19
7351	Da Isolotto Portisco a Punta delle Casette	1:30 000	Feb-19
7091	Da Punta Pietre Nere a Torre Petacciato	1:100 000	Feb-19
7511	Litorale di Chioggia	1:100 000	Feb-19
7102	Da San Giovanni in Venere a Pescara	1:100 000	Feb-19
7417	Stretto di Messina Capo Peloro Capo Paci	1:30 000	Feb-19
7418	Stretto di Messina Capo Rasocolmo	1:30 000	Feb-19
7102	Da San Giovanni in Venere a Pescara	1:100 000	Mar-19
7103	Da Pescara a Tortoreto	1:100 000	Mar-19
7086	Da Molfetta a Margherita di Savoia	1:100 000	Mar-19
7532	Litorale di Monfalcone	1:30 000	Mar-19
7346	Isole Razzoli, Budelli e Santa Maria	1:30 000	Mar-19
7116	Da Capo di Monte Russo a Porto Cervo	1:100 000	Mar-19
7117	Da Capo d'Orso a Punta Sabbatino	1:100 000	Mar-19
7344	Da Monte Bianco a Santa Teresa di Gallura	1:30 000	Mar-19
7345	Da Punta Falcone a Porto Liscia	1:30 000	Mar-19
7048	Da Trappetto a Capo Mongerbino	1:100 000	Mar-19
7050	Da Trapani a Punta Molinazzo	1:100 000	Mar-19
7074	Golfo di Corigliano	1:100 000	Apr-19

g) Problems encountered

Italy does not issue Temporary and Preliminary notices for charts and ENC's (T&P - compliant with IHO publication S-4 Part B-600 "Chart maintenance") due to limitations of our current software in managing T&P correctly. However, information are provided to mariners via the Italian NtM Booklet in the section C1 "Nautical Information". Since last year, the information contained in the section C1 have been cancelled. Updates are provided via temporary notices for Sailing Directions and for List of Lights.

IIM is changing its working procedures, implementing CARIS Software suite for NtM Booklet productions. We expect to be fully compliant with S-4 specifications for T&P by the end of the year.

4. New publications & updates

Italy is completing the testing phase for the production of the NtMBooklet through CARIS Software suite. In particular, an internal training phase has been completed successfully. The software transition will be completed by the end of the year.

Since the 20th conference, the following publications have been produced:

a) New publications

Annual

<i>Number</i>	<i>Title</i>	<i>Edition</i>
I.I. 2024	L'AGENDA NAUTICA 2017	2017
I.I. 2024	L'AGENDA NAUTICA 2018	2018
I.I. 2024	L'AGENDA NAUTICA 2019	2019
I.I. 3132	EFFEMERIDI NAUTICHE 2018	2018
I.I. 3132	EFFEMERIDI NAUTICHE 2019	2019
I.I. 3133	TAVOLE DI MAREA 2018	2018
I.I. 3133	TAVOLE DI MAREA 2019	2019

Sailing Directions

<i>Number</i>	<i>Title</i>	<i>Edition</i>
I.I. 3205	PORTOLANO P5	2018
I.I. 3204	PORTOLANO P4	2018

List of Lights

<i>Number</i>	<i>Title</i>	<i>Edition</i>
I.I. 3134	ELENCO FARI E SEGNALI DA NEBBIA DA CANNES	2017

List of Radio Signals

<i>Number</i>	<i>Title</i>	<i>Edition</i>
I.I. 3134	RADIOSERVIZI PER LA NAVIGAZIONE – PARTE I	2017

Miscellaneous

<i>Number</i>	<i>Title</i>	<i>Edition</i>
I.I. 3001	CATALOGO GENERALE DELLE CARTE E DELLE PUBBLICAZIONI NAUTICHE	2017
I.I. 3001	CATALOGO GENERALE DELLE CARTE E DELLE PUBBLICAZIONI NAUTICHE	2018

b) Updated publications

Publications are updated via the NtM (*Fascicolo Avvisi ai Naviganti*) booklet which can also be downloaded free of charge from the IIM section in the Italian Navy official website.

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

All publications are available on paper. Italy is working on the Digital Sailing Directions project that will reach the testing phase in 2020.

d) Problems encountered

NTR.

5. MSI

a) Existing infrastructure for transmission

In accordance with National jurisdiction, the Coast Guard is the Italian entity in charge of GMDSS and Navtex Coordinator.

Navtex has been operational since April 2002 on freq. 518 kHz (in English and Italian). Since 2012 the following stations are in place: La Maddalena, Mondolfo and Sellia Marina. Efficiency and reliability are very good. Since May 2015 a new station has been operational in Piombino on frequency 490 kHz (in English). The local dissemination of information is very good and is guaranteed by VHF radio communications and written documents.

b) New infrastructure in accordance with GMDSS

N.A.

c) Master Plan

N.A.

d) Problems encountered

NTR.

6. S-55

a) Latest update (March 2019)

<i>Nation/Area</i>	<i>A1</i>	<i>A2</i>	<i>B1</i>	<i>B2</i>	<i>C1</i>	<i>C2</i>
ITALY	73.74%	55.36%	23.11%	44.27%	3.15%	0.37%

7. Capacity Building

a) Offer of and/or demand for Capacity Building

- Lebanon: the project is part of the UN “International Support Group” initiative for the country stabilization. It started in 2014 as a multinational program, led by IIM and financed by Italian Ministry of Defense and it is in the 5th year of development (the end of the project is estimated in 2020). It is composed by:
 - o Education and training (cat. A, cat B courses in Italy, training on the job modules in Italy and Lebanon);
 - o Hydrographic launch and boats provision, hydrographic, oceanographic and topographic instruments and material provision and relative trainings;
 - o Capacity development in the fields of acquisition, validation and charting processes in order to create a cartographic production infrastructure;
 - o Support for a MSI infrastructure establishment;
 - o Combined Support for a geodetic/altimetry net establishment;
 - o Joint/combined geodetic surveys execution.

- Albania: a joint survey activity is going to be scheduled in order to share expertise in the field of hydrography and oceanography.

b) Training received, needed, offered

IIM offers training courses for hydrographers as follows (all courses are held in English):

- Category A course: Master Degree in Hydrography and Oceanography for military and civilian personnel, managed by IIM and the University of Genova; the next course will start in October 2019
- Category B course recognized by the FIG/IHO/ICA IBSC: open to military and civilian personnel; the next course will start in January 2020.
- Cartographic trainings organized on specific modules and on demand (ex. Military cartography for Bangladesh Navy, cartographic tools for Albanian Geographic Institute, both in 2017).

- From 17 to 21 of September 2018 IIM hosted the training course “Port and Shallow Water Survey Course“, focused on acquisition and processing of bathymetric data. The training was attended by people coming from Georgia, Romania, Malta, Ukraine, Cyprus and Tunisia.

- GEBCO hydrographic data management course held in September 2018.

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

i. Hydrographic/Cartographic data exchange agreements in force:

Tunisia:

The agreement was stipulated in 2009 and concerns on data exchange and technical assistance in the fields of hydrography, oceanography, cartography and education.

Croatia:

A bilateral agreement in the field of hydrography, nautical documentation and maritime safety information between HHI and IIM is in progress. The agreement is focused on charts co-production (other positive example of cartographic cooperation between Mediterranean border countries) and overlaps solving.

ii. Hydrographic/Cartographic cooperation in force:

Lebanon:

A bilateral cooperation is in force in order to create an independent Hydrographic Service in Lebanon. An arrangement in the Hydrographic and Cartographic filed is under discussion. In September 2018 the Italian Survey Vessel Magnaghi went to Beirut for a port visit and it surveyed the area around Beirut together with the Lebanese Hydrographic Service.

iii. Visit to the Italian Hydrographic Institute for hydrographic/cartographic purposes:

2017

Lebanon, Albania, Tunisia, Montenegro,

2018

Lebanon, Tunisia, Argentina, Perù, Chile, Albania, Montenegro, Egypt, Croatia,

2019

Hydrographic experts from Israel, Lebanon, Bangladesh, Albania, Morocco, Japan, Tunisia, Singapore, Argentina, Chile, Indonesia, Peru, Montenegro, Croatia, USA (NOAA and NGA), United Kingdom, Pakistan, Qatar.

d) Development projects with hydrographic component (In progress, planned, under evaluation or study)
NTR.

e) Definition of bids to IHO CBC
NTR.

8. Oceanographic activities

a) General

The IIM provides meteo-oceanographic support to the Italian Navy through a METOC service, carried out in the Marine Geophysics and Oceanography Department. The MetOc Office manages an operation-support service and includes a Metoc and REP-REA section and a Forecast Section.

When necessary it can organize an Operational Unit for direct support to Naval Operations. Italy was Lead Nation for Nato IMetoc support to “Dynamic Manta 2018” and “Dynamic Manta 2019” and for the MetOc support to “EUNAVFORMED Operation Sophia”: the IIM provided oceanographic (OC) support in cooperation with COMET, the Air Force Operational Centre for Meteorology.

The IIM can provide high resolution sea-state in shallow water information, using the SWAN mathematical model, and current circulation information and products, in specific areas, using the DHI Mike3 mathematical model, for specific study or forecast purposes.

For the OC products and forecast, IIM often cooperates with national Research Centers, Universities and Institutions; in particular, IIM is involved in the Italian Oceanographic Commission (COI). COI is a group composed by several Military and Civilian entities and institutes operating within the Italian METOC context.

IIM provides personnel to the Military Oceanography Panel of the NATO MCWG (METOC).

The IIM carries out scientific surveys and studies on oceanography, geophysics, and marine environment: in 2017, in line with the National Strategy for the Arctic, the Italian Navy – acting as national marine focal point for Arctic research activities – with the scientific support of the Italian Hydrographic Institute, launched the Pluriannual Joint Research Program in the Arctic named «HIGH NORTH». The Program aims at contributing to Oceans’ knowledge, hydrographically and, more generally scientifically. The new data acquired and the MBES ancillary information have been shared with the Norwegian Hydrographic Service and with GEBCO, to populate the IBCAO database and to contribute to the Oceans’ knowledge. Italy believe that this fully data sharing policy bring benefit not only to the single Hydrographic Service but generally to the scientist involved to better known the Arctic Knowledge.

In addition, IIM took part to the following activities: the LOGMEC-MREA in Autumn 2017 and 2018, SWIM-LS research surveys in September 2018 and March 2019 in the Ligurian Sea) in co-operation with other National research centers such as National Institute of Geophysics and Volcanology (INGV), National Council of Research (CNR), Bologna University, Bari University.

Moreover, surveys were carried out from hydrographic vessels (Aretusa and Magnaghi), fitted with oceanographic data collection equipment, such as CTD, XBT, Sub Bottom Profiler, Rosette system, single beam echo-sounder, multi beam echo-sounder, current meters, Side Scan Sonar, ADCP, Sea Bottom Sampler.

b) GEBCO/IBC’s activities

Italy enthusiastically supports GEBCO’s activities and has always contributed to them, especially this last two years with the Artic dataset.

c) Tide gauge network (five stations)

The IIM ensures the annual production and distribution of the 'IHO' periodical (annual publication "Tide Tables" (I.I. 3133). IIM manages two long-time-period tide stations (Genoa (from 1880) and Brindisi (from 1979), provided with a modern radar tide-gauge and a floating 'classic' digital gauge (Thalimedes) connected through GSM network to the IIM data centre (SGDM – Sistema Gestione Dati Mareografici). As part of the activities for collecting new data and harmonic constants for the prediction of tides in the main Italian ports, other radar level sensors (OTT Kalesto or new type RLS) are available and are installed as needed (respectively in the port of Gioia Tauro (from 2012), Augusta (from 2014) and La Maddalena island (from 2016).

d) New equipment

The IIM bought a new RPAS (Remotely Piloted Aircraft System) for photogrammetry and shallow water surveys.

e) Problems encountered

NTR.

9. Other activities

a) Participation in IHO Working Groups

IIM participate is strongly involved in IHO activities. It has representatives in almost all IHO WGs/PTs: WENDWG, HCA, HSPT, GEBCO, SCUFN, DQWG, NCWG, NIPWG, S-100 WG, ECNWG, IENWG, ABLOS, IRCC, CBSC, CSBWG and TWCWG.

In addition, IIM Director is Chair of two relevant bodies: HSSC and MBHC.

IIM is also ambassador for MSDI at in the MBSHC.

IIM benefit from this active involvement at IHO level: new procedures are established and testing activities and dialogues drive the change into a more and more modern and efficient productive structure.

b) Meteorological data collection

Meteorological data are collected by survey vessels during hydrographic and oceanographic surveys, and at synoptic times during transfer navigation to operational areas.

c) Geospatial studies

A study about marine geoid started in cooperation with Polytechnic of Milan.

d) Disaster prevention

The IIM cooperates with National authorities on disaster prevention, providing technical support.

e) Environmental protection

The IIM in cooperation with other National organizations is responsible for the collection of mammal observation data in order to update the existed database.

f) Astronomical observations

N.A.

g) Magnetic/Gravity surveys

Magnetic data are eventually collected by survey vessels during specific campaigns in cooperation with national scientific institutes and centers.

h) International

N.A.

i) National status of MSDI

At the following link it is possible to find the Italian *National SDI*:

<http://www.pcn.minambiente.it/mattm/en/>

The *National SDI* is the national point of access for the purposes of the INSPIRE EU Directive (establishing an Infrastructure for spatial information in the EU) where the available spatial information are open to authorities and stakeholders. It is operated by the Ministry of the Environment and Land and Sea Protection. IIM contributes to the *National SDI* sharing its data.

Besides that, the IIM is developing a new project for the creation of an independent MSDI to deliver marine data and services through its own portal.

IIM is a member of the body in charge for the National Governance of the geospatial data. Moreover, IIM is the only member exclusively focused on the marine dimension.

j) ENC overlapping issues

Italy is fully committed in the resolution of ENCs overlapping issues and has engaged with Greece, Croatia and Malta, providing solutions on existing overlaps and others avoiding possible future one.

As regards ENC overlapping issues, which are in the top priority list of Italian interests, Italy and Croatia are working on a common agreed solution in the Adriatic Sea.

Since MBSHC20 24 overlaps were solved.

k) Risk assessment of national overlapping issues

Risk assessment is carried out in accordance with Resolution 1/2008.

10. Conclusions

Italy confirms that cooperation in the Mediterranean area still remains the priority for all the countries involved. MBSHC is the forum in which and through which this cooperation can be achieved; moreover, a new phase in capacity building should be considered in this area.

It is always a must, and Italy is prepared to work hard with all its Mediterranean partners, to promote cooperation through bilateral or multilateral agreements and share experience and know how.

We would like to work together in order to reach this goal and we are open to any suggestion on this important issue.