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IHO File No. S1/6100/2020

CARTA CIRCULAR DE LA ASAMBLEA N.º 2 bis 3 25 de Julio del 2019

2.ª SESIÓN DE LA ASAMBLEA DE LA OHI (A-2) Mónaco, 21-24 de abril del 2020

NOMBRAMIENTO DEL CONTRALMIRANTE LUIGI SINAPI POR ITALIA PARA EL PUESTO DE DIRECTOR DE LA OHI

Referencias:

- A. Carta Circular de la Asamblea N.º 2 del 03 de mayo del 2019 Solicitud de nombramientos de candidatos para el puesto de Director de la OHI;
- B. Reglamento General de la OHI, Artículo 21.

Estimado(a) Director(a),

- 1. La Carta Circular de la Asamblea de la Referencia A invitaba a los Estados Miembros de la OHI a nombrar candidatos para el puesto de Director de la OHI e indicaba que los nombres de los candidatos y sus formularios de candidatura serían publicados en cuanto se recibiesen.
- 2. Italia ha nombrado al **Contralmirante Luigi SINAPI** para que se presente a la elección para el puesto de Director de la OHI, en la 2.ª Sesión de la Asamblea de la OHI. Se adjunta a la presente su formulario de candidatura.
- 3. Según lo requerido por la Referencia B, el Secretario General reunirá todas las candidaturas recibidas y presentará un inventario consolidado, como parte de la documentación que será considerada por la Asamblea.

Atentamente,

Chathius Fun

Dr Mathias JONAS Secretario General

Anexo: Formulario de candidatura de Italia.

Candidature for a post of¹ SECRETARY-GENERAL □ DIRECTOR ☒



Candidature à un poste de

☐ SECRETAIRE GENERAL ☐ DIRECTEUR

(Article 20 du Règlement général)

(Article 20 of the General Regulations)

GENERAL - GENERALITES

- 1. Nominating Member State Etat membre qui présente le candidat : ITALY
- 2. Name Nom: LUIGI SINAPI
- 3. Nationality Nationalité: ITALIAN
- 4. Date of birth Date de naissance : 27 August 1967
- 5. Titles and décorations Titres et décorations:

Italian Rear Admiral

Director of the Istituto Idrografico della Marina - Hydrographer of ITALY

Mauriziana Medal for 50 years of military service, 2019

Commemorative Medal for Multinational Peace Operations in Kosovo, United Nations resolutions 1244/99, 2018

Knight of the Order of Merit of the Italian Republic, 2014

Italian Legal Advisor for Military Operations, 2004

NATO Medal Kosovo, 2001

NATO Medal Former Yugoslavia, 2001

Commemorative Medal for Antarctic Mission, 1999

EDUCATION AND LANGUAGES - ETUDES ET LANGUES

- 6. Education (periods, including specialized or special qualifications) Etudes (durée, y compris les qualifications spécialisée sou particulières):
- 5 + 5 Defence Initiative 2nd module of 9^{eme} Training cycle for "senior" on "Climate change", Algiers, 2019
- 5 + 5 Defence Initiative 1st module of 9eme Training cycle for "senior" on "Climate change" Paris, 2018

II level Master's Degree in Marine Geomatics, University of Genoa, 2008

Master of Sciences Degree in International and Diplomatic sciences, University of Trieste, 2004

II level Master's Degree in International strategic and military studies, Centre for the Defense High Studies (CASD) and LUISS University, Rome, 2004

2011				
¹ Tick	one	box	or	both

Bachelor's Degree in Navigation and Maritime Science, University of Pisa, 2002

IHO-FIG-ICA Category A Hydrographer certification, 1996

Master of Sciences Degree in Physics, University of Lecce, 1996

Course for Hydrographers Category A at the Istituto Idrografico della Marina, Genoa, 1992 – 1993

Corso Superiore at the Naval Academy, Livorno, 1992

Corso Normale at the Naval Academy, Livorno, 1985 -1989

7. Languages (speaking and reading capacity) - Langues (niveau oral et écrit):

Italian (native speaker)

English (fluent)

Spanish (fluent)

French (good working knowledge)

SERVICE AND EXPERIENCE² - SERVICES ET EXPERIENCE²

8. Hydrographic service - Services dans l'hydrographie :

January 2018 – present: Italian Hydrographic Society (IHS) representative at Board of Directors of International Federation of Hydrographic Societies (IFHS)

November 2017 - present: IHO - Hydrographic Services and Standards Committee (HSSC) Chair

October 2017 - present: Italian representative at the IHO COUNCIL

August 2017 – present: Italian representative (as Associate Member) at IHO – Arctic Regional Hydrographic Commission (ARHC)

July 2017 - June 2019: IHO - Mediterranean and Black Seas Hydrographic Commission (MBSHC) Chair

June 2016 - present: Italian representative at the Hydrographic Commission on Antarctica (HCA)

February 2016 – January 2017: Head of the Hydro-Oceanographic Office at the Italian Navy Headquarters

2015 - present: Director of the Istituto Idrografico della Marina - ITALY's National Hydrographer

2001: Liaison hydrographic Officer onboard US NAVOCEANO launch for the joint ITA-USA hydrographic survey in the Naval Base of Gaeta (I)

2000-2001: Oceanographic Branch Staff Officer NATO Command Naval South Europe (COMNAVSOUTH)

1998 – 2000: Head of the Hydrographic Division at the Italian Hydrographic Institute

1997 – 1998: Head of the first marine trials of the European Geostationary Navigation Overlay Service (EGNOS) from Italian survey vessel "Mirto"

² All service and experience relevant to the nomination and which provide an indication of the extent to which the candidate is qualified to serve as Secretary-General or Director.

²Tout service et toute expérience en rapport avec la candidature donnant une indication de la mesure dans laquelle le candidat est qualifié pour occuper le poste de Secrétaire général ou de Directeur.

- 1996: Head of the Hydrography and Nautical Cartography team in the 11th Antarctic expedition within the Italian Antarctic Research Program
- 1994 1996: Hydro-oceanographic Officer onboard the Italian Survey Vessels "Ammiraglio Magnaghi" and "Mirto"
- 1993 1994: Head of several hydrographic and geodetic campaigns in Italian waters

9. Non-Hydrographic service - Services autres qu'hydrographiques :

- November 2014 October 2015: Head of the 1st Division of the LOGISTIC Department of the Navy General Staff
- October 2013 October 2014: Head of the 5th Division of the OPERATION Department of the Navy General Staff
- September 2012 September 2013: Commanding Officer of the Italian Navy DESTROYER "LUIGI DURAND DE LA PENNE"
- August 2007 August 2012: Head of the 1st Division of the FINANCIAL PLANNING Department of the Navy General Staff
- September 2005 July 2007: Commanding Officer of Italian Navy FRIGATE "ZEFFIRO"
- July 2004 August 2005: Executive Officer of the Italian Navy FRIGATE "ALISEO"
- September 2003 June 2004: Selected to attend the Joint General Staff Superior Institute in Rome
- November 2001 August 2003: Standing Naval Force Mediterranean (STANAVFORMED) Liaison Officer at NATO Command Naval South Europe (COMNAVSOUTH)
- September 1997 February 1998: Selected to attend the XX General Staff Course at the War School in Livorno
- September 1996 September 1997: Commanding Officer of Italian Navy SURVEY VESSEL "MIRTO" employed during maritime surveys along the Italian coasts
- March 1996 July 1996: Selected to attend the 191st Commanding Officer School section
- April 1990 August 1992: Navigating Officer and Deputy Telecommunications Officer on Italian Navy AIRCRAFT CARRIER "GIUSEPPE GARIBALDI"

10. Scientific Activities - Activités scientifiques

- 2019 present: Member of the Italian delegation at Antarctic Treaty Consultative Meeting (ATCM)
- 2019 present: Responsible for the "Framework Agreement in Marine Research and training in Oceanography" with the Parthenope University of Naples (ITALY)
- 2019 present: Member of the national "Joint Research Unit European Multidisciplinary Seafloor and Water Column Observatory (JRU-EMSO)"
- 2018 present: Member of the Blue Italian Growth technological Cluster (CTN-BIG) created by National Law n°123 of 3rd of August 2017
- 2018 present: Lecturer at the Professional Master in Sustainable Development, geopolitics of resources and Arctic Studies at the Italian Society for International Organization (SIOI), Rome (ITALY)
- 2018 present: Responsible for the "Framework Agreement in Marine Research and training in Hydrographic and Oceanographic sciences" with the University of Cagliari
- July 2018: Coordinator of the "Italian Navy Arctic Marine Geophysics Campaign HIGH NORTH 18
- 2017 2018: Chairman of the "Tavolo Tecnico Interministeriale Italiano per la Rideterminazione delle linee di base dritte e delle line di chiusura delle baie naturali e storiche", Rome (ITALY)
- August-September 2017: Speaker at Jean Monnet Module European Union and the Law of the Sea (EULOS)

 Summer School 2017, Genoa (ITALY)
- July 2017: Coordinator of the "Italian Navy Arctic Marine Geophysics Campaign HIGH NORTH 17"
- 2017 present: Member of the "Consulta Nazionale per l'Informazione Territoriale e Ambientale CNITA", Rome (ITALY)
- 2017 present: Member of the "Italian Hydrographic Society (IHS)"
- 2016 present: Member of the scientific board of The INTERNATIONAL PROPELLER CLUB Genoa (ITALY)
- 2016 2017: Professor of Hydrography at the "II Level Master in Marine Sciences: Ocean Physics and Technology", organized by the Parthenope University of Napoli and Alma Mater Studiorum University of Bologna (I), and by the Italian Navy
- 2015 present: Member of the National Arctic Committee and of International Arctic Council EPPR (Emergency Prevention, Preparedness and Response) WG
- 2015 present: Member of the National Council of Public Works "Consiglio Nazionale dei Lavori Pubblici"
- 2015 present: Member of the National Cartographic Committee (AIC), member of the National Remote Sensing Association (SIFET) and member of the Italian Federation of the Scientific Association Environmental and Territorial Information (ASITA)
- 2015 present: Member of the National Oceanographic Committee "Commissione Oceanografica Italiana COI"
- 2015 present: Member of Digital Italy Agency "Agenzia per l'Italia Digitale AGID"
- 2001 2004: Professor of "Hydrography and Geodesy" at the Parthenope University, Napoli (ITALY)

Bibliography

International Review and Books

- "High-Resolution multibeam and hydrodinamic datasets of tidal channels and inlets of the lagoon of Venice", with Madricardo F. et al. Scientific Data 4, Article number: 170121 (2017), Published: 05 September 2017
- "The Graham Bank: hydrographic features and safety of navigation", with Lamberti L.O., Pizzeghello N.M., Ivaldi R., International Hydrographic Review, International Hydrographic Organization, Monaco (Principality of Monaco) Ed. May 2016
- "Determination of the azimuth with solar observations without any particular astronomical knowledge and spherical trigonometry", with Vassallo A. Survey Review, Vol. 37, N. 293 2004
- "Optimum trigonometric ellipsoidal height, direct and inverse", with Caporaso U., Vassallo A. International Hydrographic Review, International Hydrographic Organization Monaco (Principality of Monaco), Vol. 5, N. 2-2004
- "External alignment between two beacons at different elevation for use in bathymetric operations", with Vassallo A., Gargiulo R. International Hydrographic Review, International Hydrographic Organization Monaco (Principality of Monaco), Vol. 4, N. 2 2003
- "A morphometric model of the Aeolian Islands (Italy)", with Bissoni M., Favalli M., Mazzarini F., Mori A., Pareschi M.T. Il Nuovo Cimento, Vol. 26 C, N. 4 2003
- "Nautical cartography in the Ross Sea Antarctica", with Gargiulo R. Annali Facoltà di Scienze Nautiche Napoli (I), Volume LXVI 2002
- "The first EGNOS Trials at Sea: In Columbus' week", with Basker S., Solari G., Secretan H., Barboux J.P. GALILEO'S WORLD Ed. 2000

National Review

- "Fondali senza confini in un unico oceano", with Grieco A. Rivista Marittima, Luglio-Agosto 2019
- "La misura del tempo", with Vassallo A. Rivista Marittima, Anno CXLI, Ottobre 2008
- "L'arte della navigazione nei secoli", with Vassallo A. Rivista Marittima, Anno CXLI, Gennaio 2008
- "La misura spaziale di Eratostene", with Vassallo A. Rivista Marittima, Anno CXXXIX, Novembre 2006
- "Idrografia e diritto" Rivista Marittima, Anno CXXXIX, Aprile 2006
- "Un approccio geodetico ed astronomico alla conoscenza della terra geometrica", with Vassallo A. Informazioni della Difesa, 6/2005
- "L'esercitazione navale «IONEX 2004» un passo significativo verso la cooperazione italo-russa" Informazioni della Difesa, 1/2005
- "I due problemi fondamentali della geodesia per la navigazione astronomica, in forma algebrica, sulla sfera terrestre e sull'ellissoide WGS'84", with Vassallo A. Annali Facoltà di Scienze Nautiche, Napoli (I), Vol. LXVIII 2004
- "Azimut e punto nave astronomico con assorbimento intrinseco del cammino nave negli intervalli delle osservazioni", with Vassallo A. Annali Facoltà di Scienze Nautiche, Napoli (I), Volume LXVII 2003
- "L'informazione geografica e la qualità dei dati", with Gargiulo R. Informazioni della Difesa 1/2003 "Il grid kilometrico della Mercator Secante e sue applicazioni operative", with Gargiulo R., Lusiani P., Vassallo A. I.I. 3166, Istituto Idrografico della Marina Ed., Genova (I) 2002
- "Il concetto di «Rapid Environmental Assessment» nelle operazioni navali NATO", with Gargiulo R. Informazioni della Difesa 2/2002

"Il modello tridimensionale dell'Arcipelago Eoliano: un esempio d'integrazione tra rilievo fotogrammetrico e batimetrico", with Favalli M., Mori A., Pareschi M.T., Sinapi L., Surace L. – Bollettino di Geodesia e Scienze Affini, Anno LXI N.1 – 2002

"Antartide", with Gargiulo R. - Rivista Marittima Ed. Dicembre 2000

"L'EGNOS: caratteristiche generali e primi test operativi in mare", with Surace L. – Bollettino SIFET N. 4 – 2000

"La cartografia nautica in Antartide", with Gargiulo R., Mori A., Surace L. – Bollettino SIFET N. 3 - 2000

"Errori commessi in un rilievo idrografico e differenti tecniche di modellazione tridimensionale", with Mori A., Spagnuolo A., Pizzi C. – I.I. 3085, Istituto Idrografico della Marina Ed., Genova (I) - 2000

Proceedings of International Conferences

"From Magellan to the new marine cartographic frontiers – Exploration of the future hydrographic goals" – 42nd International CIESM Congress, Cascais (PO) 7-11 October 2019

General Co-Chair at the IMEKO TC19 Workshop on "METROLOGY FOR THE SEA 2019" – www.metrosea.org, Genoa (I) 3-5 October 2019

"S-100 Universal Hydrographic Data Model: the limits and boundaries challenge", with Pizzeghello N. and Pratellesi M. – EGU General Assembly, Vienna (AT) 7-12 April 2019

"New Arctic geophysical data from the Yermak Plateau (northern Svalbard margin)", with Demarte M., Ivaldi R. and Rebesco M. – EGU General Assembly, Vienna (AT) 7-12 April 2019

"Monitoring the evolution of the coasts for a sustainable Blue Growth", with Biscotti E. and Pizzeghello N. – "XIX Giornata mondiale dell'acqua" Convegno "Gestione e difesa delle coste", Accademia dei LINCEI, Rome (I) 21 March 2019

"Hydrographic standard for a secure sea" – INTERREG ITALY-CROATIA – Technical Seminar on "Information Technology for Safety: a joint Italian and Croatian perspective for the Adriatic Sea", Venice (I) 29 February 2019

"HIGH NORTH: il Programma di ricerca in Artico della Marina Militare" – 2° International Forum "Nuovo Artico – Vecchio Mediterraneo", MILAN CENTER for FOOD LAW and POLICY, Genoa (I) 13-14 November 2018

"HIGH NORTH Program – New Hydrographic Data in the Arctic", with Ivaldi R. and Demarte M. – First Seabed 2030 - Arctic, Antarctic & North Pacific Mapping Meeting, Stockholm University, Stockholm (FI) 8-10 October 2018

"HIGH NORTH: the Italian joint research program" – Arctic Regional Hydrographic Commission (ARHC) Open Forum 2018, Longyearbyen, Svalbard (NO) 11 September 2018

"Preliminary results of the Italian Navy Arctic Marine Geophysics Campaign HIGH NORTH 18" - Press-conference onboard NATO ship ALLIANCE, Tromsø (NO) 25 July 2018

"HIGH NORTH: the Italian Navy's Joint Research Programme in the Polar Region" – Naval Survey & Ocean Intelligence Conference, London (UK) 20-21 June 2018

"Education and Capacity Building for Blue Growth" – Union for Mediterranee (UfM) Regional Stakeholder Conference on "Blue Economy", Naples (I) 30 November 2017

"HYDROGRAPHY for a secure sea" – G7 High Level Meeting on Maritime Security, Rome (I) 20 November 2017

Keynote Speaker at the IMEKO TC19 Workshop on "METROLOGY FOR THE SEA 2017" – www.metrosea.org, Naples (I) 11-13 October 2017

"Preliminary results of the Italian Navy Arctic Marine Geophysics Campaign HIGH NORTH 17", Press-conference onboard NATO ship ALLIANCE, Tromsø (NO) 28 July 2017

"Sailing for Science: on board experiences for transferring knowledge on Historical Oceanography for Future Innovation", with Garvani S., Carmisciano C., Locritani M., Grossi L., Mori A., Stroobant M., Schierano E., De Strobel F., Manzella G., Muzi E., Leccese D., Morellato C., La Tassa H., Talamoni R., Coelho E. and Nacini F. – EGU General Assembly, Vienna (AT) 23-28 April 2017

"Innovative REA tools for integrated bathymetric survey", with Demarte M., Ivaldi R., Bruzzone G., Caccia M., Odetti A., Fontanelli G. and Masini A. – EGU General Assembly, Vienna (AT) 23-28 April 2017

Keynote Speaker at the Union For Mediterranee (UFM) Stakeholder Conference on "Towards an Initiative for the sustainable development of the blue economy in the western Mediterranean", Barcelona (SP) 2 February 2017

"GEBCO Archaeological Hydrography" - GEBCO Forum, Monaco (Principality of Monaco) 15-17 June 2016

"4D Seafloor view" - GEBCO Forum, Monaco (Principality of Monaco) 15-17 June 2016

"Developing Skills and Capabilities of the Italian Navy Survey Vessel Fleet" - OSV (Oceanographic Survey Vessel) Conference, London (UK) 8-10 June 2016

"Last century seabed morphodynamics of the Magra River estuary (Western Mediterranean Sea)", with Pratellesi M., Ivaldi R., Ciavola P. – EGU General Assembly, Vienna (AT) 17-22 April 2016

"Data quality indicators: from paper charts to electronic navigational charts" – CIRM Conference & AGM 2016, Santa Margherita Ligure (I) 11-13 April 2016

National Conferences and Technical Reports

"Marine Geology for Hydrography", with Ivaldi R. – 3° Convegno di Geologia Marina, Roma (I), 21-22 February 2019

"Dalla sicurezza della navigazione alla crescita blu: il contributo dell'Istituto Idrografico della Marina all'economia blu nazionale e portuale di Genova" – Summit "Blu Economy", Genoa (I) 9 April 2018

"I rilievi idrografici portuali tra applicazione degli standard ed evoluzione della professione dell'Idrografo" – REMTECH-EXPO 2018 – Coast, Ferrara (I) 19-21 September 2018

Contributor to "The BLUEMED Italian White Paper: an overview of relevance, obstacles and proposals of the key sectors for a Blue Growth", Consiglio Nazionale delle Ricerche (CNR) Edizioni, Rome (I) July 2018

"L'Istituto Idrografico della Marina e lo SCUFN (Sub-Committee on Undersea Feature Names)", with Ivaldi R. – 2° Convegno di Geologia Marina, Roma (I), 23-24 February 2017

"Idrografia e Maritime Capacity Building", with Demarte M. – 2° Convegno di Geologia Marina, Roma (I), 23- 24 February 2017

«Monitoraggio idrografico del Banco di Graham (Canale di Sicilia)", with Lamberto L.O., Ivaldi R., Pizzeghello N.M. – 1° Convegno di Geologia Marina, CNR Roma (I),18-19 February 2016

"La cartografia nautica e l'evoluzione del territorio – il porto di San Benedetto del Tronto", with Cella A., Demarte M. – Convegno annuale della Associazione Italiana di Cartografia (AIC), San Benedetto del Tronto (I) 11-13 May 2016

"Lezioni di Idrografia teorica ed applicata" – Parthenope University, Napoli (I), Manuale del Corso di Idrografia – 2001

"La rappresentazione digitale dei fondali marini", with Gargiulo R., Mori A., Parente C., Pugliano A., Santamaria R. – 1° Convegno AUTeC (Associazione Universitari di Topografia e Cartografia) – Napoli (I) 17-18 May 2001

"Progetto 3b: Telerilevamento, GIS, Banche dati e Idrografia", with Lamberti L.O. – Rapporto sulla Campagna Antartica estate australe 1995/96, Programma Nazionale di Ricerche in Antartide (PNRA) – 1996

National Conferences and Workshops

"HIGH NORTH: The Italian Navy Marine geophysics Arctic resaerch Program" – Exhibition "La Marina Italiana al Polo Nord – Dal Duca degli Abruzzi alle spedizioni High North", Genoa, 17 April 2019

"Le iniziative della Marina Militare per la ricerca scientifica marina e la sostenibilità" – Conference on "Oceani di plastica e di ghiaccio: un viaggio attraverso racconti e proposte per salvare il mare", University of Milano-Bicocca, Milan 29 March 2018

"L'Istituto Idrografico della Marina nella ricerca idro-oceanografica nazionale" – Conference on "Stati Generali della Ricerca Marina Italiana", University of Milano-Bicocca, Milan 26-28 September 2018

"Tecnologie di Monitoraggio e Sorveglianza in mare" – XXXVII FORUM della Fascia Costiera Ligure-Tirrenica e del Mar di Sardegna, ROTARY Distretto 2000, Reggio Calabria 23-25 March 2018

"Disciplinare Tecnico per la standardizzazione dei rilievi idrografici" – Conference on "Hydrographic Surveys: Rilievi, Processamento e Cartografia" Istituto Idrografico della Marina and Italian Hydrographic Society (IHS), Catania 20 December 2017

"Programma HIGH NORTH – Tecnologie della Marina Militare a supporto della ricerca scientifica e delle esigenze della collettività" – Genoa 29 October 2017

"La carta nautica elettronica e la navigazione 2.0" – 22° Forum dei Musei Marittimi del Mediterraneo, Genova (I) 30 June 2016

"Esplorazione del paesaggio marino" – 22° Forum dei Musei Marittimi del Mediterraneo, Genova (I) 30 June 2016

"Ri-determinazione delle linee di base nazionali" – Conference on "Linee di base del mare territoriale italiano" Istituto Idrografico della Marina and Milano Bicocca University, Genoa (I) 16 May 2016

"L'Istituto Idrografico della Marina nel panorama cartografico nazionale: stato dell'arte alla luce delle trasformazioni dell'informazione geografica nell'era digitale" – AGenzia per l'Italia Digitale - AGID National Conference, Rome (I) 11 May 2016

"Le pratiche di studio, mappatura, misura e rappresentazione dei fondali marini e delle coste: storia, riferimenti teorici, normativi e casi applicativi" – Conference National Order of Engineers, Rome (I) 17 February 2016 and Ragusa (I) 29 April 2016

Workshop "Arctic Council, Governance and politics" and seminar of Whitney Lackenbauer "Placing Canada's Northern Strategy in a Global Context: Sovereignty, Environment, Resources, and Human Development", Canada Embassy, Rome (I) 21 March 2016

CANDIDATE'S POSITION - POSITION DU CANDIDAT

Oceans are still the least observed part of our planet. The link between States development and the necessity of a global governance makes Hydrography and the International Hydrographic Organization (IHO) face up new challenges, such as Ocean knowledge, in a sustainable development perspective and in line with the **United Nations Sustainable Development Goals** for 2015-2030.

Aware of the importance of **knowing the marine environment** to "conserve and sustainably use the oceans, seas and marine resources for sustainable development", one of the priorities of my mandate will be to **increase Seabed mapping** and therefore act as catalyst among all potentially involved States, Entities and Organizations. Seabed mapping is vital for the security, safety and economic health of the States. More importantly, given that three billion people rely on fish as a source of protein, a deeper understanding of the seafloor can only strengthen the understanding of marine ecosystem and marine life for the benefit of our current and future food supply.

The use of existing and emerging technologies, means and methodologies – such as Autonomous Underwater Vehicles, Autonomous Ships, Satellite Derived Bathymetry, Crowdsourced Bathymetry – will play a central role in Seabed mapping and particularly in the Seabed 2030 project. And, as the challenges of the IHO are the challenges of all the Hydrographic Offices, to achieve full Seabed mapping is necessary to increase about the adaptation and application of United Nations guiding principles for Geospatial Information Management, ensuring interoperability of hydrographic data with other marine-related data, through a shared and universal Maritime Spatial Data Infrastructure, accessible to everybody.

A Regional approach and an Inter-Regional cooperation among all the actors involved – International Organizations, non-Governmental Organizations, Universities, Maritime Industries (fishing industries, survey companies, shipping lines, oil and gas companies, cruise operators, submarine cable companies), Youth Organizations and Citizens, would consolidate and expand the role of IHO, making it face new and future challenges.

The role of the IHO has become increasingly crucial in a changing global scenario. In this regard, a refinement of the current training standards for hydrographers and cartographers and the rationalization of the specializations will lead to a greater awareness of the professions throughout the world and will encourage non-Member States to join the Organization.

Information on Hydrography needs to be accessible to all stakeholders in the civil society, maximizing IHO visibility and promoting IHO activities in a digital and modern way.

The revision and implementation of the **IHO 2020-2026 Strategic Plan** will represent one of the main achievements of the Organization in the next six years, to strengthen the liaison with the other key partners in the Ocean scene. It will involve the contribution to maritime safety and efficiency and enhance the accessibility of marine environmental data from Hydrographic Offices for the benefit of all.

An increase in the number of the IHO Member States – including also non-Coastal States – would be beneficial not only for the Organization, but for the global International Community. Global economy heavily depends on the sea and relevant knowledge. The sea has always been a source of life and resources, and needs to be protected. The IHO should embrace more members, tailoring

Capacity Building to the needs and demands of the Member States. In fact, maritime security is a shared need for the welfare and the prosperity of the entire world. Sea security is one of the pillars of a modern society.

S-100 Hydrographic Data Model represents one of the main challenges for the IHO. The ENC replaced any other format for the provision of vector nautical chart data. By adopting and implementing – through a consolidated strategy – the S-100 Universal Hydrographic Data Model, the IHO has started to develop a versatile standard framework composed of S-100 based Product Specifications (PS) to describe specific aspects of the real world. S-100 has therefore become the most important application of the ISO 19100 series of Geographic Information Standards. Standards are also synonymous of data quality and interoperability and they put the basis for an increasing safety at sea. The advantage of such datasets, based on the same paradigm, is their mutual compatibility. Interoperability supports a multitude of possible combinations of the geoinformation encoded in datasets, regardless of their science domains. New S-100 framework of standards covers many domains dealing with geo-data, providing services to mariners to visualize on ECDIS.

I think it is necessary to strengthen a sector in which the IHO is already a leader, the E-navigation. The IHO is involved in the **development of the e-navigation concept** to ensure that any underpinning hydrographic standards, products or services are in place from the beginning. A significant challenge for e-Navigation is how to efficiently capture and subsequently transfer the many forms of non-hydrographic data and information in the e-navigation domain in a relatively seamless, standardized and efficient way. E-navigation intends to meet present and future user needs through harmonization of marine navigation systems and supporting shore services. I believe that a holistic and integrated approach to modern cartography is necessary and achievable through harmonization.

The achievement of all the mentioned priorities will significantly enhance the visibility and profile of the IHO in the global International Community, contributing to **Blue growth**, as the long-term strategy to support sustainable and inclusive growth in the marine and maritime sectors, and providing the Member States with better services to improve safety of navigation and blue economy activities. Seas and oceans represent the engine for the international economy, with enormous potential for innovation and growth, and **Hydrography is paramount to a better Blue knowledge and, consequently, to more secure seas**.

UN Sustainable Development Goals, Knowledge, Technology, Cooperation, Enlargement, Capacity Building, Education, Visibility, Standards, E-navigation and Blue Growth are the key words of my candidacy. The role of an IHO Director is to contribute to the management of the IHO Secretariat, to serve efficiently the Member States, to liaise with Member States, to support the IHO Council and to represent the Organization actively internally and at international fora.

Being an experienced Hydrographer fully involved at very high level in IHO activities and a top rank Navy Officer, I am ready to assume the roles and responsibilities of an IHO Director, in order to serve – under the guidance of the Secretary General – the global Hydrographic Community with great passion, enthusiasm, competence and high level of energy.

ADDITIONAL INFORMATION - RENSEIGNEMENTS COMPLEMENTAIRES (if any) (le cas échéant)

Rear Admiral Luigi SINAPI has been serving the Italian Navy since October 1985, acting also as Commanding Officer of a Survey Vessel, a Frigate and a Destroyed. Since October 2015, he is the Italian National Hydrographer (Director of the Istituto Idrografico della Marina). He was promoted Rear Admiral in January 2018.

Under his directorate, the Istituto Idrografico della Marina has become a center of excellence, increasing its visibility nationally and internationally, reorganizing and optimizing the available resources, rationalizing the workflow, increasing output and revenue from sales of nautical products by 60%, implementing new technologies, contributing actively with research campaigns to Ocean knowledge.

Rear Admiral SINAPI has been extensively involved in National fora and International Organizations – first of all the IHO – with specific reference to maritime affairs, maritime safety and security, hydrography, oceanography, nautical charting, marine boundary delimitation and Law of the Sea application, and research activities.

Rear Admiral SINAPI and his staff are particularly active in IHO current and future activities, committees, working groups and project teams. In particular, Rear Admiral SINAPI has proactively chaired the following two IHO bodies:

- Mediterranean and Black Sea Hydrographic Commission MBSHC (2017-2019)
- Hydrographic Services and Standards Committee HSSC (since 2017).

He represents ITALY also in:

- IHO Council
- Hydrographic Commission on Antarctica (HCA)
- Arctic Regional Hydrographic Commission (ARHC).

Regionally, the MBSHC is the largest Regional Hydrographic Commission, with an internal complexity that – thanks to his dynamic moderator role – Rear Admiral SINAPI has successfully managed, facilitating dialogue amongst the Member States and launching new initiatives to increase cooperation in maritime sectors, such as nautical cartography, education and training, blue economy and capacity building.

Internationally, the HSSC is one of the two main IHO pillars, acting as the technical steering committee of the IHO. In the last two years, the Maritime Community has been assisting the implementation of S-100 Universal Hydrographic Data Model, through the issue of a large variety of new S-100 Product Specifications (PS) to describe specific hydrographic and cartographic aspects. In this activity, Rear Admiral SINAPI proved his managerial talent and technological attitude, promoting new technical solutions for a smooth transition to the digital era.

Diplomatically, thanks to the impulse and the will to concretely contribute to Ocean knowledge – especially in those areas of our planet particularly affected by lack of hydrographic data – Rear Admiral SINAPI strongly facilitated the entrance of ITALY – as Associate member – in the ARHC, as unique non-Arctic State being a member of such Commission.

Having a proactive and enthusiastic character, Rear Admiral SINAPI has demonstrated his leadership qualities and communication skills, looking forward to serving as Director the global Hydrographic Community and the IHO Secretariat with full dedication, wide international experience and high performances.

Signature of candidate:	Rear Admiral Luigi SINAPI Director
Signature du candidat :	
Forwarding Authority - Autorité qui tran	osmet :
CHIEF OF THE ITALIAN NA	VY – VICE ADMIRAL GIUSEPPE CAVO DRAGONE
Signature of forwarding authority:	Ruffe

Date : July 24, 2019