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**ASSEMBLY CIRCULAR LETTER N°2 Rev1/  
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04 October 2022**

**3<sup>rd</sup> SESSION OF THE IHO ASSEMBLY (A-3)**

**Monaco, NEW DATE: 2-5 May 2023**

**NOMINATION OF DR MATHIAS JONAS BY GERMANY  
FOR SECRETARY-GENERAL OF THE IHO**

References:

- A. Assembly Circular Letter No.2 dated 06 May 2022 – *Call for nomination of candidates for the position of IHO Secretary-General and IHO Director.*
- B. General Regulations of the IHO, Article 21
- C. General Regulations of the IHO, Article 26 (a)

Dear Hydrographer,

1. Reference A invited IHO Member States to nominate candidates for the position of IHO Secretary-General and IHO Director and indicated that the names of candidates and their nomination forms will be published as soon as they are received.
2. Germany has nominated **Dr Mathias Jonas** to stand for re-election (Reference C) at the 3<sup>rd</sup> Session of the IHO Assembly for the post of Secretary-General of the IHO. The nomination form is enclosed.
3. As required by Reference B, the Secretary-General will collate all the nominations received and present a consolidated inventory as part of the documentation for the consideration of the Assembly.

Yours sincerely,



Dr Mathias JONAS  
Secretary-General

Annex: Nomination Form from Germany

Candidature for a post of<sup>1</sup> SECRETARY-GENERAL DIRECTOR

(Article 20 of the General Regulations)

Candidature à un poste de<sup>1</sup> SECRETAIRE GENERAL DIRECTEUR

(Article 20 du Règlement général)

**GENERAL - GENERALITES**

1. Nominating Member State - *Etat membre qui présente le candidat* : Germany
2. Name - *Nom* : Dr. Mathias JONAS
3. Nationality - *Nationalité* : German
4. Date of birth - *Date de naissance* : 6 April 1961
5. Titles and decorations - *Titres et décorations* :  
 Secretary-General IHO  
 Vice President and Professor  
 Dr.-Ing. (PhD Engineering)  
 Reserve Officer, German Navy (retired)

**EDUCATION AND LANGUAGES - ETUDES ET LANGUES**

6. Education (periods, including specialized or special qualifications) - *Etudes (durée, y compris les qualifications spécialisées ou particulières)* :
- Dr.-Ing. (PhD engineering) degree, University of Rostock, Rostock, Germany, 1992
  - Studies of nautical engineering (Master Mariner's degree), Maritime Academy, Rostock, Germany 1982 - 1986
  - Merchant seaman, Rostock, Germany, 1977 – 1980
7. Languages (speaking and reading capacity) - *Langues (niveau oral et écrit)* :
- German: mother tongue
  - English: fluent speaking and reading
  - French: basic speaking and reading
  - Russian: read and understand

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<sup>1</sup>Tick one box or both - *Cocher une case ou les deux*

**SERVICE AND EXPERIENCE<sup>2</sup> - SERVICES ET EXPERIENCE<sup>2</sup>**8. Hydrographic service - *Services dans l'hydrographie* :a) *National activities – Activités nationales* :

Vice President of Germany's Federal Maritime & Hydrographic Agency (BSH)	2014 - 2017
National Hydrographer of Germany and Director of Department Nautical Hydrography of BSH	2009 - 2017
Head of Division Nautical Information Service of BSH – responsible for the edition of the complete range of official nautical publications – charts and sailing directions	2004-2008
Head of Section Navigation Systems, Satellite Navigation of BSH - responsible for the issue of official type approval for Electronic Chart Systems, Integrated Navigation Systems, Voyage Data Recorders, Satellite Navigation Receivers Head of Mission for practical ECDIS type testing on RV GAUSS of BSH	1994-2004

a) *IHO related activities – Activités au sein de l'OHI* :

Secretary-General of the International Hydrographic Organization	Since September 2017
Chair of the Hydrographic Commission on Antarctica	Since September 2017
Head of German Delegation - 1 <sup>st</sup> Assembly of the IHO, Monaco	April 2017
Presidency of the 5 <sup>th</sup> Extraordinary International Hydrographic Conference, Monaco	October 2014
Hydrographic Standards and Services Committee – HSSC of International Hydrographic Organisation - IHO	Chair 2012 - 2017, Vice-Chair 2007 - 2012, Member since 2003
German Delegation at the Subcommittee "Safety of Navigation – NAV" of International Maritime Organisation – IMO	Deputy head of delegation 2007 - 2015, Member since 2005
IC-ENC Steering Committee (International distributor of World's Electronic Navigational Charts)	Chair 2014 - 2016, Vice-Chair 2011-2014, Member since 2008
Colours & Symbols Working Group of the International Hydrographic Organisation – IHO (Standardisation of the chart display of the Electronic Sea Chart ECDIS)	Chair 2001-2009, Member 1998 – 2009,
IHO-EU Network Working Group	Member 2014 - 2017
North Sea Hydrographic Commission	Head of Delegation 2010 - 2016
Baltic Sea Hydrographic Commission	Chair 2009, Head of Delegation 2010 - 2016

<sup>2</sup> 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. - *Tout 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.*

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

Advanced training for promotion to Commander s.g. (senior grade) in the German Navy Reserve Corps	2015 - 2016
Third mate, RV STORTEBEKER, Maritime Academy of Rostock-Warnemünde, Part-time employment	1987 - 1991
Fourth mate, MV ERFURT, Deutsche Seereederei, DSR	1987
Promotion to Lieutenant of Navy Reserve Corps of the German Democratic Republic	1986
Service at Armed Forces of German Democratic Republic	1980-1982

10. Scientific Activities - *Activités scientifiques* :

Lecturer: Hydrographic Aids, IMO International Maritime Law Institute (IMLI)	Since 2019
Lecturer: Hydrography – basics, current practice and future outlook, World Maritime University Malmö, Sweden	2018
Lecturer: Electronic Sea Charts HafenCity University Hamburg, Department Geoinformation Technology	2005 - 2017
Lecturer: Maritime Geoinformation Systems, University of Applied Sciences Neubrandenburg, Department Geoinformation Technology	2005 – 2008
Dr.-Ing. degree, University of Rostock, subject of thesis: theoretical problems of manoeuvring prediction for ships	1992
Scientific assistant at ISSUS, Hamburg, involvement in research projects for the development of specific network based software applications for navigation	1991-1994
Scientific assistant at the Maritime Academy of Rostock-Warnemünde, Germany	1987-1991

## 11. Patented inventions – intentionnés brevetée :

"A method and a device for determining a position of a water vehicle" Patent EP3029487, together with Vahl, M. and Zhou, Z. (Fraunhofer Society)	European Patent Office, Munich, Germany 08. June 2016
"Method for the simulation and visual display of ship's movements induced by motions of the sea" Patent DD 272 940 A1	Amt für Erfindungs- und Patentwesen, German Democratic Republic 25. October 1988

## 12. Bibliography - Bibliographie

See Annex A

**CANDIDATE'S POSITION - POSITION DU CANDIDAT**

"Hydrography delivers the data required, for the science we need, for the ocean we want". These words said by Peter Thomson, the United Nations Secretary-General's Special Envoy for the Ocean during the IHO Centenary celebrations express in one sentence the changing role of hydrography. The need for precise and up-to-date hydrographic information is plainly not limited to ship's navigation. When people think of hydrography, the first things that usually come to mind are maps and navigation, even though the implications for this work extend well beyond these areas. The shape and texture of the seabed are important for a wide range of ocean processes, and can influence climate, pollution, biodiversity etc. There is a lot of overlap with other ocean sciences, and much of the information collected is relevant to the larger discussions currently taking place on increased knowledge and protection of the ocean, such as the UN Decade of Ocean Science for Sustainable Development and the Sustainable Development Goals. The revised IHO strategic goals and relevant objectives focus on a better support of the variety of ocean activities under this important framework. The IHO Secretariat can serve as an interface between the hydrographic community and these global processes through adaptation of the affected IHO Work Programme targets.

Hydrographic offices everywhere are facing various and, at times, rapidly evolving challenges. Some challenges impact the mission of the IHO and as well as its vision to be the authoritative worldwide hydrographic body which actively engages all coastal and interested States to advance maritime safety and efficiency and which supports the protection and sustainable use of the marine environment.

The pace of technological innovations, from sensors to digital services, is increasing, bolstering the need for continuous adaptation of training and standards, thus requiring strong effort from Hydrographic Offices in investment and training. This is particularly significant for the automation of sensor carrying devices, and for new processing techniques from the field of artificial intelligence, which make it possible to handle 'big data' and increase the capacity of teams.

More generally, the crucial role of data and information in our societies can have important consequences for public policy (e.g., what data should be open?), the need for data assurance, including cyber security, and on the involvement of the private sector, which are likely to have an impact on how investments in hydrography are sustained, and how standards are developed. To face these and other challenges, the IHO Strategic Plan for 2021-2026 is structured through three overarching goals, which focus how it exercises its mission during this period.

Although safety of navigation remains a major driver for the IHO, hydrographic products and services are meant to support all activities associated with the oceans, seas and navigable waters. As every human activity conducted in, on or under the sea depends on knowing the depth and the nature of the seafloor and an understanding of the tides and the currents, hydrography is an essential foundation to the development of the Blue Economy. Yet only a quarter of seas and oceans is well surveyed to service those purposes. This has a significant impact on what we can do at sea today in a safe, economical, and sustainable way.

The principal criteria of IHO performance, therefore, are the collection of a maximum amount of hydrographic data and wider use of these data on a global scale. In this respect, IHO has made important achievements in setting nautical chart standards. The development of Electronic Navigational Charts - ENCs - based on uniform standards worldwide reflects IHO's high competence in two of its key areas: technical standardisation and inter-regional cooperation. But IHO is now already underway to widen the scope of this concept. As IHO's own definition of hydrography includes the measurement and description of all physical features of the seas as well as their prediction over time, important steps have been taken within the last five years to apply IHO's revolutionary S-100 standardisation concept to other domains beyond nautical survey and cartography. In doing so, alliances have been built with waterway administrations, harbour operators, stakeholders from marine engineering, and global players in the field of geoinformation via their respective international organizations. The common goal of such alliances is a standard framework from which bespoke marine data products and services can be derived. This framework provides a comprehensive description of all aspects of the oceans and of their uses – forming the crucial technical foundation of the digital twin of the oceans. This approach will strengthen the role of hydrographic services worldwide as leading providers of marine geospatial services, and the competences thus acquired could be used in a similar way as in the successful WEND concept – now to be elevated to the next level called WEND-100.

To turn this vision into reality, state-of-the-art hydrographic capacity encompassing data acquisition, data handling, interpretation and provision will be indispensable. IHO should continue to support and promote the paradigm shift from the chart based to the data centred approach and systematically direct its capacity-building activities toward that goal.

Capacity in this regard should be interpreted to include the accumulated expertise of human resources, general preparedness and future orientation in technology, and political support for the enhancement of general hydrographic and survey activities. The Secretariat should assist the relevant Member State bodies in all these aspects to ensure that progress is made on local and regional levels and organize support in the transitory phase from the current generation of digital hydrographic products into the new world of the S-100 product range.

In parallel, IHO should continue its efforts to support the hydrographic industry, for example by acting as a door opener and fund raiser for the provision and use of latest state-of-the-art survey technology and ocean cartography tools. Ties with academia in the field of hydrography could be strengthened in this context under the umbrella of capacity-building and transfer of technology. Students' work and research projects at universities motivated by the IHO programme could serve as a testing ground for future solutions.

The Secretary-General is in charge of orchestrating these various objectives based on available resources and should lead the Secretariat accordingly in order to achieve the maximum effect under limiting restraints. It is up to him to creatively apply the lessons learnt from COVID times in terms of smart combinations of virtual and in person meetings and modern working arrangements for the Secretariat's staff. Further digitalization is the key here.

Living in times of increasing political tensions, it seems also worth to emphasize that the Secretary-General should insist on the technical and consultative nature of the Organization's work according to the overarching principles in the IHO Convention.

**ADDITIONAL INFORMATION - RENSEIGNEMENTS COMPLEMENTAIRES  
(If any) (le cas échéant)**

My first term as Secretary-General from 2017 – 2023 offered numerous exciting challenges to me. Some were of the nature I was expecting such as the installation of the Council, the application of the revised strategy to the Work Programme, and the updating of all outreach activities like the corporate design, the website including the International Hydrographic Review and digital archive. The inclusion of social media in the public relations toolbox elevated the organization's visibility to a new level and may have helped to attract new members which resulted in membership growing to now nearly one hundred IHO Member States. I am also happy to say that IHO has found its place as an acknowledged contributor to the UN Decade of ocean science for sustainable environment. Less visible but substantial achievements were made with the digital installation of bespoke marine spatial data infrastructure solutions at the Secretariat to maintain the ISO-conformant hydrographic registry and thematic portals on global themes such as ENC coverage, quality of survey and underwater feature names.

The unexpected challenges resulting from the COVID pandemic forced completely new arrangements within the Secretariat, on the collaboration with Member States, relations with our global partners and – not the least – the working regime of all the Committees, Sub-Committees, Working Groups and Project Teams. Thanks to the excellent commitment of the entire Secretariat staff and the enduring support of Member States I was able to keep IHO's pace on the level known from my predecessors and, despite the limitations induced by the pandemic, we were able to celebrate the centenary of the Organization in June 2021 very appropriately in highlighting the past, the present and the future of international cooperation in hydrography. One of the latest promising developments is IMO's adoption of IHO's S-100 roadmap culminating in the acceptance of S-101 next generation ENC as the authoritative digital standard for Nautical Charts from 2026 onward. I have been deeply involved in the concept, the technical process, and the regulatory considerations of this important achievement from its start in 2005. Based on my experience with the uptake of S-57 ENCs under the WEND regime I am confident I can help make S-101 ENC coverage and amending S-1xx data services work in time and space. I am once more asking for your trust to enable me to work on this quantum leap in navigation and interrelated processes and to ensure the digital transformation in the marine environment becomes a reality by means of a second term as Secretary-General.

Date: 1<sup>st</sup> September 2022

Signature of candidate - *Signature du candidat* :

*Matthias Juras*

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Forwarding Authority - *Autorité qui transmet* :

**Digitales und Verkehr**.....

**Robert-Schuman-Platz 1**.....

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**53170 Bonn**

Signature of forwarding authority – *Signature de l'autorité qui transmet* :

*[Signature]*

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**Annex A – Annexe A**Bibliography (English publications only) – *Bibliographie (langue anglaise seulement)*

- "Measuring and Charting the Ocean – One hundred years of international cooperation in hydrography – Prestige book for the celebrations of the IHO Anniversary" together with Bessero, G. (Editor in Chief) and the group of Co-Authors  
International Hydrographic Organization, Monaco 2021
- Half-yearly column on developments in hydrography  
download: <https://www.hydro-international.com/magazine>  
Hydro International, Geomares, Lemmer, Netherlands
- "Marine Geographic Information Systems"  
download: [https://link.springer.com/chapter/10.1007/978-3-540-72680-7\\_23](https://link.springer.com/chapter/10.1007/978-3-540-72680-7_23)  
Springer Handbook of Geographic Information, Kresse, Danko (EdP.),  
1<sup>st</sup> Edition 2012,  
Springer Verlag Berlin Heidelberg,  
P. 759-780,  
2<sup>nd</sup> Edition 2022,  
Springer Nature Switzerland,  
P. 639-657
- "I want nothing less than all the physics of the sea charted – an academic discussion"  
download: <http://dhyg.de/index.php/hydrographische-nachrichten/hn-archiv>  
Hydrographische Nachrichten,  
Nr 105, P. 6-11, Deutsche Hydrographische Gesellschaft,  
November 2016
- "IHO – the deliberated Organisation"  
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Hydrographische Nachrichten,  
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- "IC-ENC: Global Collaboration, Regional Focus", together with Harper, J.  
Hydro International, March 2016  
P. 54-55, Geomares, Lemmer, Netherlands & International Hydrographic Review, IHO Monaco,  
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- "Safer navigation through high technology"  
Shipping&Operation, Volume 5,  
2011, P. 76-78
- "Study on ENC Loading Strategy in Relation to SCAMIN Effects and "Overscale" Indications", together with Melles, J.  
International Hydrographic Review, Vol.4, No.2, 2003
- "Functional Scope and Generic Model of Integrated Navigation Systems", together with Behnke, J.; Berking, B.; Herberg, J.; Matthes, S.  
The Journal of Navigation,  
Royal Institute of Navigation, London,  
Vol.56, No.1, January 2003
- "ECDIS Type Approval according to International Standards"  
International Hydrographic Review, Vol.1, 2/2000
- "ECDIS Back-up systems and arrangements"  
Contour, Spring 1997,  
Canadian Hydrographic Service