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1st SESSION OF THE IHO ASSEMBLY

Monaco, 24-28 April 2017

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

References:

- A. Conference Circular Letter No.5 dated 14 June 2016 – *Call for Nomination of Candidates for Secretary General and Directors of the IHO*
- B. General Regulations of the IHO, Article 21

Dear Hydrographer,

1. Reference A invited IHO Member States to nominate candidates for the positions of Secretary-General and Director of the IHO 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 election at the 1st 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,

Robert WARD
Secretary-General

Annex: Nomination Form from Germany

Candidature for a post of¹
SECRETARY-GENERAL

DIRECTOR

(Article 20 of the General Regulations)



Candidature à un poste de¹
 SECRETAIRE GENERAL

DIRECTEUR

(Article 20 du Règlement général)

GENERAL - GENERALITES

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

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)
Russian: (read and understand)

¹ Tick one box or both

SERVICE AND EXPERIENCE² - SERVICES ET EXPERIENCE²

8. Hydrographic service – *Service hydrographique* :

a) *National activities – Activités nationales* :

Vice President of the Federal Maritime & Hydrographic Agency	Since 2014
National Hydrographer and Director of Department Nautical Hydrography	Since 2009
Head of Division Nautical Information Service – 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 - 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	1994-2004

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

Presidency of the 5 th Extraordinary International Hydrographic Conference, Monaco	October 2014
Hydrographic Standards and Services Committee – HSSC of International Hydrographic Organisation - IHO	Chair since 2012, Vice-Chair since 2007, 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 since 2014
North Sea Hydrographic Commission	Head of Delegation since 2010
Baltic Sea Hydrographic Commission	Chair 2009, Head of Delegation since 2010

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.

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 que 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. *Education Activities – Cours de formation continue* :

„External communication and mass media“ Federal Academy of Public Administration	Hamburg, November 2010
“Organisational structure and tasks of the European Union” Federal Academy of Public Administration	Berlin, July 2001
„Management and Leadership in Public Administration” Academy for Advanced Training	Hannover, February, August, November 2000
“International negotiations and conferences” Federal Academy of Public Administration	Berlin, September 1999
„Basics of cooperation“ Federal Academy of Public Administration	Bonn, January 1998

11. *Scientific Activities - Activités scientifiques* :

Lecturer: Electronic Sea Charts HafenCity University Hamburg, Department Geoinformation Technology	Since 2005
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

12. Patented inventions – intentionnés brevetée

„A method and a device for determining a position of a water vehicle“
Patent application No. 1495623.5 – 1812, together with Vahl, M. and Zhou, Z. (Fraunhofer Society)

European Patent Office,
Munich, Germany
23. January 2015

“Method for the simulation and visual display of ship’s movements induced by motions of the sea”
Patentschrift DD 272 940 A1

Amt für Erfindungs- und Patentwesen,
German Democratic Republic
25. October 1988

13. Bibliography - Bibliographie

See Annex A

CANDIDATE'S POSITION - *POSITION DU CANDIDAT*

Globalisation has brought things closer together. The oceans separating the continents have transformed from lonely trade routes to marine highways for international trade, which attract more and more cruise ships venturing into ever remoter areas. All nations have become increasingly aware of the inestimable value of the energy resources, minerals and raw materials hidden in the oceans and seabed. Nations and interested parties have manifold, oftentimes conflicting perspectives and expectations ranging from purely commercial interests or intensified exploration to strict environmental protection excluding any human intervention. Those who are professionally involved in this field have no doubt that hydrography - the "engineering of the blue" - is the key to any activity in this regard. However, this has not yet been generally acknowledged and some ocean areas to this day have remained part of "the last great unknown". To raise the profile of hydrography at any opportunity and at all levels - internationally, in governmental bodies and non-governmental organisations, and in those regions and countries which are not yet IHO members: that is the principal and ongoing task of all IHO office holders.

It is the vision of the IHO 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 political aspirations of the United Nations Agenda 2030 for sustainable development offer an opportunity to turn this self-conception into reality. In close cooperation with the existing maritime organizations, IHO has the potential to evolve into an important contributor to the development of an integrated world ocean strategy. The resulting system of future ocean governance offers IHO the chance of becoming the predominant provider of maritime knowledge.

The principal criteria of IHO performance 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 the time has come to widen the scope of this concept. As IHO's own definition of hydrography has been expanded to include the measurement and description of all physical features of the seas as well as their prediction over time, it appears appropriate now to apply IHO's revolutionary S-100 standardisation concept to other domains beyond nautical survey and cartography. The standardisation concept as well as the application of a unified data provision infrastructure can be applied successfully to all relevant sea related data. In doing so, alliances should be built with science domains such as marine physics and meteorology, and collaboration should be sought with environmentalists, stakeholders from marine engineering, and global players in the field of geoinformation via their respective international organisations. The common goal of such alliances should be a standard framework from which bespoke marine data products and services can be derived, and which in its entirety provides a comprehensive description of all aspects of the oceans and of their uses. This approach would 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. To turn this vision into reality, latest state-of-the-art hydrographic capacity encompassing data acquisition, data handling, interpretation and provision will be indispensable. IHO should 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. It should focus on regaining its role as the conceptual driver of hydrography in the digital age. In order to achieve that goal, technology transfer should constitute an integral part of capacity building.

Capacity in this regard should be interpreted to include the accumulated expertise of management personnel, general preparedness and future orientation in technology, and political support for the enhancement of general hydrographic and, in particular, survey activities. The Secretariat should assist the affected Member State bodies in all of these aspects to ensure that progress is made on local and regional levels.

Parallely, IHO should intensify 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. Ties with academia in the field of hydrography could be strengthened in this context under the aspect of capacity building and technology transfer. Students' work and research projects at universities motivated by the IHO programme could serve as a playground for later solutions.

Thanks to the efficient work of the former generation of office holders at the Secretariat, successful implementation of the three pillars of the IHO Work Programme has been ensured. However, further evolution to keep up with global developments will be necessary. A generally observed growing interest in maritime matters correlates well with the provisions of the amended IHO Convention. Its long awaited modernisation enables the Organization to operate more efficiently, grow in membership, and become more flexible in the operational control of its work programme. The challenge for the new Secretary General and the designated Directors will be to implement the Council as an effective steering instrument for the goals and performance of the Organization's subordinate bodies, balanced against available resources provided by the Member States. The Council is in a position to respond quickly to changing circumstances and demands. Therefore, this body should be motivated to make efficient use of the decision making competences it has been assigned under the reformed convention. It will indeed be an ambitious task for the Secretariat to cope with the increased frequency of top-level events such as meetings of the Council and the Assembly and with the challenges posed by intensified cooperation with other organisations, which is a result of numerous collaboration agreements implemented in the course of the last tenure. There is a vast range of opportunities, and synergy can make a difference, but the endorsement of mutual understanding should now be followed by concrete joint projects. The Secretary-General will be 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.

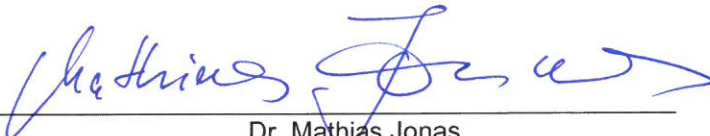
The hundredth anniversary of the foundation of the International Hydrographic Bureau as the forerunner of the modern IHO falls into the upcoming tenure of the Secretary General Elect. Prince Albert I of Monaco, an ambitious oceanographer, held a holistic view of all aspects of the oceans. The reigning Sovereign of Monaco, Prince Albert II, has continued in his great-great-grandfather's tradition by intensifying efforts to explore and investigate the mechanics of the oceans across territorial borders and scientific domains. He is a strong proponent of international cooperation, which he considers the only approach that is adequate to the challenge. The celebration of the anniversary will offer an excellent opportunity to underline the continuity of IHO's relations with the authorities of the Principality of Monaco and IHO's determination to further hydrography in the same future oriented, progressive spirit.

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

My professional career has been closely linked to digital hydrography. Since the time I issued my first ECDIS type approval in 1995, I have been involved continuously in the IHO's core tasks of technical standardisation, data production, and data distribution. My contribution to subordinate bodies, the WEND concept, and to IHO bodies covers many years as chairman of the Colours & Symbols Working Group, the overarching Hydrographic Standards and Services Committee since 2012, the two-year term as chairman of the IC-ENC Steering Committee, and the Presidency of the Extraordinary International Hydrographic Conference in 2014. Regular attendance and chairing of regional North and Baltic Sea commissions since 2008 has made me familiar with the sea basin related aspects of cross-border cooperation. My domestic responsibility as Germany's National Hydrographer since 2009 and my position as Vice President of the German Federal Maritime and Hydrographic Agency have been a good preparation not only in terms of leadership and management skills but they have also given me an insight into the wider perspective of all parties and stakeholders involved in maritime matters and ocean uses. High-level administration, budget and staff management in the wide field of maritime affairs are part of my daily responsibilities. Throughout the time I have been working for the administration, I have never lost the scientific and lecturing aspect of maritime affairs out of sight. I have taken every occasion to bring maritime matters to the public arena, benefiting from the combination of practical experience at sea with management skills and scientific aspirations which may be called my hallmark. As a token of gratitude to my country, which after reunification allowed me to make a good career, I revived my military skills to become Reserve Officer of the German Navy. By combining all of these fields of professional experience and personal capability, I feel adequately prepared to apply for the position of Secretary-General and, if elected, to become the first servant of the Organisation.

Date: 3. December 2016

Signature of candidate:
Signature du candidat :




Dr. Mathias Jonas
Vice President and Professor

Forwarding Authority - *Autorité qui transmet :*

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





Monika Breuch-Moritz
President and Professor
Federal Maritime and Hydrographic Agency

Annex A – Annexe A

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

- „The Electronic Chart – Fundamentals, Functions, Data and other Essentials – A Textbook for ECDIS use and Training“ (Standard publication international), together with Hecht, H.; Berking, B.; Büttgenbach, G. (2001), Alexander, L. (-2014), Harper, J. (2017)
- „I want nothing less than all the physics of the sea chart – an academic discussion“
download: <http://dhyg.de/index.php/hydrographische-nachrichten/hn-archiv>
- „IHO – the deliberated Organisation“
- „The provision of hydrographic services as core element of E-navigation - Status and perspective“, together with Bessero, G. and Powell, J.
- „IC-ENC: Global Collaboration, Regional Focus“, together with Harper, J.
- „e-navigation – Challenge for data modelling“
- „IMO e-navigation implementation strategy – challenge for simulation“
- „Ship’s navigation - from lonesome sailing to collaborative operation“
- „Electronic Navigational Charts for Ship Operations at Sea“
- „Safer navigation through high technology“
- „The IHO Geospatial Information Registry Structures and applications for hydrographic information beyond ECDIS“
- GITC, Lemmer, geomares
The Netherlands, 2001,
2006, 2011, 2014, 2017
(fourth, revised and updated
edition – altogether more
than 10.000 samples sold)
- Hydrographische Nachrichten
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- ISIS-MTE 2016, Hamburg,
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- Hydro International, March
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Lemmer, Netherlands &
International Hydrographic
Review, IHO Monaco,
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- TRANSNAV 2013, International
Symposium on Navigation,
Gdynia, Poland,
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- International Navigation
Simulator Lecturers' Conference
INSLC 17, Rostock-
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Information, Kresse,
Danko (Eds.), Springer Verlag
Berlin Heidelberg 2012,
P. 759-780
- Shipping&Operation, Volume
5, 2011, P. 76-78
- Hydro 2010, Rostock-
Warnemünde,
2. November 2010

- „New applications for hydrographic information beyond ECDIS“
 „IHO On-line Navigational Chart Catalogue“, together with A. Weintritt
 „S-52 Presentation Library - current status and future challenges“
 „Proposals for Harmonised Presentation of Navigation Related Information“
 „Study on ENC Loading Strategy in Relation to SCAMIN Effects and “Overscale” Indications“, together with Melles, J.
 „Functional Scope and Generic Model of Integrated Navigation Systems“, together with Behnke, J.; Berking, B.; Herberg, J.; Matthes, S.
 „Functional Scope and Model of Integrated Navigation Systems – A Toolbox for Identification and Testing“, together with Behnke, J.; Berking, B.; Herberg, J.; Matthes, S.
 „ECDIS Type Approval according to International Standards“
 „ECDIS Back-up systems and arrangements“
- ISIS2008, Hamburg, September 2008
 6th International Symposium on Navigation, University of Gdansk, Poland, September 2005
 ECDIS Stakeholder Forum, Rostock, IHO CHRIS 17, September 2005
 ISIS2004, Hamburg, September 2004
 International Hydrographic Review, Vol.4, No.2, 2003
 The Journal of Navigation, Royal Institute of Navigation, London, Vol.56, No.1, January 2003
 Berichte des BSH, Nr.28, 181pp. 2001
 International Hydrographic Review, Vol.1, 2/2000
 Contour, Spring 1997, Canadian Hydrographic Service