

HYDROSPATIAL... A GLOBAL MOVEMENT !

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ABSTRACT

In two previous articles published as Notes in the International Hydrographic Review (IHR) No.25 and No.23 the topics of “What’s Hydrospatial?” (Hains, 2020) and « So... What is Hydrospatial ? » (Hains & al, 2021), it was suggested to use the new term Hydrospatial as the expansion of hydrography in the context of a sustainable growing Blue Economy. The authors continue to stress and will continue to reaffirm that Hydrospatial is not a replacement for hydrography, it is broader and an expansion of it beyond the realm of sea navigation. The authors have no intention to have hydrography being replaced as a term. The term Hydrospatial is intended to provide a refinement of the concept of Geospatial in the context of the aquatic environment.

“Hydrography” is, and will remain, the foundation of the Hydrospatial and continues to be a very relevant term and field of science. More articles and information have

been published to clarify Hydrospatial and to define it better. In the momentum of exploring the benefits of using the term Hydrospatial to better address geospatial in the water, a global movement of volunteers has been established to generate discussion and advocate the applications of the term Hydrospatial, which could be simply described as the blue geospatial environment.

1. INTRODUCTION

A core team of volunteers suggested the creation of a global Hydrospatial Movement Club and Community (HMCC) to promote the concept of Hydrospatial. Established at the end of 2020, the HMCC was first started by a «club» of professional volunteers globally in the water domain. The HMCC is currently a club of twelve volunteers worldwide interested in promoting and advocating the importance of marine and aquatic geospatial or blue geospatial data and information, namely the Hydrospatial domain.



Figure 1. Logo of the HMCC

«Hydrospatial is all about the Blue of our Blue Planet and its Coastal Zones!»

The working definition of the term Hydrospatial was originally derived from a variation of the existing International Hydrographic Organization (IHO) definition of hydrography. Although this definition still stands as the original definition ; it is encompassing and complex.

In the context of the HMCC, a group of twelve volunteers around the world with an interest on « the Blue of our Blue Planet and its Coastal Zones » agreed to put their heads together to review and exchange knowledge and thoughts on how to simplify the description of the term Hydrospatial. More specifically, the Club aspires to expand its membership to a larger Community of professional volunteers. Together the HMCC aims to clarify and simplify the definition for the term Hydrospatial to something like the title above. Alternatively, we hope to also be inspired by

publishing articles and papers using Hydrospatial, which was described by one independent author as: *...“that portion of geospatial knowledge infrastructure that addresses the hydrosphere, and hydrospatial technologies support navigation, economic development, stability, security and defence, resilience and scientific research.”* (Smits M., June 2021)

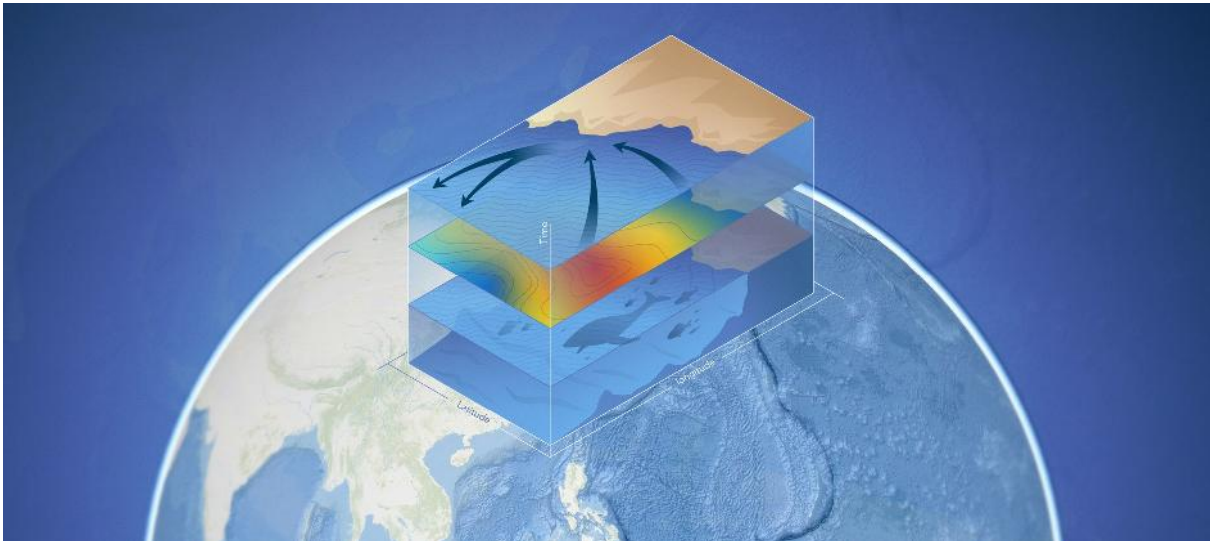


Figure 2. Hydrospatial is multidimensions and temporal - Courtesy of Esri, Inc©

2. THE VISION AND MISSION

The HMCC is neither a non-for-profit organization, nor an overly structured group. It is a group of volunteers willing to invest their own time for the importance of bridging interests; creating momentum, synergies and alliances in Hydrospatial of all the existing structured organizations by advocating the importance of knowledge, data and information sharing of the blue of our blue planet and its coastal zones.

The intention is to serve as a voice and advocate of Hydrospatial as the foundation of any activity in the oceans, seas, lakes and rivers, emphasizing the blue economic growth for Sustainable Development and Clean Environment.

The Hydrospatial Movement Club and Community carries out the outreach by publishing, mobilizing, bridging and engaging ocean, inland waters and coastal professionals in understanding and using Hydrospatial to explore and exploit marine and aquatic geospatial data and information to the broadest extent possible.

3. THE VALUES AND OBJECTIVES

Like many other professional groups the HMCC values are based on behaving with trust and respect; demonstrating sustained commitment and proactivity; and interacting in an honest and efficient manner.

All this towards the target to promote, produce, share, and stimulate the production of quality policy and technical papers, articles and presentations on Hydrospatial.

Also by maintaining a strong, credible and active core club of members from every continent of the world. Members have in mind to expand as much as possible the Hydrospatial Movement Club into a large, vibrant Community using the social media as a vehicle.

4. THE TACTICAL ACTIONS

The HMCC has set out some goals and actions to achieve its growth:

Recruit members with a diversified background. In mid-2021, the team comprises volunteers from a mix of senior, mid-career and early career members and from different continents to establish the Club i.e. Americas, Asia, Europe, Africa and Australasia;

Develop a plan to present at events and publish papers yearly on some relevant topics, articles and notes on Hydrospatial in well-known international and domestic events and publications;

Have an integrated publishing plan of Hydrospatial articles and notes in targeted international publications, in areas such as, and not limited to: shipping; ports and harbours management & operations, pilotage, polar and remote marine areas; UN Convention on Law of the Sea; marine cadastre; Marine Spatial Data Infrastructure (MSDI), Marine Spatial Planning (MSP), ocean and coastal management & technologies;

Put in place a flexible and straightforward electronic means to maintain a fluent and frequent communication within the HMCC members;

Establish and implement basic criteria and rules to recruit members beyond the Club to an Hydrospatial Movement “Community”.

5. THE CURRENT CLUB MEMBERSHIP

The core Club is currently composed of twelve members including 2 co-leads plus 2 members per continent for the African, American, Asian Australasian and European Nodes as a starting point. Those members drive through leadership in the use of Hydrospatial to create a momentum to get the HMCC taken off as a community, and make a difference and advocate for Hydrospatial..

The individuals authoring this paper are the twelve members of the original Club. The shape, the form and the structure of the HMCC are expected to be flexible and fluid to adapt to the issues and areas of interest for Hydrospatial.

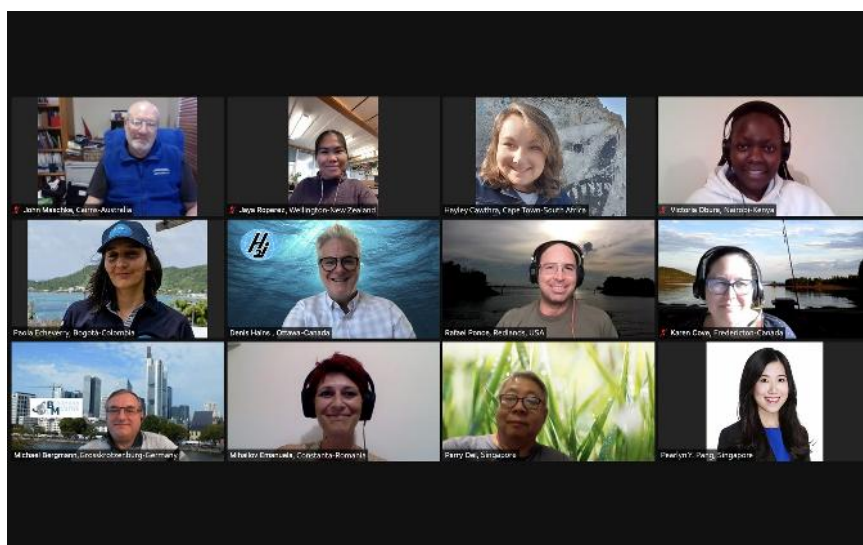


Figure 3. Authors and members of the Hydrospatial Movement Club of the HMCC photo from ZOOM Screen Shot



Figure 4. Map of the World showing the locations of the current Club members from the HMCC Story Map.

6. THE EXPANSION TO A GLOBAL COMMUNITY AND HOW TO GET INVOLVED

The HMCC aims to be open and inclusive. More information on Hydrospatial and the HMCC can be found on a Story Map at: <https://arcg.is/19fiab>.

Everyone interested in joining the volunteer Community can join by becoming a member of the HMCC **LinkedIn** Group site at: <https://lnkd.in/eBYGfkpg>. Activities such as Nodes Virtual Workshops will be scheduled in the last quarter of 2021 and the first half of 2022 on topics of interest starting with the review and feedback on the more straightforward and shorter definition to adopt for Hydrospatial.

7. CONCLUSION, NEXT STEPS AND CALL FOR INTEREST...

Hydrography as we understand it, in the past, in the moment now and for the future, is essential and will continue to be more relevant than ever. We would like to reiterate that it is not the HMCC intention to replace the term Hydrography with the term Hydrospatial. On the contrary, the HMCC is of the view that a term is needed to go beyond the science of hydrography from its traditional meaning into a multi-dimensional and temporal data content that are becoming more relevant and critical in the digital world of Big Data, the Internet of Things and Artificial Intelligence.

Moving towards the use of the term Hydrospatial not only highlights the ongoing benefits and the leadership role of hydrography, but also emphasizes the new roles for hydrographic data and expertise.

All individuals or organizations interested in furthering the thoughts, and the definition and activities of Hydrospatial, are invited to reach out to one of the authors to express their interest.

The Hydrospatial Movement Club & Community (HMCC) is open and inclusive of our blue planet's positive and constructive people.

Feedback, and constructive comments and suggestions are welcome. If you reached to this point, it means you are interested and the authors would like to invite you to register as a volunteer member of the Hydrospatial community by becoming a follower of the HMCC *LinkedIn* site. It is free, it is for the blue of our planet and it will be fun !

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- Teledyne-Caris 2020 S-100 User Groups Meeting (UGM)- Asia/Pacific on November 26, 2020 + Europe/Americas on December 10, 2020 - virtual presentations on **What's Hydrospatial?** : <https://www.teledynecaris.com/en/events/s-100-ugm/>

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