

# *So... What's HYDROSPATIAL?*



Denis Hains, President & CEO H2i  
**MSDIWG “Online” Meeting**

17 March, 2021

\* For details go to Denis Hains’ published article as a note in the International Hydrographic Review, May 2020 edition Pp. 84-93 at:  
[https://iho.int/uploads/user/pubs/ihreview\\_P1/IHR\\_May2020.pdf](https://iho.int/uploads/user/pubs/ihreview_P1/IHR_May2020.pdf)



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# GEO HYDRO

SPATIAL?  
GRAPHY!



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# HYDROSPATIAL



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IHO

International  
Hydrographic  
Organization

# Definition (March 2021):

**Hydrography** *“is the branch of applied sciences which deals with the measurement and description of the physical features of oceans, seas, coastal areas, lakes and rivers, as well as with the prediction of their change over time, for the primary purpose of safety of navigation and in support of all other marine activities, including economic development, security and defence, scientific research, and environmental protection.”*

*In addition to supporting safe and efficient navigation of ships, hydrography underpins almost every other activity associated with the sea, including:*

- *Resource exploration*
- *Environmental protection and management*
- *National marine spatial data infrastructures*
- *Recreational boating*
- *Maritime defence and security*
- *Tsunami flood and inundation modeling*
- *Coastal zone management*
- *Toutism*
- *Marine science*

Source: <https://iho.int/en/importance-of-hydrography>



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# HYDROSPATIAL

## Suggested Draft Definition (March 2021):

**Hydrographyspatial** “is the branch of applied sciences which deals with the analysis, understanding and access to static and dynamic marine and aquatic geospatial digital and analog data and information, digital signals, measurement and description of the physical, biological and chemical features of oceans, seas, coastal areas, lakes and rivers from all possible available data sources in near-real time, real-time, including history and, ~~as well as with~~ the prediction of their change over time. For the primary purpose of providing timely access to a standard, quality and the most up-to-date marine spatial data infrastructure, including the safety and efficiency of navigation; ~~in support of~~ all other aquatic and marine activities, including for a sustainable Blue environment & economic development, security and defence, and scientific research, ~~and environmental protection.~~”

~~In addition to supporting safe and efficient navigation of ships, hydrography underpins almost every other activity associated with the sea, including:~~

- Resource exploration
- Environmental protection and management
- National marine spatial data infrastructures
- Recreational boating
- Maritime defence and security
- Tsunami flood and inundation modeling
- Coastal zone management
- Tourism
- Marine science



*... Let's enter into the HYDROSPATIAL  
new generation & Era!*



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# HYDROSPATIAL

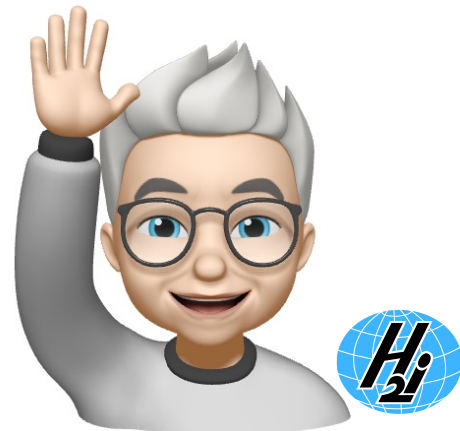
## Questions asked:

- 1) Would IHO agree to adopt officially an HYDROSPTATIAL definition?
- 2) How do Hydrographic Offices see an adoption of HYDROSPATIAL?
- 3) How does the Research & Education see HYDROSPATIAL integrated?

### Since February 2020:

*Publications IHR and HI: Hains D. (H2i); Jonas M. (IHO);  
Pang P. & Oei P, (Singapore); Ponce R. (Esri); and more planned for 2021...*

***Implementation of an  
HYDROSPATIAL Movement Club & Community...***  
***...publications and activities in 2021 ... To follow...***



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# GEO



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## LAND

## AIR

METEO

## WATER

## HYDRO

MARINE

AQUATIC

OCEANO

## GRAPHY - LOGY - MATICS - SPATIAL ...



# Merci! / Thank you!



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