

DRAFT
Letter of Intent
for NOAA and the IHO Innovation and Technology Center
to cooperate on technical and operational matters related to the mapping of the world's oceans and
protection of the marine environment

Background

There is a critical need to coordinate international efforts to develop and harness emerging hydrographic-related technologies that support safe maritime navigation and protection of the marine environment, As the world stands at an interesting crossroad of technological exploration and exploitation, the IHO as a technical standardization body is confronted with the challenge to harness the rapidly evolving technologies. These, in turn, will drive the ever accelerating transformation processes on the roles and services of Member States hydrographic offices. It is timely that the IHO examines ways for a faster transition of knowledge into the standardization process and – in turn - accelerated application of the resulting new standards to enable extended use of hydrographic products and services. This strategy of closer linkage of the standardization process with emerging technical solutions is seen as a more efficient way to deliver extended benefits on hydrographic aspects to users and society in navigational and non-navigational areas. (quoted FROM A-2 Proposal)

NOAA is.....{CAN ADD MORE DESCRIPTION }

NOAA's Office of Coast Survey is an office of the federal government of the United States of America charged with charting the waters of the United States.... {CAN ADD MORE DESCRIPTION }

The IHO is.....{CAN ADD MORE DESCRIPTION }

The IHO Innovation and Technology Center (the "Center") is a government of Singapore-sponsored center endorsed by the member states of the IHO at the Second Assembly meeting October 2021.{CAN ADD MORE DESCRIPTION }

Scope of Potential Cooperation

This letter of intent provides an initial nonbinding articulation and exploration of broad interest areas for collaboration shared by the NOAA Office of Coast Survey and the Center. The NOAA and the Center intend to explore these and potentially other topics further under a Memorandum of Understanding (MOU) that will more fully scope principles and agreed practices. The common interest of NOAA and the Center include such areas as:

- testing of feasibility of emerging technologies to the improvement of navigation safety and protection of the marine environment.
- improving the accuracy of environmental models that include hydrographic and bathymetric data that improve governance and protection of the environment, lives and/or property. One model identified of high mutual interest is the STOFS Model where the improvement of the model (geographical coverage and model output resolution) through collaborative development is sought. This includes collaboration among modelers, practitioners and data partners.
- innovative thinking to develop recommendations to the IHO Secretariat, IHO member states, and/or other working groups, project teams, and commissions of the IHO that address the scope

of the IHO mission and in support of its Strategic Plan.

- providing expertise, resources, and potentially funding through direct or in-kind contributions to further this letter of intent.
- supporting the application of the S-100 Hydrographic model to enhance situational awareness and improve decision-making, including in support of WEND-100 principles and envisioned services.
- contributing and partnering to advance global marine initiatives such as the UN-GGIM, the UN Decade of Ocean Science, the Seabed 2030 Project, and others.
- training and capacity building in related projects.
- developing cooperative networks with other IHO partners, such as the IHO e-learning center, Regional ENC distribution networks, navigation equipment manufacturers, recognized observer organizations to the IHO, and others.
- responding to specific requests of the IHO Secretariat, the InterRegional Coordination Committee, the Hydrographic Standards and Services Committee, the IHO Council, or other member states or organizations of the IHO.
- Providing recommendations, as warranted, to the development or evaluation of the IHO Work Program in the scope of the mandate of the Center.
- identifying any other opportunities through which the Center and NOAA may support the International Hydrographic Organization and the capacities of member states.

Specific Projects, Budget, Resources, Timeline

- to be discussed but may involve project specific annexes that could be developed and incorporated within the envisioned Memorandum of Understanding and its framework.
- An initial period of 5 years is envisioned for the MOU.

This letter of intent is a notional expression of general interest, is nonbinding and provides no compulsion on either the Center or NOAA for any specific action beyond continued dialogue on exploration of interests, opportunities, and requirements, if any, that would be warranted if NOAA and the Center were to develop an MOU or other expressions of intent.

Parry Oei
on behalf of the IHO Innovation and Technology Center

John Nyberg
on behalf of NOAA Office of
Coast Survey

Reference:

- https://iho.int/uploads/user/About%20IHO/Assembly/Assembly2/A2PRO/eng/A2_2020_PRO2-4_EN_TechnoLab_SingUSA_v1.pdf
- https://iho.int/uploads/user/Inter-Regional%20Coordination/IRCC/IRCC13/IRCC13-07M_IHO_Lab_IRCC_v2.pdf