IHO and Singapore Launch Hydrographic Innovation Laboratory





Singapore and the International Hydrographic Organization (IHO) launched the Joint IHO-Singapore Innovation and Technology Laboratory on 26 October 2021. The laboratory seeks to optimize the resources of IHO Member States to harness and develop emerging technologies in the hydrographic domain that

support safe maritime navigation and the protection of the marine environment.

In accelerating innovation in the field of hydrography, the laboratory aims to (i) conduct research and testing of projects proposed by IHO Member States, IHO organs and other stakeholders; (ii) grow knowledge and foster collaboration on global standard-setting for the development and application of technologies enhancing safety at sea; and (iii) promote a multidisciplinary and collaborative environment to drive innovative solutions and develop pioneering technologies through active partnerships.

For a start, the Joint IHO-Singapore Innovation and Technology Laboratory will embark on the following two pilot projects:

- Investigate the automated conversion of the IHO S-57 Electronic Navigation Chart (ENC) to the IHO S-101 ENC. This project supports the development of the S-100 Electronic Chart Display and Information System.
- Develop a digital infrastructure to improve information exchange between harbours and hydrographic offices. The outcome of this project will inform the IHO S-131 Marine Harbour Infrastructure product specifications.

The laboratory is overseen by a governing board chaired by Mr Abri Kampfer, the IHO director in charge of the IHO Work Programme II. Its general manager, Dr Parry Oei, adviser (hydrography) of the Maritime and Port Authority of Singapore (MPA), leads the day-to-day operations.

Progress in Digital Hydrography

IHO Secretary General, Dr Mathias Jonas, said: "The Joint IHO-Singapore Innovation and Technology Laboratory will provide a dedicated space to test and evaluate new ideas to enable their smooth transfer into practice. This is a key element which has been missing and will help progress in digital hydrography. The laboratory is designed to become the testing ground for the future of hydrography."

Senior Minister of State, Ministry of Transport, Mr Chee Hong Tat, said: "Singapore supports international efforts to develop hydrographic technologies that enhance safety of navigation and protection of the marine environment. The Joint IHO-Singapore Innovation and Technology Laboratory is an important endeavour to harness the collective resources and expertise of IHO Member States. Singapore is honoured to be the host country of the laboratory."

SOURCE: IHO.

Launch of the Joint IHO-Singapore Innovation and Technology Laboratory: Ms Quah Ley Hoon, Chief Executive of MPA (top left); Mr Chee Hong Tat, Senior Minister of State, Ministry of Transport (top centre); Mr Niam Chiang Meng, Chairman of MPA (top right); Dr Mathias Jonas, IHO Secretary General (bottom left); and Dr Genevià ve Béchard, IHO Council Chair (bottom right).