2020-06-09 SPRWG Circular letter 01-2020 (by e-mail)

From: Chair, IHO Strategic Plan Review Working Group (c/SPRWG) **To:** Members of the IHO Strategic Plan Review Working Group (SPRWG)

Cc: IHO Council's Chair

Subject: Strategic Performance Indicators of the draft revised IHO strategic plan

References: a) SPRWG CL 06-2019, dated 19 October 2019

- b) Summary report of the 3rd meeting of the IHO Council, dated 23 October 2019
- c) Council Circular letter 02/2020 dated 05 May 2020

Enclosure: Annexe

Dear members of the Strategic Plan Review Working Group,

- 1. I hope that you and your kin are all getting safe through these troubled times.
- 2. At its last meeting in October 2019 (see ref. a &b), the IHO Council had decided to propose the Assembly to continue the SPRWG after the approval of the IHO Strategic Plan, in order to finalize the methods of calculation of the Strategic Performance Indicators (SPIs), to be submitted to the Council's 4th session.
- 3. The CoViD-19 crisis has deeply upset the process of the Assembly, and consequently the timeline of the SPRWG. Accordingly, the Council's Chair tasked the SPRWG to develop methods for calculation of the Strategic Performance Indicators as outlined in the endorsed revision of the Strategic Plan, as originally proposed by PRO 1.8 with the intention to amend the SPRWG chair's report for the forthcoming Assembly (see ref. c).
- 4. Council's Chair asked therefore current Council members to consider or renew their commitment of participation on the work of the SPRWG, and to inform the SPRWG's secretary. A few intentions for membership has been received so far, but you may wish to make some change in your participation. In that event, let the SPRWG's secretary know, in order to update the group's mailing list.
- 5. The timeline of the work could be the following:
 - From now to mid July: work on the SPI.
 - From mid July to mid August: liaison with HSCC's, IRCC's chairs and IHO Secretariat.
 - By the 31st of August: additional report of SPRWG to the Council.
 - September: consideration of the report by the Council.

- 6. Therefore, I propose that we now focus on the definition and the calculation of the SPI. They should be as operational as possible and simple to measure, as stated State in the "Red Book" of the Assembly by a Member, wrt ISO 9001 principles on Key Performance Indicators. I suggest that at this stage we focus on metrics and formula and, envisage only afterwards whether we should propose some change in the wording of the SPI (as endorsed by the Council), for disambiguating the wording or improving consistency, for instance.
- 7. You will find in annexe the table of strategic performance indicators as currently drafted, with reference to the strategic targets they support. I have added a few comments to each SPI, taking into account those provided by member States in the "Red Book" of the Assembly. I suggest, as a first round, to collect your views on the way to calculate these SPIs, before the 22nd of June. As the Council adopted a rather large number of them (14), and given the number of participants to the working group, we could share the work and each of you could decide to focus on a few SPIs. Contributions to this first round would be circulated to the whole WG for further comments.
- 8. For some of the SPI, values to be reached by 2026 are proposed, when it seems desirable to define an "end-state" for the IHO at this horizon. Those values would need an approval by the Assembly, and I suggest that our WG discuss them.
- 9. The achievements of the targets presupposes the realization or the completion of works, already undertaken by the IHO, or to be planned. I suggest that you take advantage of the additional time before the Assembly's meeting to review the proposed Work Programme 2021-2026 in the light of these targets, in order to assess possible need for further guidance on the Work programme. Although not in the remit of the SPRWG, these first thoughts could be useful to your Member State for further comments when the SPRWG's report is considered by the Council, or at the Assembly's meeting.
- 10. To conclude a few words on the SPRWG's officers. Those among you who attended the last Council's meeting are aware that IGA Laurent Kerleguer has taken over as SHOM's CEO and France national hydrographer. With his consent, it was agreed at C-3 that, with the support of vice-chair Shigeru Nakabayashi from Japan and secretary Doug Brunt from Canada, I would continue to chair our WG until A-2. With IHO Secretary General and Council's chair, we checked that this arrangement could be maintained albeit the postponement of the Assembly's session, and we are looking forward to helping the SPRWG to complete its mission.

With my best regards,

Bruno Frachon Chair of the SPRWG

Annexe

Strategic performance indicators

Goal 1: Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation

Target 1.1 Deliver standards for hydrographic data and specifications of hydrographic products; support their regular production; and coordinate regional and global services for their provision

1.1.1 Percentage of Member States having operationalized production and distribution of hydrographic data products and services based on IHO Universal Hydrographic Data Model (S-100), under an implementation framework of coordination and agreed timelines (2026: 100%).

<u>Comments</u>: A member State expressed concern in the RedBook of the Assembly about the consistency between SPI 1.1.1 and SPI 1.3.1.

Target 1.3 has been added by the Council to mark the key role of capacity building in supporting the strategic goal 1, while target 1.1 is focused on the technical aspects and regional coordination. Both targets can build on the S100 Roadmap submitted by the Council to the Assembly¹.

SPI 1.1.1 could reflect milestones and/or achievements under sections 1 to 3 of the roadmap². The current wording of the SPI 1.1.1 does not refer to a complete coverage of products and/or services, but established processes and plans for achieving it, including the start of the production of S-101 with conversion from S-57.

1.1.2 Number of hydrographic data products and services based on Universal Hydrographic Data Model that cater for the new requirements: autonomous shipping, reduction of emission.

<u>Comments</u>: this SPI is to measure the involvement of IHO in supporting new paths in maritime navigation. As it is not possible to define a priori what should be the number of such products or services, which could be new ones or adaptation or evolution of existing ones, we could consider a scale that reflects steps achieved in defining and implementing those products and services.

Target 1.2 Develop standards, specifications and guidelines in the areas of data assurance, including cyber security and data quality assessment.

1.2.1 Percentage of hydrographic data products and services based on S-100 model that are covered by IHO standards, specifications and guidelines on cyber security (2026: 100%)

<u>Comments</u>: a first step could be to review the current list of data products and services based on S-100 models and that are under the responsibility of IHO, to define which of them need to be covered. Percentage of realization – i.e. adaptation or evolution of the standards of data products or services - would be calculated on this base.

¹ PRO 2.1 "S-100 Implementation Strategy"

² 1. Operational infrastructure - 2. Technical Standardization - 3. Coordinated implementation of services

1.2.2 Percentage of navigationally significant areas (e.g. charted traffic separation schemes, anchorages, channels) for which the adequacy of the hydrographic knowledge is assessed through the use of appropriate quality indicators (2026:100%).

<u>Comments</u>: calculation method should be consistent with C55 calculation methods, possibly modified by CBSC. A first step could be for the MS to define and quantify which fraction of their coastal waters that are navigationally significant, if they have not already done so. This would reduce the amount of effort needed to apply quality indicators in these areas.

Target 1.3 Use capacity building and training to develop and increase the ability of Member States to support safety and efficiency of maritime navigation.

1.3.1 Ability and capability of Member States to meet the requirements and delivery phases of the S100 implementation plan (2026: 50%).

Comments: See above comments on SPI 1.1.1.

SPI 1.3.1 is linked to Target 1.3 related to capacity building. To make a clear difference with SPI 1.1.1, SPI 1.3.1 could address the ability to produce native S-101 ENC (cf. §3 of PRO 2-1 "S-100 Implementation Strategy"). This SPI is to affect the CB strategy and funding.

Goal 2: Increasing the use of hydrographic data for the benefit of society

Target 2.1 Build a portal to support and promote regional and international cooperation in marine spatial data infrastructures (MSDI)

2.1.1 Number of hits downloading data/information from the portal.

<u>Comments</u>: wrt a comment made by a Member State in the "Red Book" of the Assembly, we should bear in mind that the portal is not intended to disseminate hydrographic data products or services, but to provide information and resources (e.g. guidelines, tutorials, references, reports) in the field of MSDI, in order to support Member States in their endeavour and to promote regional cooperation. Since the content remains to be defined, calculation of the SPI could be based on relative increase in consultation (beyond front page) rather than on absolute values. The choice of parameters to measure could be inspired by common practices websites practices to measure the level of their visitors' interest.

Target 2.2 Promote new tools and methods to accelerate and increase coverage, consistency, quality of surveys in poorly surveyed areas

<u>Comments</u>: the rationale behind this target is development of hydrographic coverage, not only for the safety of navigation, but also for all the developing marine applications (e.g. maritime spatial planning, ocean modelling, cable laying).

2.2.1 Percentage of adequately surveyed area per coastal state

<u>Comments</u>: the SPI, albeit some relationship with SPI 1.2.2, relates to a different target. In this case, the target is to promote methods of collecting hydrographic data sufficient for usages, including in non "navigationally significant" areas, and to measure the progress in coverage achieved by Member States with the help of these new tools and methods. This implies progress in the appropriation by IHO of new tools or methods for acquisition of marine data. Calculation could depend on the outputs of work undertaken by DQWG, C-55RPT and HSPT.

2.2.2 Number of new applications of the new version of Standards for Hydrographic Surveys (S-44). <u>Comments</u>: a key feature of the future S-44 is the capacity offered to deal with application of hydrographic surveys to other fields than the safety of surface navigation. As such, it would help to qualify the adequacy of surveys according for other usages, beyond the safety of navigation.

Target 2.3 Apply UN shared guiding principles for geospatial information management in order to ensure interoperability and extended use of hydrographic data in combination with other marine-related data.

2.3.1 Number of HOs reporting success applying the principles in their national contexts (2026: 70%).

<u>Comments</u>: the MS's reporting could go through the regional hydrographic commissions (RHCs), or through a specific circular questionnaire prepared by the IRCC and issued by the IHO Council or Secretariat.

Goal 3: Participating actively in international initiatives related to the knowledge and the sustainable use of the Ocean

Target 3.1 Collaborate with other bodies who deliver capacity building and training to improve effectiveness efficiency of capacity building activities and programmes

3.1.1 Percentage of Coastal States that are capable to provide marine safety information (MSI) according to the joint IMO/IHO/WMO manual on MSI (2026 90%).

Comments: See also comments on SPI 1.3.1, for the relationship with CB programmes.

Target 3.2 Improve knowledge of the world's seafloors

<u>Comments</u>: about this Target, its relationship with DCDB and Seabed 2030 requires interaction with these bodies to define relevant and effective metrics. Proposals beneath should be discussed with them.

3.2.1 Amount of data received per year by the IHO Data Centre for Digital Bathymetry (DCDB).

Comments: we could envisage two metrics, both based on the objectives of Seabed 2030:

- Number of depth soundings received annually, after decimation according to the objectives of Seabed 2030 (grid resolution varying according the depth).
- Increase (in km²) of coverage compliant with Seabed 2030 standard, gained annually through the provision of data to DCDB.
- 3.2.2 Number of contributors to DCDB who are not hydrographic offices.

<u>Comments</u>: this SPI would reflect the ability of IHO to attract new contributors to DCDB, which would strengthen its role. As their contributions are likely to be irregular, the SPI could be the total number of contributors, counted from 1st of January 2020.

3.2.3 Percentage of total sea area that is Seabed 2030 compliant for ingestion into the GEBCO dataset and services

<u>Comments</u>: the Council discussed the possibility of measuring this SPI annually and reporting through RHCs to IRCC and the regional Seabed 2030. This approach assumes that RHCs have set up some regional assessment of the status of bathymetric knowledge, which may not be the case in all RHCs. An alternative would be to use assessments made by the Regional Data Assembly and Coordination Centres of Seabed 2030.

Target 3.3 Implement a comprehensive IHO digital communication strategy in order to enhance its visibility and accessibility to its work

- 3.3.1 Number of visits, likes, re-postings, etc. associated to the IHO social media sites.

 <u>Comments</u>: Standard analytics for measuring the visitors' interest could be used (cf. above SPI 2.1.1).
- 3.3.2 Volume downloaded from the IHO website and Geographical Information System (GIS).

 <u>Comments</u>: a metrics similar to the SPI 2.1.1 could be more meaningful than a raw volume of data