

## **Comments on procedures for measuring SPIs allocated to IRCC**

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

### MACHC Capacity Building Coordinator

“Navigationally significant areas” are not defined and agreed upon. Currently extracting this information from C-55 is not possible.

### Brazil

The expression “navigationally significant area” needs to be defined. The “appropriate quality indicators” also needs to be established by DQWG. It doesn’t seem to be possible to extract the information from C-55.

### Colombia

If all IHO Member States update C-55 information every year, the appropriate statistics can be generated.

### France

The term “navigationally significant areas” is to define precisely (with a list of features) to enable Member States to identify the areas concerned in their waters.

The definition of this SPI to be clarified in order not to create ambiguity with SPI 2.2.1, here the objective is to have a CATZOC in the area whatever is the hydrographic knowledge.

The proposed way forward seems unclear as written, it is recommended to use CATZOC present in ENC’s to measure the SPI when areas will be defined.

C-55 does not look useful for this SPI in its current format with no distinction on “navigationally significant areas”.

### Netherlands

To measure this SPI, two parameters need to be defined.

1. What are navigational significant areas? I suggest as a first iteration those areas that are or should be (based on risk assessment) covered by ENC’s UB 3-6. Those UB’s typically cover coastal waters, approaches, harbors, berthing areas, fairways and channels.

2. What are appropriate quality indicators? For those navigational significant areas, I suggest that SOUACC of Soundings and POSACC and SOUACC of objects/wrecks should be provided in the ENC besides CATZOC. This approach is subject to further findings of the DQWG.

Assessing the adequacy through quality indicators is not the same as being adequate. It means that the data has the appropriate quality indicators. Agree that current C-55 offers no useful reference.

### UK

Further discussion is needed to define methodology.

**SPI 1.3.1 Ability and capability of Member States to meet the requirements and delivery phases of the S-100 implementation plan (2026: 50%).**

MACHC Capacity Building Coordinator

This can be achieved through the development of a questionnaire in conjunction with IHO S-100WG which CBSC have proposed in response to the Circular Letter. CB Coordinators can then disseminate this to RHCs.

Brazil

Suggest to use only S-101 and to make this SPI simpler, as it is not clear that Hydrographic Offices will be responsible to produce S-102. On the other hand, it seems that Hydrographic Offices will be more concerned with producing other prioritized S-1XX products.

Colombia

The results of the survey in the IHO CL 27/2021 can be used for statistics about the status of S-100 implementation. It is recommended that S-100WG contact the Genoa University regarding this.

France

Proposed way forward: for the moment, a question on the ability for Member States to produce S-101 and S-102 products seems sufficient and to send the answer back to CBSC.

Need for IRCC to precise what they mean by “Develop method to derive improved measurable figures and provide figures to IRCC”.

Proposal for CBSC to develop a form in cooperation with S-100WG to gather the information from Member States.

Netherlands

An alternative to the suggestion by the CB coordinator is to measure this SPI through the RENCs. RENCs report which members disseminate what S-1XX products at a specific moment in time.

UK

A questionnaire is suitable to define if a Member State is capable to provide S-101 and S-102 products.

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

Brazil

Agree with the proposed way forward and the remarks.

Colombia

Each Member State have had developed a MSDI for sharing the appropriate and authorized data. Each one must obtain the number of visits, amount of data downloaded, etc.

The construction of a regional MSDI (MACHC for example) will be a double effort. The most useful must be made liaison with the MSDIs built and each country report the own statistics to regional MSDI manage.

France

RHC Chairs to delegate this SPI implementation to the head of MSDIWG when existing.  
France agrees with the proposal in the remark to measure this SPI until the IHO portal is operational.  
After the development of IHO portal, technical issue for Member States with the ability to identify the access to their national MSDI from the IHO portal.

Netherlands

As described in remarks of Annex A to IRCC CL 1/2021. No further guidance seems necessary.

UK

Action on MSDIWG and IHO. In the interim, UK should be able to provide a number of hits downloading data for national MDSI portals.

**SPI 2.2.1 Percentage of adequately surveyed area per coastal State.**

MACHC Capacity Building Coordinator

C-55 limitation. How do we define ‘adequately surveyed’? Will coastal States be open to sharing this information?

Brazil

The expressions “poorly surveyed area” and “adequately surveyed area” needs to be defined.  
It doesn’t seem like C-55 fully meets this measurement.  
The proposed way forward uses CATZOC for ENCs, but this procedure does not present a measurement for paper nautical charts (national and international).  
Suggest DQWG y HSWG can contribute to define the quality of surveys in “poorly surveyed areas”.

Colombia

The C-55, M\_QUAL and the attribute CATZOC information is the way to assess the status of each Member State. Well, the way how must be classified there is not. Each one must do this classification since honesty position. Each one knows if some area is: adequately, poor, re-survey. The IHO and the normal reader must trust in this classification. But, if there is some problem during the navigation in one area, the Member State must be responsible.  
The information in C-55 must be trustworthy always.  
I believe is different to share and record the disposition of the data.

France

This item should be led by MSDIWG in RHCs.  
Proposal to subdivide this SPI in CATZOC orders in order to have better view on the hydrographic knowledge (as presented in the French national hydrographic program).

Is C-55 enough reliable to use it for the SPI measurement?

Netherlands

To measure this SPI we need a common definition of what “adequately surveyed” means. Adequately surveyed directly refers to the C-55 survey status. The C-55 RPT recommended to use CATZOC for ENC’s to derive survey status data as a first step to the quality and especially the consistency of C-55. However, there is no proposal on how CATZOC translates to “adequately surveyed”. So, if we want to operationalize this SPI, we will have to start somewhere. I suggest the following simple scheme which we can improve/refine over time.

C-55		CATZOC
Adequately surveyed	< 40 m	A1, A2
	> 40 m & < 200 m	B
	> 200 m	Meeting Seabed 2030 grid requirements

UK

Further discussion is needed to define methodology.

**SPI 2.3.1 Number of Hydrographic Offices reporting success applying the principles in their national contexts (2026: 70%).**

MACHC Capacity Building Coordinator

This will be raised at CBSC meeting for wider discussion. Action on this is required from MSDIWG who may utilize the CB coordinators to disseminate information or requests for data.

Brazil

Agree with the proposed way forward and the remarks.

Colombia

The number of alliances between Hydrographic Offices and other entities can be a good measure of how the nautical products are the benefit for society.

France

Nothing can be started until MSDIWG and UN-GGIM have defined the guidelines (application definitions and their measurement).

Netherlands

This a difficult SPI to operationalize because there is no prescribed way Nations have to apply the UN Shared Guiding Principles for Geospatial Management. So, I propose to wait for the findings of the MSDIWG on the definition of what application of the guiding principles means. Until that time, the focus can remain on sharing data with as many (M)SDIs as feasible.

UK

Action on MSDIWG to define metrics for reporting success.

**SPI 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%).**

MACHC Capacity Building Coordinator

WWNWS-SC Chair invited to CBSC meetings to address MSI matters. C-55 currently used to measure success of IHO funded MSI Courses. Effective and easy SPI to implement.

Brazil

It seems that this SPI is easy to be delivered by NAVAREA Coordinators.

Colombia

The C-55 shows the status of MSI matters. NAVAREA Coordinators can confirm the report.

France

SPI implementation led by WWNWS.

Netherlands

The required data is already provided to the WWNWS. No additional action seems necessary.

UK

Action on WWNWS to derive figure which should be easy to do as NAVAREA Coordinators complete a self-assessment report on MSI for their region.

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

**SPI 3.2.2 Number of contributors to DCDB who are not Hydrographic Offices.**

Netherlands

Underpinning actions to provide data to the DCDB are already in place, allowing the DCDB to collate an overarching report for the IRCC.

UK

Action on CSB/DCDB to derive and report figures annually.

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

UK

Action on GEBCO to derive and report figures annually