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|  | **INTERNATIONAL HYDROGRAPHIC ORGANIZATION****CAPACITY BUILDING SUB COMMITTEE (CBSC)** | brazaoOHI |

**C-55 Review Project Team**

**Wednesday, 19 September 2018 – Conference Call Minutes**

*Participants*

The following Member States participated in the call:

* Norway : Evert Flier (NHS) [Chair]
* United Kingdom: Lucy Fieldhouse (UKHO) [Vice-Chair] and Nigel Sutton (UKHO)
* France : Vincent Lamarre (Shom) [Secretary]
* Canada : Douglas Brunt (CHS) and Shenghoa Shi (CHS)
* United States: Samuel Greenaway (NOAA), Meredith Payne (NOAA),

Unable to participate

* United States: Calvin Martin (NAVOCEANO)
* Japan: Shigeru Nakabayashi (JHOD)

*References - Documents*

ToRs and RoPs of the WG are available on the CBSC section of the IHO website (<https://www.iho.int/mtg_docs/com_wg/CBC/CBSC16/AnnexB-C-55RPT-ToR-RoP.pdf>).

The UK & FR proposal to the CBSC16 for review of C-55 is also available on this section (<https://www.iho.int/mtg_docs/com_wg/CBC/CBSC16/CBSC16-08.3B-Review_of_C-55_UK_FR.pdf>).

C-55 publication: <https://www.iho.int/iho_pubs/CB/C-55/index.html>

*Discussion*

CBSC has the responsibility for C-55 guidelines.

At the last meeting (CBSC16, Goa, 30 May – 1 June) it was decided that a project team be set up to review the C-55 indicator related to “Hydrographic survey status”:

* evaluate current limitations
* investigate options for improving the quality of the information in C-55

C-55 indicators regarding “Nautical Charting” and “Provision of Maritime Safety Information” are considered generally satisfactory. This working group focuses only on the “Hydrographic Surveying” indicator.

In the context of this RPT, it is essential to recall the objective of the C-55 and its use by other organizations and in particular by the IMO:

*The purpose of IHO C-55 Publication is to provide base data for governments and supporting international organizations as they consider the best means by which to implement responsibilities set out in Chapter V, Regulation 9, of the Safety of Life at Sea (SOLAS) Convention. It also informs IHO input to the United Nations Global Maritime Assessment.*

The ToRs and RoPs should place more emphasis on the external use (outside IHO) of this indicator. This could be part of the RPT recommendations (Possible action, but this is probably not critical). At least, this must be stressed during the consultation of the MSs (key factor to justify the review / improvement of the indicator).

While the quality of the indicator for a given country may be difficult to assess (especially for non-hydrographers), the overall lack of coherence of the indicator is obvious (Inputs are too subjective due to non-prescriptive guidelines), which considerably undermines the credibility of the information provided, not only for internal uses of MSs and IHO but especially with regard to the outside (IMO in the first place through their IMSAS (IMO Member State Audit Scheme).

<https://www.iho.int/mtg_docs/CB/CBA/IMSAS/IMSAS-Programme.pdf>

**Inconsistency: major limitation.**

Besides improving quality of data the goals are also to make it easier to use/populate and to ensure it is visually accessible and 'downloadable'. It must meet the need for a global indicator (figures) but also provide a more detailed and geographical view (GIS).

Remark - In the rest of these minutes, “C-55” means “C-55 indicator regarding Hydrographic Surveying”.

UKHO undertook a project last year to use CATZOC to derive the C-55. The results were satisfactory.

Shom did the same.

UK and France submitted a joint paper to CBSC [CBSC16-08.3B].

US do the same, using the CATZOC from their bathy database, supplemented by the CATZOC from the ENCs (when not available in the bathy database).

The participants of the meeting all agreed that the CATZOC approach is appropriate as a first step to improve the quality (especially the consistency) of the C-55.

UK and FR suggested to use the CATZOC directly associated to the surveys (and not the CATZOC from the ENCs) (see CBSC16-08.3B).

Some IHO MS have an issue that CATZOC is linked to the charts, but the CATZOC is directly linked (by definition!) to the source data.

The difficulty “to CATZOC” surveys (especially "old" surveys) should not be underestimated and could constitute a real obstacle to the implementation of the RPT's proposals.

The participants agreed that it would be preferable to recommend as a first step the use of CATZOC from the ENCs (pragmatic approach). This recommendation is in line with IRCC's requests to producers to improve the quality of CATZOCs on their charts (in particular by limiting the use of CATZOC “U”).

SHOM proposes to compare C-55 derived from the CATZOC associated to the surveys (current methodology) and the CATZOC from the ENCs.

The calculation of the C-55 from the CATZOC could lead to a deterioration of the indicator. The risk is real (this was the case for the indicators set by FR & UK) but the objective of the C-55 is to provide the most reliable information possible on the state of the surveys and not to show indicators in green.

The 200m depth limit between “shallow” and “deep” indicators can be questioned. It can however be addressed through the conversion table from CATZOC to C-55 (see FR proposal annexed to the CBSC16-08.3B paper).

The calculation of the C-55 from the CATZOC may simplify the production of the C-55:

* CATZOC has to be established by the ENCs producers
* IHO secretariat has already access to the ENCs’ CATZOC through the RENCs (see IRCC7 Action 24 for example). The IHO secretariat could therefore produce the C-55 quite directly and automatically.

Beyond this “immediate” pragmatic solution, the RPT should also consider a more in-depth overhaul of the C-55 in order to better depict the surveying status for:

* Safety of navigation. In some areas (e.g. Arctic; Polynesia) only a small percentage of coverage is really necessary, a “poor” C-55 may be enough to answer safety of navigation needs;
* A state of knowledge of bathymetry ("Hydrography is Much More than Just Nautical Charts").

Based on the discussions of this first RPT meeting, the Chair will prepare a draft note on C-55 limitations and recommendations, to circulate between participants.

Once agreed (deadline January 2019), a correspondence will be addressed (February) to the CBSC members and RHCs chairs to seek comments (April) in order to be able to finalize a submission for the next CBSC.