Brief Summary on Outcomes of WMO No 1131 discussions, 10 June 2022

Agenda:

- 1. Welcome and brief introductions
- 2. About WMO No 1131
- 3. Scope of updates required
- 4. Possible sources of material
- 5. Discussion on approach to the task and timelines.
- 6. Next meeting

1. Welcome and brief introductions

William welcomed participants and their willingness to contribute to the update of this important document. Participants introduced themselves and provided brief descriptions of their background and current responsibilities.

2. About WMO No 1131

William provided a brief description of WMO No 1131 (2014 version), noting that the various "Components" do not need to be in one software package (and in many instances should not be, noting access to functionalities via WIS2.0, the Cloud, possibly Regional Climate Centres, etc). So-called "Components" are ranked as "Required" (i.e Mandatory for a CDMS), Recommended or Optional. Denis highlighted the success already of WMO No 1131 in informing CDMS development priorities in several countries, and William indicated that the OpenCDMS project plans to concentrate on establishing a minimum viable product that encapsulates at least the Required components.

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3, 4: Scope of updates required & possible sources of material

William took participants through the proposed workplan, as outlined in the document "WMO No 1131 revision workplan" (attached). The main elements were to agree on the broadscale updates to be made, and then establish an ongoing process to develop the revised content, with regular teleconferences, restricted to one hour in length, to review material and ensure progress remained on track. Hopefully a revised draft can be prepared by end of August (or early September), and then a write-shop proposed for Geneva in late September can assemble the material, and possibly update other Sections such as the current WMO No 1131 Chapters 2, 10 and 11 (William has already provided some thoughts on these).

Two references identified in that document were provided to participants:

- A summary of **current** climate data-related guidance and regulatory material (which includes also some references to hydrological and marine Regulatory material), noting that there have been many updates or new guidance documents since 2018;
- An annex to a WMO project focussed on identifying climate data management needs in developing/least developed/small island States, under the ACP component of ClimSA.

This document summarised the express needs of countries in the African/Caribbean. Pacific regions.

It was posited that these two documents, at least, should inform revision of WMO No 1131.

Discussion on certain aspects of the Scope, and the proposed approach, are provided below.

5. Discussion on approach to the task and timelines.

5.1 Clarifying the task. It was agreed that the priority for updating should be Chapters 3-5, especially the latter two. This followed concerns expressed by some participants that the time-frame was "ambitious", especially given the Northern Hemisphere summer break season, Executive Council, and internal NMHS/Secretariat pressures. However it was noted that WMO No 1131 will continue to evolve, and that the current exercise is primarily focussed on ensuring recent WMO Guidelines, Resolutions and Technical Regulations, plus reference to emerging standards such as ISO/OGC standards are reflected, as well as reinforcing the need to adhere to the WMO Core Metadata Standard, are adhered to. Given the limited timeframe, accomplishing these, plus perhaps revising the existing Chapter 11, would appear to be a successful outcome at this time.

5.2 Broadening scope to Hydrology/Marine. Hydrological and Marine subject matter experts were requested to review the document from the viewpoint of identifying: What's missing? What is possibly contradictory? What new references should be included? What can be introduced from the experience and requirements of the Expert Team-Marine Climatology and the Marine Climate Data System?

5.3. Approach to the modifications.

Following discussion, it was agreed that the whole Team concentrate on one Chapter at a time, as was done with the ET-DRC document on Reference Climate Stations. Adopting this latter approach, it was agreed that the next Telecon would concentrate on discussing Chapter 4 (Time Series Climate Data).

RE collaboration: Denis offered to split the document into individual chapters. A spreadsheet, based on a former "Issues" tracker, has been provided by Denis (refer his email 14 June) to ensure that comments/concerns/suggestions are documented and transparently addressed. It is requested that all Writing Team members review the document, and provide their comments in the spreadsheet provided..

Future teleconferences will address any issues raised from the comments provided. The planned write-shop in late September will be charged with accepting/endorsing suggestions, and providing responses to any comments that remain unaddressed.

Other issues:

- A suggestion that references to Guidance documents be expanded by incorporating more detailed descriptions within WMO No 1131 was rejected, because:
 - a. Time-frames for WMO No 1131 meant this would be problematic;
 - b. Given that most Guidance documents these days are living documents, there is a high risk that guidance would very soon be superceded, leading to conflicting guidance;
 - c. The length of the document might blow out to an unacceptable length.
- RE the document name: "Specifications" could be regarded as a misleading term, since many might regard this as detailed technical specifications, rather than functional specifications. Denis responded by stating that this was never meant to be a detailed specification that could be used by a software developer, but rather as an overall description of the functionality to be provided for each component. William added that, such functionality need not be developed by individual NMHSs, or CDMS providers, but might be obtained via WIS Centres (GISCs, DCPCs), Regional Climate Centres, Cloudbased providers, or code exchange via the OpenCDMS project. This could be referenced in an update of the existing Chapter 11. Denis also reinforced that the existing WMO No 1131 had already been successfully adopted by a number of countries seeking to update their CDMS, which included the ability to influence planning and procurement decisions.
- Images. The existing images in WMO No 1131 are complex, and were time-consuming to produce. As the specifications change, some of the diagrams will also need to be changed, and possibly new ones added.
- (Not discussed at the meeting, but added here as a discussion point). Assessment by NHMS against WMO No 1131. As recommended in Chapter 11 of the previous edition of WMO No 1131, Members should be encouraged to assess their current CDMS against the Specifications. This will facilitate:
 - A realistic assessment of capability versus recommended best-practice;
 - An opportunity to identify which CDMS functionalities meet the standard, and therefore provide a "swap market" to exchange functionality among those NMHSs who would like to acquire capabilities that they lack

A problem in this regard is the lack of a suitable assessment template. Any such template developed in future needs to be consistent with the Stewardship Maturity Matrix for Climate Data, as should be WMO No 1131.

6. Next meeting

It was agreed that the next meeting would be scheduled for 24 June, specifically to discuss Chapter 4 (Time Series Climate Data).