

Expert-Team on Data Requirements for Climate Services (ET-DRC)

Kick-off meeting
November 27, 2020



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

Agenda

- WMO Strategic Plan
- Where are we in the new WMO structure?
- ET-DRC : From where it comes?
- ET-DRC : Who we are?
- ET-DRC : Deliverables?
- Other tasks
- Sub-groups and work methods



WMO Strategic Plan

LONG-TERM GOALS AND STRATEGIC OBJECTIVES

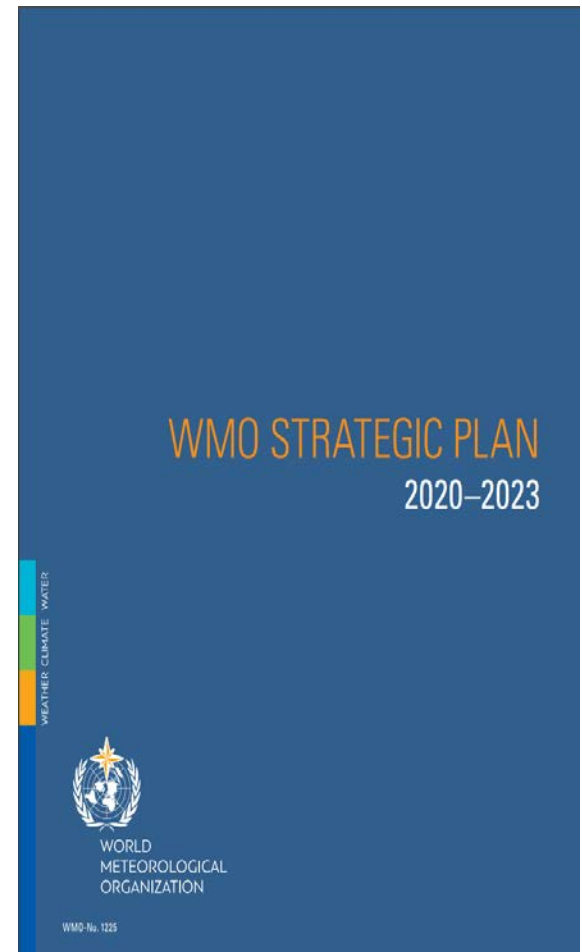
Goal 1: Better serve societal needs: delivering, authoritative, accessible, user-oriented and fit-for-purpose information and services

Goal 2: Enhance Earth system observations and predictions: Strengthening the technical foundation for the future

Goal 3: Advance targeted research: Leveraging leadership in science to improve understanding of the Earth system for enhanced services

Goal 4: Close the capacity gap on weather, climate, hydrological and related environmental services: Enhancing service delivery capacity of developing countries to ensure availability of essential information and services needed by governments, economic sectors and citizens

Goal 5: Strategic realignment of WMO structure and programmes for effective policy- and decision-making and implementation



Objective 1.2 Broaden the provision of policy- and decision-supporting climate information and services

Where are we in the new WMO structure?

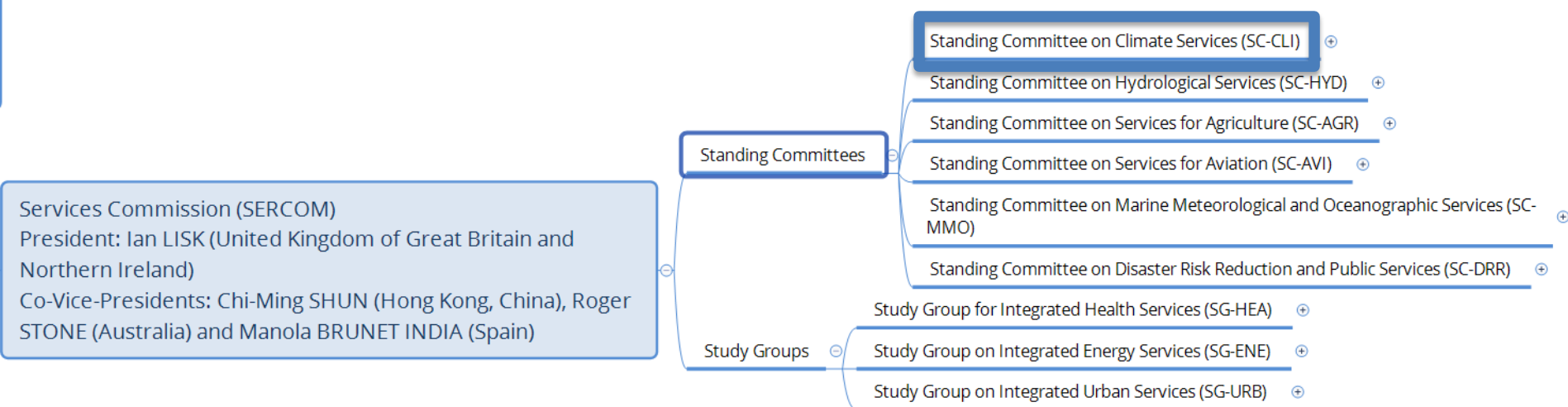
Commissions Techniques de l'OMM / WMO Technical Commissions

Infrastructure Commission (INFCOM) :
Commission for Observation, Infrastructure and Information
Systems
President: Michel JEAN (Canada)
Co-Vice-Presidents: Bruce FORGAN (Australia), Nadia PINARDI
(Italy) and Silvano PECORA (Italy)

Services Commission (SERCOM)
President: Ian LISK (United Kingdom of Great Britain and
Northern Ireland)
Co-Vice-Presidents: Chi-Ming SHUN (Hong Kong, China), Roger
STONE (Australia) and Manola BRUNET INDIA (Spain)



Where are we in the new WMO structure?



Where are we in the new WMO structure?

TOR

- 1) Define modern standards and good practices for climate data management including collection, exchange, archiving and rescue of historical and current data for use in climate monitoring and other climate applications, and the development of related systems and Information technology;
- 2) Promote international projects and initiatives for ensuring the delivery of high-quality Climate Data and their inclusion / reference in the WMO Catalogue of Climate Data.

Standing Committee on Climate Services (SC-CLI)
Chair: Manola Brunet (Spain)
Vice-Chair: Barbara Tapia (Chile)

Expert Team on Climate Monitoring and Assessment
Co-chairs: John Kennedy, Met Office, UK and Jessica Blunden, NOAA-NCEI, USA

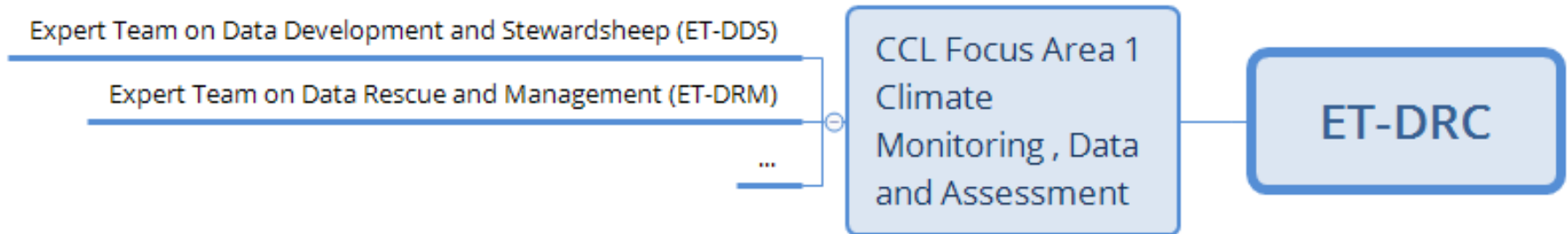
Expert Team on Data Requirements for Climate Services (ET-DRC)
Co-chairs: Christina Lief (retired from NOAA-NCEI) USA; Denis Stuber, Meteo-France

Expert Team on Climate Services Information System Operations (ET-CSISO)
Co-chairs: Roger Pulwarty, USA and Rupar Kumar Kolli, India

Expert Team on Climate Information for Decision-making (ET-CID)
Co-chairs: Lisa Alexander, AUSTRALIA and Chris Hewitt (UK)

Expert Team on Capacity Development for Climate Services and Communication (ET-CDC)
Co-chairs: Wassila Thiaw (USA) and Charlotte McBride (South Africa)

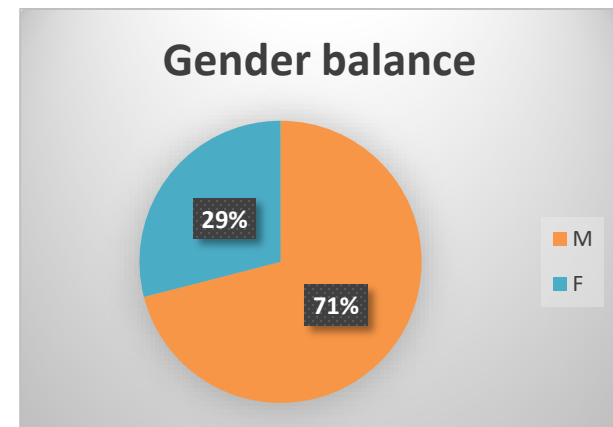
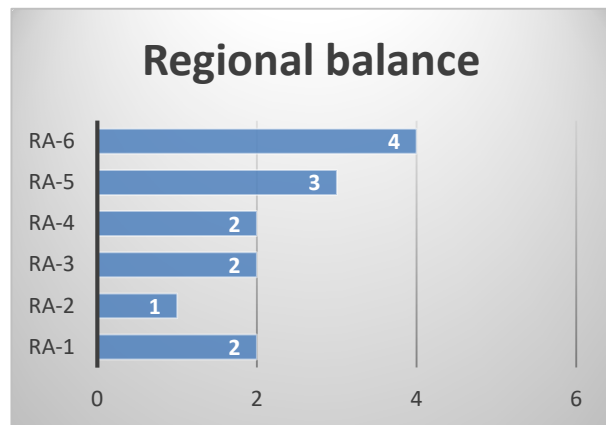
ET-DRC: From where it comes?



ET-DRC : who we are?

Guide WMO Members on existing and evolving climate services requirements for the collection, exchange, archiving and management of Climate Data

ET-DRC : 17 Members with different backgrounds and competences



ET-DRC : who we are?

Christina Lief
(ret. NOAA)



Denis Stuber



Peer Hechler



Omar Baddour



ET-DRC : who we are?

Bruce Bannerman



Australian Government
Bureau of Meteorology



William Wright
(ret. BoM)



Australian Government
Bureau of Meteorology



Ali EDDENJAL



Ge PENG



ET-DRC : who we are?

José A. GUIJARRO



Lydia GATES



Lipeng JIANG



María SKANSI

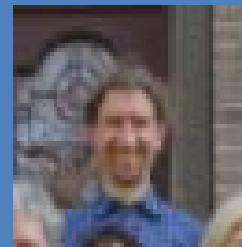


ET-DRC : who we are?

Markus DONAT



Markus ZIESE



Rachid SEBBARI

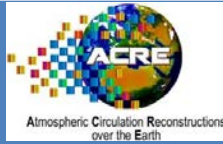


Reinaldo SILVEIRA



ET-DRC : who we are?

Robert ALLAN



Urip HARYOKO



Xiaolan WANG



Agenda

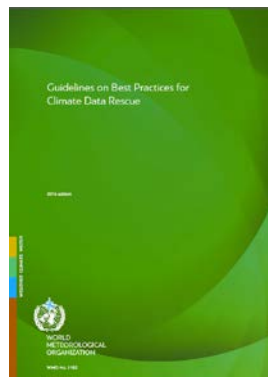
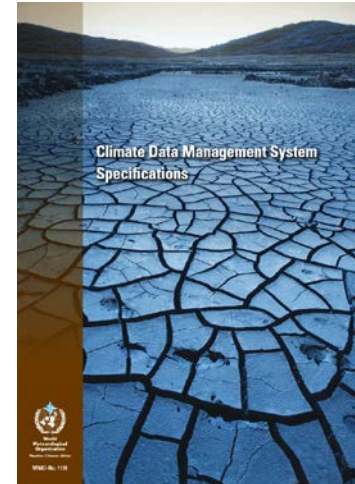
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CDMS and Data Rescue

Guidance and recommendations for CDMS and Data Rescue Project implementation using WMO Extra-Budgetary resources

- **Maintenance and Update of the "CDMS Specifications" WMO-No.1131 (2014). In liaison with the necessary Teams expertise from SERCOM and INFCOM**
- CDMS Monitoring (Maintenance and update of the database on CDMS implementations, survey)
- Maintenance and Update of the "Guidelines on Best Practices for Climate Data Rescue" WMO-No.1182 (2016). In liaison with Copernicus "Best Practices Guidelines for Climate Data Rescue" (2019). **Close Work with the KNMI (I-Dare Portal) and with the Copernicus Portal**
- Maintenance and Update of the "Guidelines on Homogenization" WMO-No.1245 (2020)



WMO OMM

November 2020 – Kick off meeting of the WMO Expert Team on Data Requirements for Climate Services

Open Source Climate Data Management Systems

- Be a guarantor of the best climatological practices to be implemented in Climate Data Management System projects and initiatives. In liaison with all actors : SERCOM, INFCOM and other entities.
- Maintenance and Update of the QA/QC WMO Document + Finalization of the review
- Provide use cases, conceptual diagrams to all the community.

Design and provide a first draft of an international Data Quality Code

WWR, CLINO, CLIMAT and daily climate data exchange

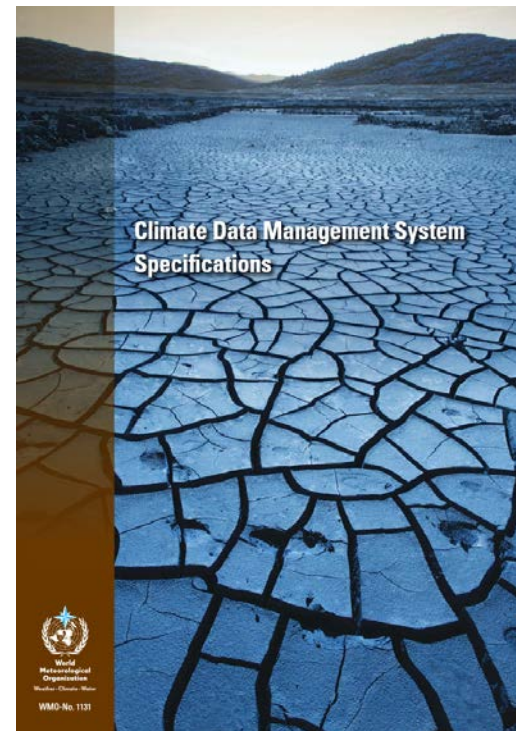
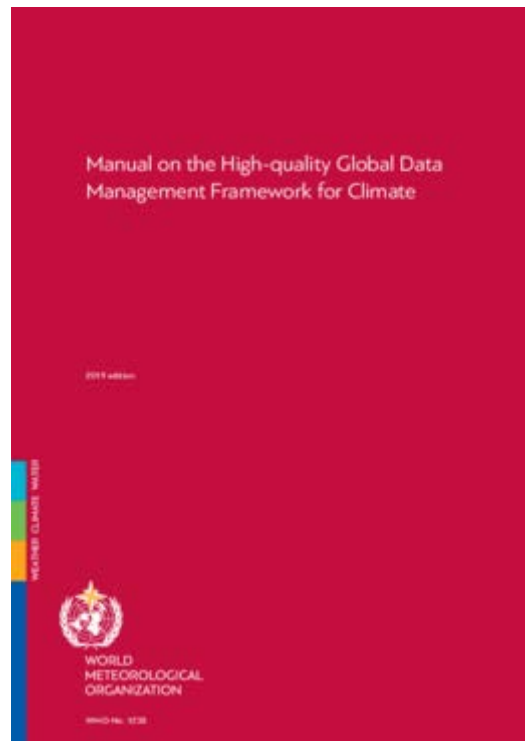
Guidance and recommendations for global and regional climate data collections including WWR, CLINO, CLIMAT and, daily climate data exchange and reference climatological stations

- **DAYCLI message : Provide user requirements to INFCOM for the implementation of the DAYCLI, With TT-TDCF (INFCOM), Meetings with TT-TDCF: 3-4 November 2020**
- **Produce a recommendation for EC-73 (through SERCOM/INFCOM) on the collection of Climatological Standard Normals**



Full WIS 2.0 utilization for climate data and products

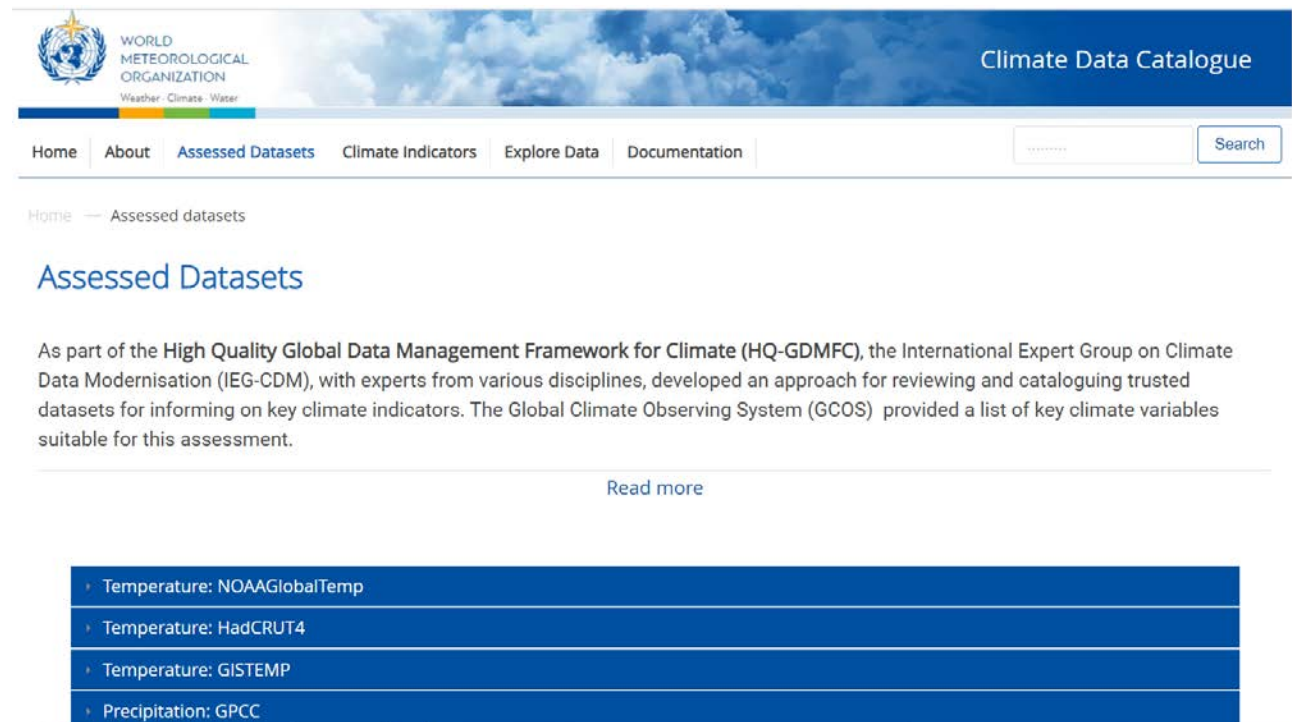
- Collaboration ET-DRC and the Expert Team on Information Management (ET-IM, INFCOM) to avoid duplication of work and for this purpose a close collaboration is required.
- WMO-No.1238 and WMO-No.1131 integrated into the manual in the WIS technical regulation



WMO Catalogue of Climate Data

- Assessed global datasets need to be updated;
- Global updated datasets need to be added to Catalogue;
- Content of Catalogue website needs updating;
- National datasets for France, Germany, Canada and Brazil need to be added to a new National Assessed Datasets feature page on the Catalogue.

<https://climatedata-catalogue.wmo.int/homepage>



The screenshot shows the WMO Climate Data Catalogue website. The header features the WMO logo and the text 'WORLD METEOROLOGICAL ORGANIZATION Weather · Climate · Water'. The main navigation bar includes links for Home, About, Assessed Datasets, Climate Indicators, Explore Data, and Documentation. A search bar is located on the right. The page title is 'Climate Data Catalogue'. Below the navigation bar, the breadcrumb trail reads 'Home — Assessed datasets'. The main heading is 'Assessed Datasets'. A paragraph explains that as part of the High Quality Global Data Management Framework for Climate (HQ-GDMFC), the International Expert Group on Climate Data Modernisation (IEG-CDM) developed an approach for reviewing and cataloguing trusted datasets for informing on key climate indicators. The Global Climate Observing System (GCOS) provided a list of key climate variables suitable for this assessment. A 'Read more' link is provided. Below this, a list of datasets is shown in a blue box with white text: Temperature: NOAGlobalTemp, Temperature: HadCRUT4, Temperature: GISTEMP, and Precipitation: GPCC.

WORLD METEOROLOGICAL ORGANIZATION
Weather · Climate · Water

Climate Data Catalogue

Home About Assessed Datasets Climate Indicators Explore Data Documentation

Home — Assessed datasets

Assessed Datasets

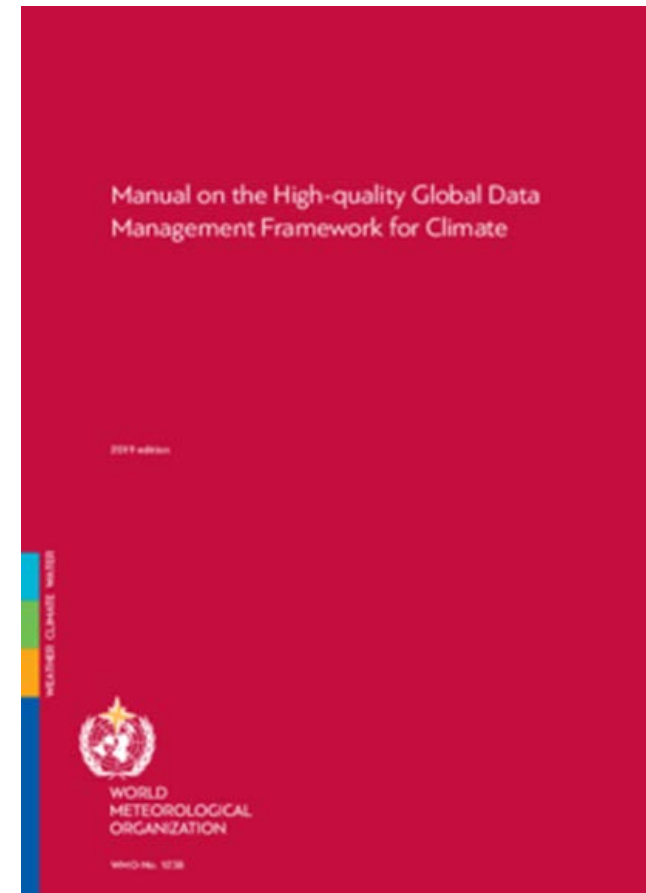
As part of the High Quality Global Data Management Framework for Climate (HQ-GDMFC), the International Expert Group on Climate Data Modernisation (IEG-CDM), with experts from various disciplines, developed an approach for reviewing and cataloguing trusted datasets for informing on key climate indicators. The Global Climate Observing System (GCOS) provided a list of key climate variables suitable for this assessment.

[Read more](#)

- Temperature: NOAGlobalTemp
- Temperature: HadCRUT4
- Temperature: GISTEMP
- Precipitation: GPCC

WMO Manual on High Quality Global Data Management Framework for Climate

- ET-DDS team with William Wright as the lead author helped develop the first version of the Manual (WMO-No. 1238);
- First technical manual on Climate Data;
- Endorsed by Congress 18 in June 2019;
- Manual needs updating;
- Among others needs additional information on Marine Data;
- William Wright has agreed to be the lead editor on the update;
- Timeline for next version publication is 2023?



Manual available for download at
https://library.wmo.int/doc_num.php?explnum_id=10197

Update of the WMO recognition mechanism for the long-term observing stations

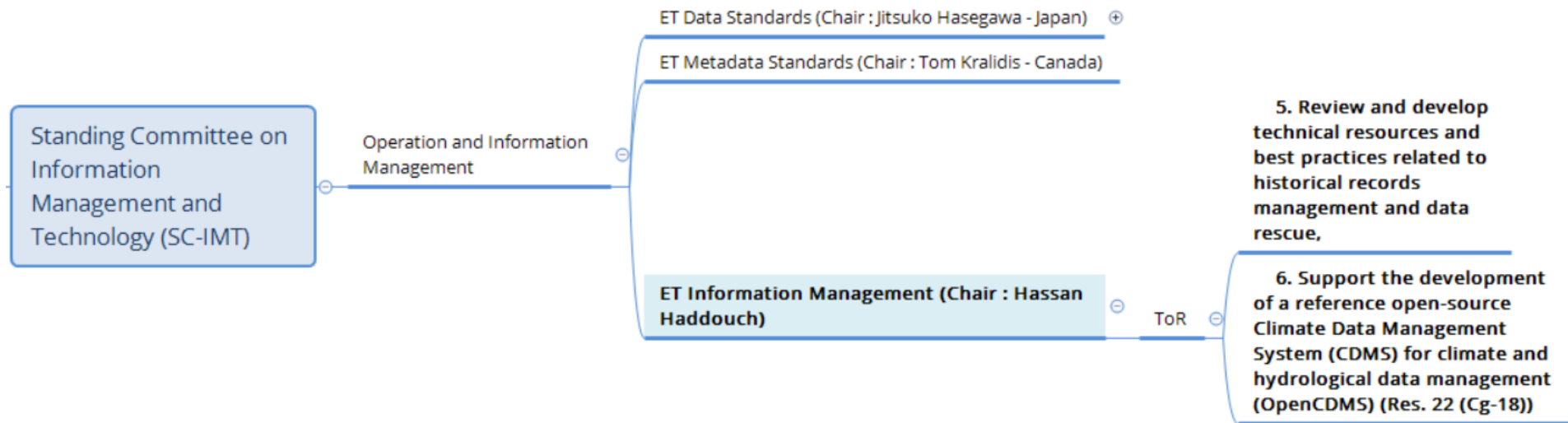
- **Produce a recommendation for EC-73 (through SERCOM/INFCOM) on updated mechanism for long term observing stations (as a response to EC-72 outcomes);**
- WMO Secretariat will provide to ET-DRC a draft recommendation for the SERCOM session in Feb 21 that provides a proposal for TCC.

Guidelines on definitions and requirements for climatological reference stations

- The previous CCI Rapporteur on Reference Observation, Mr. Andrea Merlone is currently finalizing a document **“Climate Reference Stations: Definitions and Requirements”**. We intend to present this document to the next INFCOM session (February 2021) .
- Andrea works with experts from different domains (Peer Hechler and William Wright). **WMO Secretariat will facilitate presentation of this doc to the ET-DRC upon its finalization (planned for Dec 20)**



ET-DRC : Collaboration with INFCOM and Others



- WMO and Open Geospatial Consortium (OGC): The Meteorology and Oceanography Domain Working Group (Met Ocean DWG)
- WMO and Open Geospatial Consortium (OGC): The Hydrology Domain Working Group
- OGC and International Organization for Standardization (ISO)



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- Need to communicate on our deliverables so that the community can fully benefit



Work methods and Tools

- Use the method designed by WMO with the GitHub tool

ET-DRC / WMO-No.1131

Watch 2 Star 0 Fork 1

<> Code Issues 2 Pull requests 1 Actions Projects 1 Wiki Security Insights

Corrections and Updates of WMO-No.1131
Updated 15 days ago

Filter cards

Fullscreen Menu

2 Submitted

Submitted issues

The team determines if the issue should be worked on. If no, then add an explanation and close the issue. If yes, the chair assigns team member to facilitate the issue and move to In Progress. The facilitator "owns" the issue, engages stakeholders as needed and maintains the issue until it is closed by the Secretariat.

Added by ET-DRC

1 In progress

Determine solution

Facilitator and team propose a solution, document it clearly in GitHub and engages stakeholders/domain experts as needed. When there is consensus, the Chair moves the issue to In Validation and notifies the secretariat.

Added by ET-DRC

1 In Validation

Validate

The secretariat creates a branch from Master. The facilitator updates the branch based on the determined solution and another designated individual validates the branch using sample data. When it's valid, the chair moves issue to Validated and notifies secretariat. The branch shall be named "issue-##" based on the issue number, e.g. "issue-29".

Added by ET-DRC

1 Validated

Ready for Submission

The secretariat verifies that the issue is well documented, merges the issue branch to a consolidated branch for all fast track issues and prepares draft documents for submission. Team may be asked to verify amendment document, but no further work should be done on the branch. The consolidated branch shall be named "FT-YYYY-#", e.g. "FT-2020-2".

Added by ET-DRC

<https://github.com/ET-DRC/WMO-No.1131/projects/1>

Sub-groups

- We are numerous and so are the tasks!!
- Need to have sub-groups/task-groups;
- These sub-groups/task-group need to have other leaders than the co-chairs;
- Need to delegate;
- Invited experts to help;
- Need to have several meetings to finalize the tasks in the 6 coming months
- Regular short meetings with specific topics ?



Attempt on work processes and frequency of meetings

Agenda for next meetings

Meeting December 2, 2020 – 13:00 Geneva Time