

ET-DDS

Expert Team on Data Development and Stewardship

Workshop:

"Needs and Applications of Climate Data Management to Support State of the Climate Reporting"

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23-26 June 2025, Astana, Kazakhstan

Co-chairs:

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Content

- ✓ ET-DDS's terms of reference
- ✓ Objectives
- ✓ Composition
- ✓ ET-DDS work so far...
- ✓ Workplan and deliverables for 2025-2026



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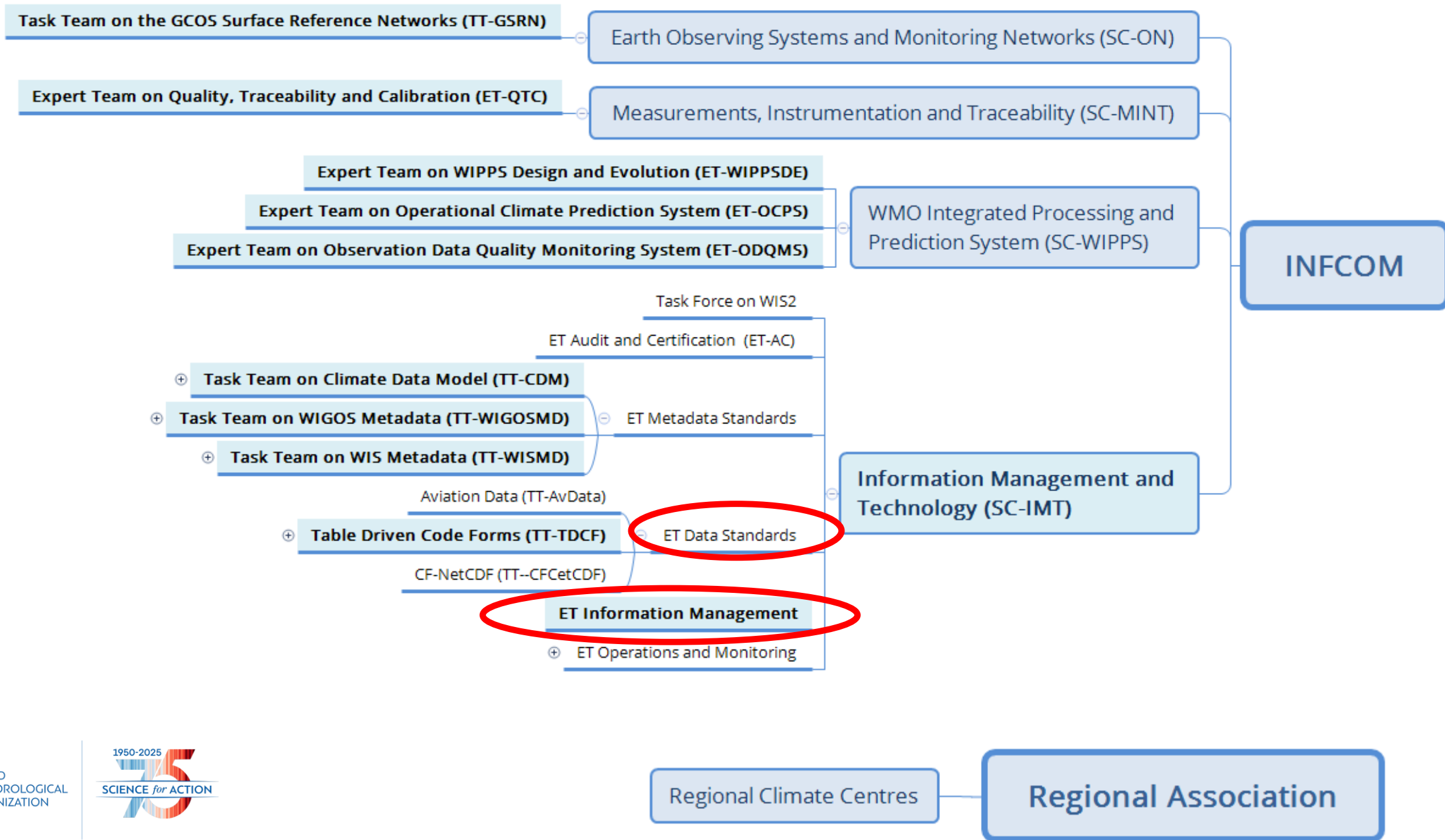
Terms of reference

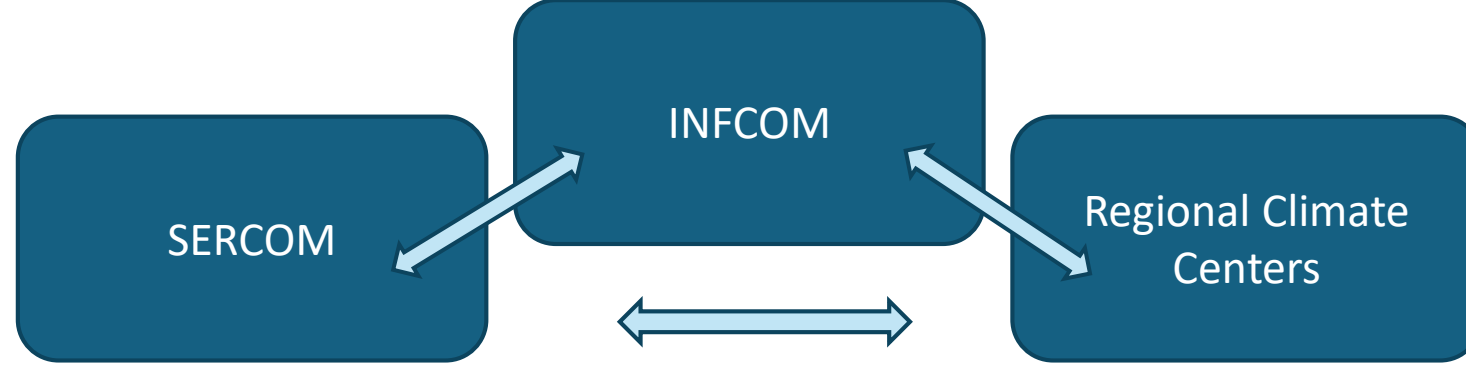
1. Define modern **standards and good practices** for climate data stewardship including quality control, homogenization, exchange, archiving and rescue of historical and current data for use in climate monitoring and assessment, prediction and other climate applications;
2. Collaborate with INFCOM on the **development of Climate Data Management Systems** and related Information technology, by identifying adequate specifications and their update, based on Member's needs;
3. Facilitate provision of WMO **expertise to projects and initiatives** for ensuring the delivery of high-quality climate data and their inclusion/reference in the WMO Catalogue of Climate Data, as per existing WMO standards and recommended practices.

Objective

Get as close as possible to the concerns of WMO members on data development and data stewardship by:

- ✓ working in synergy with SC-CLI expert teams;
- ✓ collaborating actively with INFCOM expert teams and the Global Climate Observing System (GCOS);
- ✓ meeting the needs of WMO regions and Regional Climate Centers;
- ✓ ...and **answering questions from WMO members.**





ET-DDS authors:

- ✓ Climate Data Management System Specifications, WMO-No. 1131, **Edition 2025**
- ✓ Guidelines on the DAYCLI message (daily summary report), WMO-No.XXXX, 2025?
- ✓ Guidelines on Good Practices for Data Rescue, WMO-No.1182, 2024
- ✓ Guidance Booklet: WMO Stewardship Maturity Matrix for Climate Data, WMO-No. 1328, 2023

ET-DDS participation: with INFCOM and SC-CLI (ET-CSIS)

- ✓ Technical Regulations, WMO-No. 49, Volume I, 2023
- ✓ **Manual on High-quality Global Data Management Framework for Climate (HQ-GDMFC), WMO-No.1238, 2023**
- ✓ Guide to Climatological Practices, WMO-No. 100, 2023
- ✓ Centennial Observing Stations: State of Recognition published, WMO-No. 1296, 2022
- ✓ Guidelines for the establishment & operation of WMO Regional Climate Centres, WMO-No XXXX
- ✓ Guidelines RCOF and RCF, WMO-No. XXXX

Composition

| ET DDS core members | ET DDS associated members |
|---|---|
| Ms Sandhya Dindyal, Mauritius (RA I) | Mr Ali Eddenjal, Libya (RA I) |
| Ms Tursyn Tillakarim, Kazakhstan (RA II) | Mr Rachid Sebbari, Morocco (RA I) * |
| Co-Chair: Mr Reinaldo Silveira, Brazil (RA III) | Ms Maria Skansi, Argentina (RA III) |
| Ms Cathy Smith, USA (RA IV) | Ms Ge Peng, US (RA IV) * |
| Mr Urip Haryoko, Indonesia (RA V) | Mr William Wright, Australia (RA V) * |
| Mr Axel Andersson, Germany (RA VI) * | Mr Robert Dunn, UK (RA VI) |
| Co-chair: Mr Denis Stuber, France (RA VI) * | Mr Jose Guijarro, Spain (RA VI) |
| Mr Markus Ziese, Germany (RA VI) | Mr Alesandro Spinuso, The Netherlands (RA VI) |

WMO Secretariat focal point: Peer Hechler

ET-DDS Tasks so far...

ET-DDS

- ✓ All initiatives : see <https://github.com/ET-DRC/Home/wiki/ET%E2%80%90and-former-ET%E2%80%90DRC-Initiatives>.
- ✓ All reports, documents and papers are available on the ET-DDS Wiki at: <https://github.com/ET-DRC/Home/wiki/ET%E2%80%90meetings>.

Close collaboration with ET on Information Management (ET-IM): CDMS, harmonization of the WMO technical Regulations (**WMO-N0. 49**) and its Manuals especially the High Quality Global Framework on Data Management for Climate (**WMO-N0.1238**).

Close collaboration with **ET Data Standards** for the update on the DAYCLI message, with the help of **ET-MCCVC** (e.g. brainstorming meeting on the DAYCLI message, 6/06/2025).

2 examples:

- ✓ **Climatology Training** at the Argentinean National Met Service, November 2024 (**ET-DDS & ET-CSIS**)
- ✓ Participation on the development of a plan for the **Angola Data Rescue Pilot project** (ClimSA) to support the Southern African Development Community Climate Services Centre (SADC CSC)



Workplan and deliverables for 2025-2026

1. Update of the **DAYCLI message BUFR sequence**, and finalization of the **DAYCLI guidelines** (See <https://github.com/wmo-im/BUFR4/issues/238>);
2. Finalization of the update of the Climate Data Management Specifications, **WMO-No. 1131, Edition 2025**;
3. Plan and conduct a series of online consultations for WMO Members (with French, Spanish and Russian interpretation) around ET DDS topics during 2025, e.g. i) Climate dataset development and stewardship maturity matrix, ii) Data gaps and statistics in a changing climate, iii) Data control, Provenance and Lineage, iv) CLIMAT and DAYCLI, v) the use of gridded data, etc. These consultations may trigger specific ET DDS activities in 2026 and 2027. **September 2025: consultation on homogenization.**
4. Contribution to INFCOM/ET-IM tasks **(1) the review and harmonization** of technical regulations related to climate data and observations that includes the Manual on HQ-GDMF WMO-No. 1238 and other Manuals and **(2) the development of the minimum technical specifications of a climate data management system** deemed **compliant** with the WMO Climate Data Management System Specifications (WMO-No. 1131).
5. How to better support the WMO “Stewardship Maturity Matrix” for climate datasets? Globally, Regionally and Nationally...

Thank you!