

Participants:

Joerg Klausen (MeteoSwiss, GAWSIS, Chair), Geir Braathen (WMO), Ed Hare (Env Canada, WOUDC), Anatoly Tsvetkov (MGO, WRDC), Van Bowersox (ISWS, WDCPC), Markus Fiebig, Kjetil Toreseth (NILU, WDCA), Séverine Bernonville (DLR, WDCRSAT), Julian Wilson (JRC).

1) Designation of rapporteur

- Julian Wilson

2) Agreement on agenda and scope of telecom

- All approved agenda

3) Activities of chair ET-WDC since Toronto meeting

- Toronto Meeting minutes (thanks Ed for preparing them)
- SAG aerosol Geneva Sept 2010,
- Report to JSC OPAG-EPAC earlier this year.

4) Information on activities of each WDC relating to, eg

- recommendations of previous meeting
- operational aspects of the WDC
- input from SAGs relevant to ET-WDC
- the metadata model at each WDC
- metadata exchange
- WIS and XML metadata implementations

- **WOUDC:**
 - o Teleconference is a good a idea – allows better more regular contact & updating
 - o Unifying definitions & vocabularies (station, etc.),
 - o Moving away from flat files – want to give possibilities to extract data for individual days,
 - o Progress on XML with GAWSIS and also Data-centre interoperability (DCIO) group.
 - o large inventory of Dobson level 0 data now available
 - o NDAC concept of a metadata-file of station history etc.

- **WDCGG:**
 - o JMA was designated as a WMO/WIS Global Information System Centre (GISC) as well as other 8 Data Collection or Production Centre (DCPC) in the World Meteorological Congress held May-June 2011.

- WDCGG started its operational service as a DCPC at the beginning of August. JMA's WIS portal site URL: <http://www.wis-jma.go.jp/cms/> discovery, access and retrieval (DAR) function of WIS are provided.
- All WDCGG metadata (same as the provided to GAWSIS) are available in search and browse menu: <http://www.wis-jma.go.jp/meta/search.jsp> this is a first step to delivering the metadata from WDCGG together with all other WMO data catalogues and to facilitate the data exchange within various WMO programmes.
- The WDCGG website is planned to be moved into a cloud service in March 2012. This plan includes many of JMA's web information services, WDCGG will not change most of its services but anonymous ftp will not be allowed on the new server and the URL will be changed.

- **WRDC:**

- 1530 Actinometric stations active in the world, 221 of these are GAW stations,
- XML provision of metadata to GAWSIS, working but the XML used is not compliant with ISO standard or any other?

Action Item 1. Joerg to circulate the example of WRDC xml metadata for comment to the expert group, expert group to provide feedback to WRDC by 30/09/11

- **WDCPC:**

- PC/SAG will meet in Geneva in late September to finalize a precipitation chemistry assessment. A journal article is anticipated in early 2012 with a more complete report to follow.
- A somewhat cumbersome file structure had been used in the past to capture Metadata. In restructuring the WDCPC Web site, it was decided to develop an interactive table with drop-down boxes that list field and laboratory instruments and analytical methods. It is anticipated that this will help simplify and standardize the capture of Metadata.
- As development of the Web site continues, it will be beneficial to use a universal vocabulary & XML format.

- **WDCA:**

- include variability of data,
- possibility to handle level 0 data,
- SAG has defined standard methods for which there are SOPs, datasets then refer to the SOP used.
- 35 stations contributing real-time data.
- Legacy data – taking longer as some data providers are reprocessing the data to today's QA standards
- Prefer to get providers to reformat data rather than do it at WDCA
- A task in ACTRIS is to connect WDCA to WIS, so far it looks a though how the connection occurs between WDCA & a node is v flexible & up to the 2 nodes...

- **WDC-RSAT:**

- Participation in SAGs Aerosol and Ozone

- Establishment of a one-stop-shop for satellite data regarding the chemical and physical composition of the atmosphere (phase 1: aerosol & ozone data), One-Stop-Shop Aerosol is on line (http://wdc.dlr.de/data_products/AEROSOLS/), Ozone is next;
 - WDC-RSAT was designated as aWMO/WIS Data Collection or Production Centre (DCPC) on 1 June 2011 (Cg-XVI);
 - Developing a metadata catalogue (ISO 19115 and WMO Core Profiles) especially for the connection to WIS (GISC DWD German Weather Services) for metadata exchange;
 - Implementing services for satellite and in-situ data access, display and download through OGC Web Services (WMS, WCS, SOS ...); e.g. development of the CEOSS Atmospheric Composition Portal (ACP – <http://wdc.dlr.de/acp/>) in cooperation with NASA (LoA with NASA).
- **GAWSIS:**
- discussion on acceptance of stations as part of GAW Strategic Plan Addendum and JSC OPAG-EPAC meeting (see those reports/minutes for details),
 - MeteoSwiss has responded positively to WMO request to support GAWSIS as a WDC, have to move GAWSIS from EMPA to Meteosuisse, & then have an update/rewrite.
 - GEOMON port for metadata exchange added
 - TCCON metadata added, no automatic update possible yet.
 - Auto processing of WOUDC & WRDC OK, WDCGG & NDACC minor problems, WDCA/EBAS not complete – as at the moment translating the EBAS variable to GAW is proving a challenge (e.g. POPs are covered in detail in EBAS, but not really part of GAW)
 - SAG Aerosol asked for overview of what is in GAWSIS & what is in WDCA, not straightforward.
 - Metadata exchange with WDCPC is an open issue, when are data/metadata likely to be available?
 - BSRN auto exchange & mobile stations still “open issues”,
 - Plans: allocation of lab ids, clearing house much like for GAWIDs.

5) WIS and XML metadata implementations at each WDC

- GAWSIS XML metadata representation unchanged since Toronto meeting, still waiting for critical input from WIS office.
- WDCA also have no clear idea on what it involves,
- WDC-RSAT have ISO compliant xml representations of metadata, that they make available to the GISC (exchange metadata examples per email), but with no feedback or information from GISC regarding WIS implementations.
- GISC apparently has problems with metadata catalogue & harvesting
- As info & info exchange is very important with this in particular, can the ET-WDC web pages be used a blog to collect the experiences on connecting the WDCs to WIS?
- Or at least provide link to where the relevant information files are?

Action Item 2. Joerg & Severine to provide example xml files to group. ET-WDC members to start looking at them by 30/08/2011.

6) Vocabularies

- (e.g. WDCPC dropdown menus, WDCA standard methods etc) Is now time to undertake a critical review of these varying vocabularies? SAG Aerosol is going further to decide how to implement naming vocabularies in BUFR & Grib2 – implies that WDCA & SAG aerosol already has the vocabulary sorted?
- Maybe standardization of vocabularies is too big a task. Instead begin with a mapping of existing naming.
- Subject is rather large – need a separate teleconference/meeting on this
- 3 levels of metadata, core – site, timestamps, etc, extended (site history NDACC metadata file) & data descriptors – program specific, ISO 19115 has done this, but what is missing are the vocabularies for variables (program specific).
- Think about this when commenting on the xml examples that will be circulated.

7) ET-WDC TORs: are they adequate? useful?

- Not considered.

8) Summary and conclusions, agreed actions

The group concludes that teleconferences are useful in bringing the group forward.

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9) Next telecom

In November, but with some prompting actions beforehand.