

**WORLD METEOROLOGICAL ORGANIZATION**



**COMMISSION FOR BASIC SYSTEMS**

**OPEN PROGRAMME AREA GROUP ON INTEGRATED OBSERVING SYSTEMS**

**INTER-PROGRAMME EXPERT TEAM ON SATELLITE UTILIZATION AND PRODUCTS**

**DIRECT BROADCAST NETWORK (DBNet) COORDINATION GROUP**

**20-22 September 2016, WMO Geneva**

**Meeting Outcome and Actions**



## **Meeting Outcome**

### **Status of operational DBNet regional network components and services**

The group assessed the overall status of the DBNet operations as very good, recognizing the efforts of all DBNet regional and station operators. Timeliness has improved very significantly in many areas, but continues to be of an issue that requires high degree of attention.

Regarding the DBNet stations operated by IMD, the group noted with appreciation that the Chennai data timeline issue has been resolved and that NOAA18/19 and MetopA/B data are being received. It would be highly beneficial to the robustness of DBNet if Guwahati and Delhi stations can also be brought to operational status.

The NOAA DBRTN network will become a fully integrated DBNet component by the end of 2016, a major step forward.

For a number of stations (e.g. Papeete, St Denis and the BoM stations on Antarctica) communications bandwidth still is an issue.

### **Evolution of DBNet Services**

The interest of the NWP in  $\mu$ -wave imager services was confirmed. EUMETSAT is considering an implementation of FY-3/MWRI. It was also noted that the downlink on GCOM-W1 could be exploited at least in some areas. For MTVZA-GY instrument on-board METEOR a pre-processing package is not available and no firm plans currently exist for providing it.

For IASI, it was concluded, that the 500 channel subset recommended by EUMETSAT includes the channels used operationally by NCEP and therefore will remain the baseline for the DBNet IASI service.

### **FY-3 polarization issues**

The group concluded that the frequency plans of CMS are firm now and that left hand circular polarization will be employed for FY-3E, which can have a detrimental effect for the implementation of FY-3E in DBNet, as very few station operators can commit to the implementation of LHCP, taking into account technical and financial constraints.

### **CGMS Operators Support**

It was noted with appreciation that CGMS-44 had adopted the Best Practices for the support to Local and Regional Processing of LEO data, and that the implementation of the Best Practices is very important for ensuring the operational continuity and evolution of DBNet in the future.

### **DBNet Guide**

The Guide to DBNet was reviewed and the final version endorsed for submission to the Commission for Basic Systems as part of the overall WIS documentation.

### **DBNet Coordination Group Chair**

Since Anthony Rea (BOM) stepped down as Chair of the Coordination Group, the Group agreed that Pascal Brunel (MeteoFrance) be the new Chair. The Group thanked Mikael Rattenborg for having served as interim Chair for this second session.

**As overall conclusion, the DBNet CG agreed the following priority activities for the coming years**

- Consolidate the existing network for IR/MW sounding services, solving specific problems (e.g. Singapore)
- Complete the infrastructure for Metop and S-NPP/JPSS
- Implement consistent monitoring of DBNet part of overall latency and address specific timeliness problems
- Extend the geographical coverage of DBNet, capitalizing on existing capabilities (e.g. Tierra del Fuego, Isla de Pasqua, NW South America, Santa Maria Madre del Dios)
- Improve the user-friendliness of release process for processing software
- Advance the implementation of Hi-res IR services (IASI, CrIS)
- Contribute to the implementation of the new WIS metadata standard for DBNet products
- Strengthen the dialogue with global and regional WMO groups responsible for WIS capacity planning
- Advance the implementation of FY-3

### Open Actions (22 Sep 2016)

<b>Actions</b>	<b>Status</b>
<b>DBNet – Overall network operations</b>	
All Operators to provide information on major station events to DBNet Operations mailing list	
<b>DBNet - South America</b>	
To coordinate with CLS-Argos, CONAE, SMN (Argentina) and DMC (Chile) to investigate the possibility to install AAPP in Isla de Pascua with remote administration by CONAE, or to extract and transmit the level 0 ATOVS data for remote processing. (Gloria Pujol, WMO)	
<b>DBNet - Asia Pacific</b>	
Provide data volume simulations for Papeete station (for ATMS and ATMS+CrIS+IASI, to support decision for upgrade to TLS-line.	
CMA to consider providing on the GTS, in a format consistent with global data in BUFR, the FY-3 sounding data from Beijing, Guangzhou, Urumqi which are concentrated in Beijing.	CMA have previously indicated that Metop and NOAA data are received in DB, but FY-3 A,B,C data are integrated with the data dump at these stations, therefore it is not easy to extract local FY-3 data to support DBNet. This may be reconsidered with FY3D.
<b>Cross-cutting matters</b>	
BoM to analyse timeliness monitoring issue and propose way forward	

All DBNet operators to implement new filename convention	
<b><i>Transition to new DBNet services</i></b>	
<b><i>Processing Software issues</i></b>	
DBNET Coordination Group to investigate ways to make it possible for DBNET operators to contribute sounder data to the network without needing to run local processing: (i) Provide a mechanism where station operators can notify a regional coordinating node that Level 0 data is available; (ii) Provide a mechanism to allow push or pull of the Level 0 data (perhaps in compressed format) to the regional node; (iii) Regional node can process the data to Level 1 and BUFR and distribute it normally via GTS/WIS/Rebroadcast/Internet; (iv) Provide the regional or global data back to the station operator (if needed).	Will be included in agenda for DBNet CG-3
ITSC-PSWG (via Nigel) to provide S/W benchmark figures associated with a typical configuration	
NWPSAF to revise AAPP minimum configuration	
NWPSAF to investigate methods for providing pre-processor software version in BUFR product	
CIMSS to provide instructions on how to build a Docker Image for AAPP and OPS-LRS	
CIMSS to provide examples on installation and running of FY3 processing packages	<b>DONE by email to DBNet Coordination Group.</b>
<b><i>DBNet and WIS</i></b>	
WMO to provide communication to DBNet operators about new WIS metadata standard after CBS decision	

DBNet regional coordinators to initiate dialogues with Regional Association WGs responsible for WIS infrastructure	
<b><i>Other Actions</i></b>	
WMO to publish article about DBNet in WMO bulletin	
Present proposal for DBNet metrics to IPET-SUP-3, as per Actions in EGOS-IP	
WMO to update DBNet-ops and DBNet-coord email lists	

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