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DECISIONS AND GUIDANCE FROM CG17 AND CBS Ext(2014)

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1. References

- CBS report:
<https://drive.google.com/a/wmo.int/file/d/0BwdvoC9AeWjUQTNQMDBUN1dtMFU/view>
- Congress 17 report: http://library.wmo.int/pmb_ged/wmo_1157_en.pdf

2. Introduction

2015 was an important year for WIS in that it was effectively the end of the WIS initial development and implementation following its becoming operational in 2012. Major objectives had been met in the form of inclusion of the Technical Specifications that WIS was built on into the Manual on WIS along with important use cases and guidance needed by Members to implement WIS. Also included in the Manuals and Guide were the necessary information on WIS Metadata. 2015 also saw new developments in WIS standards and practices that relate to the maintenance of codes and updating of the technical regulations. Very importantly, 2015 saw the publishing of the WIS competencies and learning guide essential for Members to be able to ensure that they have staff with the right set of competencies to be able to use and maintain WIS. All these things are now in place thanks to the agreement of Congress 17 in accepting the recommendations from CBS-14 (through previous ECs) and more recently, the recommendations of CBS Ext.(2014).

This paper provides a summary of the recommendations from CBS Ext.(2014) with a link to the associated Cg-17 resolution to allow easy mapping by RA VI WG-TDI when considering the progress of WIS implementation in the region, ensuring that the work plans of the group align with the latest technical regulations and guidance that has been agreed since the last meeting of WG-TDI.

3. Resolutions and recommendations of CBS Ext(2014) relating to WIS and their associated Congress 17 resolution.

CBS had three resolutions, one related to guidelines on multi-hazard impact-based warning services. One related specifically to WIS governance and one related to regulating climate database management systems through WIS. In particular, CBS Resolution 2 tasked ICT-ISS to establish and Inter-commission Task Team on WIS to look at data flow and other issues. Resolution 2 (CBS Ext.(2014)) is reprinted in Annex 1 for reference.

CBS Ext.(2104) also made 24 recommendations for consideration of Congress. Of these 12 related specifically to WIS. These are listed below with brief comments.

- **Rec 4. Amendments to the Manual on the GTS** (WMO-No. 386) (See Res 32 (Cg-17))

There were three parts to Rec 4 as follows:

(1) That Volume I of the Manual be updated editorially to align with Volume I of the Technical Regulations. For details see the annex to the Rec 4;

(2) That Volume II of the Manual be discontinued and replaced by web-based documentation that should be reviewed and updated as required;

(3) That Members include national and regional information in messages distributed globally to meet the needs of global numerical weather prediction

Item 1 is basically just editorial but RA VI WG-TDI is encouraged to advise the Secretariat and OPAG ISS of any other editorials that may be needed in future reviews of the Technical Regulations.

Item 2 is very important for RA VI as it allows those non regulatory activities previously recorded in Volume II of the Manual on GTS to be more easily updated by the region. It also clarifies that Volume II of a technical regulation was non-regulatory, however, RA VI may find some things in Volume II that need to be mapped back into the Manual on WIS or GTS and should work with the OPAG ISS of CBS to ensure the Region's needs are met.

Item 3 is also important as it gives permission to nations and RTHs to exchange the parts of messages that were previously clipped on international messages in line with the international need for such data.

- **Rec 5. Authorizing use of the procedure for amending Manuals between CBS sessions in response to amendments to ICAO** (See Res 21 (Cg-17))

Congress authorized CBS to apply the procedure for adoption of amendments between its sessions to changes to the *Manual on Codes*, Volume I.2 and Volume I.3, the *Manual on GTS* (WMO-No. 386) and the *Manual on WIS* (WMO-No. 1060) that will be required to support the implementation of amendments to ICAO Annex 3.

CBS experts would have liked to extend this to many other operational procedures and have introduced a new set of procedures described in Recommendation 15 of CBS Ext.(2014) and would be interested in the opinion of the Regions on how far to extend this.

- **Rec's 6, 7 & 8. Amendments to the Manual on Codes** (WMO-No. 306), Vol. I.2 – Amendments to Regulations for reporting traditional observation data in TDCF (BUFR or CREX) and for representation of missing character strings (See Res 32 (Cg-17))

Congress agreed that tables of FM 94 BUFR and the Regulations for reporting traditional observation data in TDCF (BUFR or CREX) and that regulations of FM 94 BUFR and the

templates of FM 92 GRIB be amended as given in the annexes to the recommendations from CBS. These changes will be in effect from 4 November 2015.

Congress, noting that it is not possible to represent some information in TAC, agreed that Members adding new reports for exchange using the GTS should not use TAC to represent the information.

- **Rec 9. Establishment of a Satcom Users Forum** (See Res 31 (Cg-17))

The concept of Satcom initiated through Members' desire to make available to all Members access to satellite based data collection systems such as provided by EUMETSAT in RA I and VI and by ARGOS. CBS and JCOMM held two forums with users and providers of such systems and developed an implementation strategy and framework for such a liaison forum. More information is available on the SATCOM page <http://wis.wmo.int/page=SATCOM>

- **Rec 10. Representation of aviation information in XML** (See Res 32 (Cg-17))

Congress noting ICAO's want to exchange meteorological information in XML, agreed to introduce a third volume (Volume I.3) of the Manual on Codes (WMO-No. 306) to document data representations that are derived from a logical data-modelling approach. It accepted the XML documented the annex to the CBS recommendation and agreed to a start date of 1 January 2016.

- **Rec 15. Procedures for maintaining Manuals and Guides managed by CBS.** (See Res 31 (Cg-17))

Congress agreed to a new set of procedures for updating of the Manuals and Guides maintained by CBS. These are described in the annex to the recommendation in the CBS report.

- **Rec 19. Critical role of WIS networks.** See Res 31 (Cg-17)

Congress classified telecommunications between WIS centres as an essential service for creating and distributing data, products, warnings and advisories for the protection of life and property

It urged Members to recognize the critical importance of providing unrestricted exchange of information and supporting WMO telecommunication networks between National Meteorological and Hydrological Services in support of public and economic safety and well-being, and to endeavour to support and protect this information flow and its supporting technologies in their national and international decision-making

- **Rec 20. Updates to the Manual on the WMO Information System WMO-No. 1060.** See Res 31 & 32 (Cg-17)

Rec 20 CBS Ext.(2014) had 5 recommendations. The first was to make editorial changes to the Manual on WIS with effect from 1 July 2015

Parts 2, 3 and 4 were related to WIS centre registration in Appendix B of the Manual on WIS. Congress reviewed the status of WIS centres, taking into consideration changes since CBS Ext.(2014). Congress removed the conditional marker from the Manual on WIS for centres that have been certified, added new certified centres and extended the time for designated but uncertified centres up until CBS 16 to complete the certification process. Affected RA VI centres are listed in Tables 1, 2 and 3 respectively of Annex 2 below.

Part 5 of the CBS recommendation provided updates to the Manual on WIS to include the WIS Specifications and the WIS Competencies connecting them to further details in the Guide to WIS (WMO-No. 1061)

- **Rec 21. Updates to the Guide to the WMO Information System (WMO-No. 1061),** Including the WIS Competencies See Res 32 (Cg-17)

Congress approved recommendation 21 in 9 parts (a to i) under Res 32. This included the details of the WIS competencies introduced in the Manual on WIS, the use cases for WIS technical specifications and certification, the details of which are in the CBS Ext.(2014) report annexes to Recommendations 21.

The WG-TDI may wish to review its implementation plan to align with the new Technical Regulations. For instance replace references to the background documents with the update Technical Regulation reference.

4. Other Resolutions of C-17 relating to WIS

The WG-TDI will note that Resolution 33 (Cg-17) relating to Recommendation 24 (CBS-Ext.(2014)) on standardization of data management practices under WIGOS, also has a strong WIS component.

5. Recommendation

WG-TDI is invited to take into consideration the above information.

Annex 1 - Resolution 2 (CBS-Ext.(2014))

Resolution 2 (CBS-Ext.(2014))

ESTABLISHMENT OF AN INTER-COMMISSION TASK TEAM TO REVIEW PROCESSES FOR PRIORITIZING OF DATA STREAMS AND CACHE CONTENT

THE COMMISSION FOR BASIC SYSTEMS,

Noting:

- (1) Resolution 1 (Cg-XVI) – World Weather Watch Programme for 2012–2015,
- (2) The *Manual on the WMO Information System* (WMO-No. 1060),

Noting further:

- (1) That the capacity of the WMO Information System (WIS) Core Network is a limited resource,
- (2) The requirement for Global Information System Centres (GISCs) to ensure the effective operation of the communication systems and services,

Recognizing:

- (1) The increasing requirement for the global exchange of all types of environmental data in addition to the established ongoing exchange of meteorological data and products under the auspices of the World Weather Watch and other WMO Programmes, including the Global Framework for Climate Services,
- (2) That the addition of new data or products to the WIS Core Network has an impact on all GISCs that have to ensure their capacity is sufficient to handle data and product exchange,
- (3) That GISCs have already established a multilateral collaboration forum through the Expert Team on WMO Information System Centres/Task Team on GISCs,
- (4) That, although GISCs are responsible for their access to and capacity management of the WIS Core Network, the WMO constituent bodies are ultimately responsible for the content of and capacity requirements for the WMO Information System,
- (5) That information that is required to be exchanged between all GISCs is flagged in the discovery metadata by the keyword GlobalExchange,

Decides that there is a need for a formal mechanism for deciding what should be designated for global exchange, and thus held in the cache, and for determining the transmission priority;

Requests the Implementation Coordination Team on Information Systems and Services to establish an ad hoc inter-commission task team to work with GISCs to recommend a process for making decisions affecting the capacity management of WIS networks, in particular the WIS Core Network and the GISC cache; the task team should also consider the need for this decision-making process to resolve issues that the collaborative mechanisms established by GISCs are unable to resolve;

Requests the Secretary-General to make available the necessary resources to support the work of this ad hoc inter-commission task team.

Annex 2 – Annex to Resolution 31 (Cg-17)

DATA COLLECTION OR PRODUCTION CENTRE DESIGNATIONS

Table 1. RA VI DCPCs to have conditional marker removed from Manual on WIS

<i>Member State or Org</i>	<i>Centre</i>	<i>ID No.</i>	<i>CBS Endorsement</i>	<i>Principal GISC</i>	<i>WIS Manual action</i>
Croatia	Croatia MMC	9	Endorsed	Offenbach	Remove conditional marker (*) from Manual on WIS
Czech Republic	RTH Prague	125	Endorsed	Offenbach	Remove conditional marker (*) from Manual on WIS
France	RSMC-Activity-TC (La Reunion)	56	Endorsed	Toulouse	Remove conditional marker (*) from Manual on WIS
Italy	RTH Rome	97	Endorsed	Offenbach	Remove conditional marker (*) from Manual on WIS
Serbia	RCC Belgrade	147	Endorsed	Offenbach	Remove conditional marker (*) from Manual on WIS
Sweden	RTH Norrkoping	11	Endorsed	Offenbach	Remove conditional marker (*) from Manual on WIS

Table 2. RA VI Centres endorsed by the Commission for Basic Systems at its extraordinary session (2014) to serve as WIS Data Collection or Production Centres (DCPCs) and recognized as satisfying the pre-operational compliance requirements

<i>Member or International Organization</i>	<i>Centre</i>	<i>Principal GISC</i>
Austria	RTH (Vienna)	Offenbach
France	Radar Data Centre (ODC Toulouse)	Toulouse
Spain	MEDARE	Toulouse
Turkey	RCC (EMCC – RA VI)	Offenbach
UK	GCOS Lead Centre for Antarctica (BAS Cambridge)	Exeter
UK	Radar Data Centre (ODC Exeter)	Exeter
UK**	RSMC-Activity-ATM	Exeter
UK	VAAC (London)	Exeter
UK	WAFC (London)	Exeter

** Replaces RSMC-EER

Table 3. RA VI Centres designated as WIS Centres by Resolution 51 (Cg-XVI) that have not been endorsed by the Commission for Basic Systems

<i>Member</i>	<i>Centre</i>
Finland	FMI-ARC
Germany	GRDC
Italy	RSMC Rome
Netherlands	RCC De Bilt
Netherlands	Satellite Centre De Bilt
Sweden	Baltrad