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| WORLD METEOROLOGICAL ORGANIZATIONCOMMISSION FOR BASIC SYSTEMS-----------------------------THIRD MEETING OF INTER-PROGRAMME EXPERT TEAM ONDATA REPRESENTATION MAINTENANCE AND MONITORINGBEIJING, CHINA, 20 - 24 JULY 2015 |  | IPET-DRMM-III / Doc. 4.1(10. 6. 2015)-------------------------ITEM 4.1ENGLISH ONLY |

SUMMARY AND CONCLUSION OF PROPOSALS

Summary on amendments after IPET-DRMM-II

*Submitted by the Secretariat*

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**Summary and Purpose of Document**

This document records implementation of amendments to GRIB edition 2, BUFR and CREX, and the Common Code tables after the previous meeting of IPET-DRMM, and presents status of the past proposals to be updated.

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**ACTION PROPOSED**

The meeting is invited to review and update status of the past proposals and, if needed, to discuss further actions for implementation of the past proposals.

**REFERENCES:**

- Abridged final report of with resolutions and recommendations (Asunción, 8-12 September 2014)

- Report of the second meeting of IPET-DRMM (College Park, USA, 28 April-2 May 2014)

- Report of the first meeting of IPET-DRMM (Tokyo, Japan, 1-5 July 2013)

- Report of the fourth meeting of IPET-DRC (Exeter, UK, 21-25 May 2012)

- Report of the third meeting of IPET-DRC (Melbourne, Australia, 20-23 September 2011)

- Report of the second meeting of IPET-DRC (Brasilia, Brazil, 31 August-3 September 2010)

- Report of the first meeting of IPET-DRC (Geneva, 15-18 September 2009)

- Report of the Joint meeting of CT-MTDCF and ET-DRC (Geneva, 1-5 September 2008)

- Report of the Joint meeting of CT-MTDCF and ET-DRC (Montreal, 8-12 May 2006)

**ANNEXES:**

I. Implementation of amendments during the intersessional period

II. Status of proposals

**DISCUSSIONS**

1. In accordance with the previous *Procedures for Amending the Manual on Codes*, amendments to the Manual on Codes have come into force during the intersessional period of the IPET-DRMM without going through CBS and EC sessions.

2. This document is to place these amendments on record, which details are not shown in the "Abridged final report with resolutions and recommendations" of sessions of the Commission for Basic Systems (CBS).

3. After the previous meeting of IPET-DRMM, the amendments listed in the Annex I were approved and implemented or waiting for implementation. English documents are available from the links in the Annex, and other language versions are available, replacing "en" with "fr", "ru", "es" or "ar" (Arabic is available for the item 1 only) in the links.

4. Proposals on amendments to GRIB edition 2 (GRIB2), BUFR and CREX, and the Common Code tables, which have been approved for validation, are listed in the Annex II along with those waiting for implementation.

5. The meeting will review and update the status of these proposals, and make arrangements for validation to be conducted by centres concerned, if needed.

6. Proposals in the Annex II, which have been significantly modified through validation process, should be discussed separately under a specific agenda item.

**ANNEX I**

Implementation of amendments during the intersessional period

1. [Adoption between CBS sessions 2014](https://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2014/betweenCBSs/PR-6745-OBS-WIS-DRMM-DRC_en.pdf) (5 November 2014)

2. [Pre-operational](https://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2014/preOperational/Pre-operational_2014.pdf) (14 October 2014)

3. [Fast-track 2014-2](https://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2014/fastTrack/FT2014-2_en.pdf) (5 November 2014)

4. [Fast-track 2015-1](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2015/fastTrack/FT2015-1_en.pdf) (6 May 2015)

5. [Pre-Operational](https://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2015/preOperational/PRE-OPERATIONAL_2015_CBS.docx) (7 May 2015)

*6.* [*Rec. 6 and 7 (CBS Ext. (2014))*](https://drive.google.com/open?id=0BwdvoC9AeWjUQTNQMDBUN1dtMFU&authuser=0) *(4 November 2015)*

Note: The recommendations have been adopted by the World Meteorological Congress Seventeenth session (Cg-17).

**STATUS OF PROPOSALS**

**ANNEX II**

1. The following tables are to show the proposals at validation stage to facilitate validation exercise.

2. Proposals at validation stage have no status of the Manual on Codes (WMO-No. 306) and MAY NOT be used in operational data and products.

3. It should be noted proposals at validation stage may be modified during validation exercise.  It is recommended to update the proposals whenever modified.

Information as of: 24 July 2015

**FM 92 GRIB**

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| --- | --- | --- | --- | --- |
| ID | Approval for Validation | Proposals | Last updatefor validation | Stage |
| 2014-2.2.1 | DRMM-II | [New parameters and fixed surface types to represent ground surface conditions in analyses or models](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_2_2_1) |  | Pre-operational07/05/2015 |
| 2014-2.2.2 | DRMM-II | [A product definition template for statistics over an ensemble](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_2_2_2) |   | Val |
| 2014-2.2.5 | DRMM-II | [Review of GRIB templates for spatio-temporal changing tiles](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_2_2_5) |   | Val |
| 2014-2.2.7 | DRMM-II | [Octets of forecast time in product definition template 4.44](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_2_2_7) |  | CBS-Ext. (2014) |
|  |   |   |   |   |
| 2013-2.1.1 | DRMM-I | [Reporting quality information in GRIB2](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2013_2_1_1) |   | Val |
| 2013-2.2.1 | DRMM-I | [GRIB2 new compression method – CCSDS libaec](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2013_2_2_1) |   | Val |
| 2013-2.2.5 | DRMM-I | [Proposed amendments to GRIB2 Code table](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2013_2_2_5)~~s 4.2, 4.3 and~~ 4.10 (amendments other than Code table 4.10 were implemented by FT2014-1) |   | Val |
|  |   |   |   |   |
| 2012-2.2.9 | DRC-IV | [GRIB template for 4-D Trajectory grid definition](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2012_2_2_9) |   | Val |
|  |   |   |   |   |
| 2011-2.3.5 | DRC-III | [GRIB template for rotated tilted Mercator projection](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2011_2_3_5) |   | Val |
| 2011-2.3.12 | DRC-III | [Space Weather in GRIB2](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2011_2_3_12) |   | Val |
|  |   |   |   |   |
| 2010-2.3.1/2 | DRC-II | [Encoding wave spectra in GRIB Edition 2 Waves parameters](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2010_2_3_1_2) (amendments other than 46-48 were implemented) |   | Val |

**FM 94 BUFR/FM 95 CREX**

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| ID | Approval for Validation | Proposals | Last update | Stage |
| 2014-3.1.2 | DRMM-II | [Clarification of Regulation 94.1.5](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_3_1_2) |  | CBS-Ext. (2014) |
| 2014-3.2.7 | DRMM-II | [BUFR template for n-minute AWS data (3 07 092)](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_3_2_7) |   | Val |
| 2014-3.2.8 | DRMM-II | [Revised BUFR sequence for synoptic reports from sea stations suitable for VOS observation data](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_3_2_8) |   | Val |
| 2014-3.2.9 | DRMM-II | [Proposed BUFR sequence for reporting observations from offshore platforms](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_3_2_9) |   | Val |
| 2014-3.2.10 | DRMM-II | [Proposed modifications to the BUFR template for reporting data from Argo profiling floats](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_3_2_10) |   | Val |
| 2014-11.2 | DRMM-II | [WIGOS Station Identifier](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2014_11_2) |  | Val |
|  |   |   |   |   |
| 2013-3.2.1 | DRMM-I | Additions to the BUFR template for n-minute AWS data (3 07 092) | Combined to 2014-3.2.7  | Val |
| 2013-3.2.2 | DRMM-I | [Proposal for a BUFR template for radar wind profiler](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2013_3_2_2) |   | Val |
| 2013-3.2.4 | DRMM-I | [Satellite-derived winds in BUFR](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2013_3_2_4) |   | Val |
|  |   |   |   |   |
| 2012-3.2.7 | DRC-IV | [Sequence 3 02 067](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2012_3_2_7) |   | Val |
| 2012-3.2.11 | DRC-IV | [A BUFR Sequence to append data for national use to Canadian SYNOP reports](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2012_3_2_11) |    | Val |
| 2012-3.2.12 | DRC-IV | [New BUFR/CREX entries for dual polarization radar data](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2012_3_2_12) | [19/12/2014](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2012_3_2_12r) | Val |
|  |   |   |   |   |
| 2009-3.3.2 | DRC-I | [Update from JCOMM on developments for BUFR templates: New XBT template and queries about a revised VOS template](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2009_3_3_2)\* Proposals other than 3 06 032 and 3 15 006 have been implemented. 3 06 032 and 3 15 006 were proposed in association with the 2006-5.4.3 and considered under validation. |   | Val? |
|  |   |   |   |   |
| 2008-3.1.15 | JM-MTDCF/DRC | [Templates for the wave observations from different platforms suitable for WAVEOB data (revision 4)](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2008_3_1_15) |   | Val |
|  |  |  |  |  |
| 2006-5.4.3 | JM-MTDCF/DRC | [BUFR template for buoy wave data](Provisional-Report_IPET-DRMM-III_Beijing_annex.docx#A2006_5_4_3)\* It was confirmed in 2013 that this template is under validation. |  | Val? |