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| WORLD METEOROLOGICAL ORGANIZATIONCOMMISSION FOR BASIC SYSTEMS-----------------------------FIRST MEETING OFINTER-PROGRAMME EXPERT TEAM ONCODES MAINTENANCEGENEVA, SWITZERLAND, 24 - 28 JULY 2017 |  | IPET-CM-I / Doc. 6.1(2. 6. 2017)-------------------------ITEM 6.1ENGLISH ONLY |

SUMMARY AND CONCLUSION OF PROPOSALS

**Summary on Amendments since IPET-DRMM-IV**

*Submitted by* *Secretariat*

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**Summary and Purpose of Document**

This document is to record implementation of amendments to Manual on Codes (WMO-No. 306) since the previous meeting of IPET-DRMM and to update the status of proposals under validation.

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**ACTION PROPOSED**

The meeting is invited to note the implementation of amendments to Manual on Codes and to review and update the status of proposals and, if needed, to discuss further actions for implementation of these proposals.

**REFERENCES:**

Final reports,

- Report of IPET-DRMM, fourth meeting (Geneva, Switzerland, 30 May-3 June 2016)

- Report of IPET-DRMM, third meeting (Beijing, China, 20-24 July 2015)

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

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

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

[Procedures for amending WMO Manuals and Guides that are the responsibility of the Commission for Basic Systems](http://www.wmo.int/pages/prog/www/ISS/Meetings/IPET-CM_Geneva2017/References/PROCEDURES_20160624.pdf)

**ANNEXES:**

Annex I Implementation of amendments during the intersessional period

Annex II Status of proposals

**DISCUSSIONS**

1. In accordance with the *Procedures for amending WMO Manuals and Guides that are the responsibility of the Commission for Basic Systems* (Rec.15(CBS-Ext.(2014)/Res.21(Cg-17)/revised by Res.12 (EC-68)), the amendments by the fast-track procedure and the procedure for adoption between CBS sessions were approved by WMO Members (focal points or PRs).

2. This document is to place these amendments on record, which details are no more shown in the Abridged final report with resolutions and recommendations of CBS sessions. After the previous meeting of IPET-DRMM, the amendments listed in the Annex I have been implemented or adopted (waiting for implementation).

3. Proposals on amendments to the Manual on Codes, which have been approved for validation, are listed in the Annex II along with those waiting for implementation or implemented after the previous meeting of IPET-DRMM.

4. The meeting will review and update the status of these proposals under validation, and make arrangements, if needed, to properly validate them with centres concerned.

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

Implementation of amendments during the intersessional period

**ANNEX I**

1. [Pre-operational](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2016/preOperational/PreO_2016-1.pdf) (22 September 2016)

2. [Fast-track 2016-2](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2016/fastTrack/FT2016-2_en.pdf) (2 November 2016)

3. [Fast-track 2017-1](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2017/fastTrack/FT2017-1_en.pdf) (3 May 2017)

4. [*Adoption between CBS sessions 2017*](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2017/betweenCBS/02952-2017-OBS-WIS-DRMM-DRC_en.pdf) *(8 November 2017)*

Note: English documents are available from the links. Some of them are also available in other languages, replacing "en" with "fr", "ru", "es" or "ar" (Item 4), or with "fr", "ru" and "es" (Items 2 and 3) in the links.

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| **STATUS OF PROPOSALS****ANNEX II****STATUS OF PROPOSALS**1. The following tables are to highlight the proposals under validation for facilitating validation exercise and to record those implemented or adopted after the previous meeting of IPET-DRMM.2. Proposals at validation stage have no status of Manual on Codes (WMO-No. 306) and MAY NOT be applied 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.**FM 92 GRIB**

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| --- | --- | --- | --- | --- |
| ID | Approval for Validation | Proposals | Status | Remarks |
| PFC2016-2.2 |  | [New GRIB2 entry in code table 4.2](#P2016_2_2) | FT2017-1 |  |
| PFC2016-2.4 |  | [New GRIB2 templates related to distribution functions and associated table entries](#P2016_2_4) | FT2017-1 |  |
|  |  |  |  |  |
| 2016-2.2.1 | DRMM-IV | [New parameter for tropical cyclone forecasts](#A2016_2_2_1) | FT2016-2 |  |
| 2016-2.2.2 | DRMM-IV | [New GRIB template for post-processed NWP output](#A2016_2_2_2) | FT2016-2 |  |
| 2016-2.2.3 | DRMM-IV | [New GRIB table entries (unbalanced components)](#A2016_2_2_3) | FT2016-2 |  |
| 2016-2.2.4 | DRMM-IV | [Amendments in Common Table C-14 for Pollen, new parameters in Table 4.2 and new entries in Table 4.5](#A2016_2_2_4) | FT2016-2 |  |
| 2016-2.2.5 | DRMM-IV | [New generating process and common codes to represent wildfire-driven pollution in air quality models](#A2016_2_2_5) | FT2016-2 |  |
| 2016-2.2.6 | DRMM-IV | [Update of GRIB2 new compression method – CCSDS libaec](#A2016_2_2_6) | FT2016-2 |  |
| 2016-2.2.7 | DRMM-IV | [New ensemble templates and one ensemble template correction](#A2016_2_2_7) | FT2016-2 |  |
| 2016-2.2.8 | DRMM-IV | [Encoding fields from Limited Area models combining conformal projections and bi-periodic spectral geometry](#A2016_2_2_8) | Val |  |
| 2016-2.2.9 | DRMM-IV | [New table entries for GRIB2 to represent GRAPES model products](#A2016_2_2_9) | FT2016-2 |  |
|  |  |  |  |  |
| 2015-2.1.1 | DRMM-III | [Complete encoding of information required for georeferencing grid points in GRIB](#A2015_2_1_1) | ABC2016 |  |
| 2015-2.1.2 | DRMM-III | [New GRIB2 Regulations and notes to make it clear that forecast times may be negative](#A2015_2_1_2) | **ABC2017** |  |
| 2015-2.2.1/2.2.2 | DRMM-III | [New parameters in GRIB2 Code table 4.2/New GRIB2 parameters and product definition template for observational satellite data](#A2015_2_2_1) | Val |  |
|  |  |  |  |  |
| 2014-2.2.2 | DRMM-II | [A product definition template for statistics over an ensemble](#A2014_2_2_2) | Val |  |
|  |  |  |  |  |
| 2012-2.2.9 | DRC-IV | [GRIB template for 4-D Trajectory grid definition](#A2012_2_2_9) | Val |  |

**FM 94 BUFR/FM 95 CREX**

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| ID | Approval for Validation | Proposals | Status | Confirmed at meeting |
| PFC2016-2.5 |  | [Clarification of entry 4 in code table 0 01 150](#P2016_2_5) | FT2017-1 |  |
|  |  |  |  |  |
| 2016-3.2.1 | DRMM-IV | [New entry in common code table C-2 by Switzerland and Kazakhstan](#A2016_3_2_1) | FT2016-2 |  |
| 2016-3.2.2 | DRMM-IV | [New entries for dropsonde data](#A2016_3_2_2) | FT2016-2 |  |
| 2016-3.2.32016-3.2.8 | DRMM-IV | [New entries in Common Tables C-5 and C-8New entries in Common Code Table C-5](#A2016_3_2_3) | FT2016-2 |  |
| 2016-3.2.4 | DRMM-IV | [New BUFR elements for C-band synthetic aperture radar  instrument (C-SAR)](#A2016_3_2_4) | FT2016-2 |  |
| 2016-3.2.6 | DRMM-IV | [BUFR Sequence for synoptic reports from sea stations suitable for VOS observation data (editorial changes)](#A2016_3_2_6) | FT2016-2 |  |
| 2016-3.2.7 | DRMM-IV | [Additional bio-geochemical sequences for data from Argo profiling floats](#A2016_3_2_7) | Val |  |
| 2016-3.2.9 | DRMM-IV | [Revised and additional new descriptors for radar data products](#A2016_3_2_9) | FT2016-2 |  |
| 2016-3.2.10 | DRMM-IV | [Revised note for encoding geographic coordinates in BUFR and new element descriptors for encoding coordinate reference systems and fixed reference mean sea level](#A2016_3_2_10) | **ABC2017,**FT2016-2 |  |
| 2016-3.2.11 | DRMM-IV | [Development of a LIDAR & Ceilometer Table D Sequence](#A2016_3_2_11) | FT2017-1 |  |
| 2016-3.2.12 | DRMM-IV | [Radiosounding meta-data reporting: clarifications and amendments required](#A2016_3_2_12_I) | FT2016-2,FT2017-1 |  |
| 2016-3.2.13 | DRMM-IV | [Reporting of measurement uncertainties in BUFR](#A2016_3_2_13) | FT2017-1 |  |
|  |  |  |  |  |
| 2015-5.1 | DRMM-III | [Clarifications of B/C 30 and B/C 32 Regulations](#A2015_5_1) | ABC2016 |  |
| 2015-5.2 | DRMM-III | [Strategy for amending Annex II to B/C 25 Regulations](#A2015_5_2)  | ABC2016 |  |
| 2015-5.3 | DRMM-III | [Clarification of upper-air wind reporting nearby the Poles](#A2015_5_3) | ABC2016 |  |
|  |  |  |  |  |
| 2014-3.2.7 | DRMM-II | [BUFR template for n-minute AWS data (3 07 092)](#A2014_3_2_7) | Val |  |
| 2014-3.2.9 | DRMM-II | [Proposed BUFR sequence for reporting observations from offshore platforms](#A2014_3_2_9) | Val |  |
| 2014-11.2 | DRMM-II | [WIGOS Station Identifier](#A2014_11_2) | FT2017-1 |  |
|  |  |  |  |  |
| 2013-3.2.2 | DRMM-I | [Proposal for a BUFR template for radar wind profiler](#A2013_3_2_2) | FT2017-1 |  |
| 2013-3.2.4 | DRMM-I | [Satellite-derived winds in BUFR](#A2013_3_2_4) | Val |  |

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