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| WORLD METEOROLOGICAL ORGANIZATIONCOMMISSION FOR BASIC SYSTEMS-----------------------------THIRD MEETING OFINTER-PROGRAMME EXPERT TEAM ONCODES MAINTENANCEMARRAKECH, MOROCCO, 15 - 19 APRIL 2019 |  | IPET-CM-III / Doc. 6.1 rev12.03.2019-------------------------ITEM 6.1ENGLISH ONLY |

SUMMARY AND CONCLUSION OF PROPOSALS

Summary on Amendments since IPET-CM-II
 and update of status of validation

*Submitted by the 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-CM and to update the status of proposals under validation.

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**ACTION PROPOSED**

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

**REFERENCES:**

Final reports,

- Report of IPET-CM, second meeting (Offenbach, Germany, 28 May-1 June 2018)

- Report of IPET-CM, first meeting (Geneva, Switzerland, 24-28 July 2017)

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

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

**ANNEXES:**

 1. Implementation of amendments during the intersessional period

 2. Status of proposals

**DISCUSSIONS**

1. In accordance with the *PROCEDURES FOR MAINTAINING MANUALS AND GUIDES MANAGED BY 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-CM, the amendments listed in Annex I have been implemented or adopted and waiting for implementation.

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

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 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/2018/preOperational/PreO_2018-1.pdf) (23 August 2018)

2. [Fast-track 2018-2](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2018/fastTrack/FT2018-2_en.pdf) (7 November 2018) and [supporting documents](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2018/fastTrack/PFC2018-2_REPORTS.zip) at PFC2018-2

3. [Adoption between CBS sessions 2018](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2018/betweenCBS/01356-2018-OBS-WIS-DRMM-DRC_en.pdf) (7 November 2018)

4. [*Fast-track 2019-1*](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2019/fastTrack/FT2019-1_en.pdf) (*15 May 2019:* waiting for implementation)

5. [*Adoption between CBS sessions 2019*](http://www.wmo.int/pages/prog/www/WMOCodes/Amendments/2019/betweenCBS/19171-2019-OBS-WIS-DRMM-DRC_en.pdf) (*6 November 2019:* waiting for implementation)

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 also to record those implemented or adopted after the previous meeting of IPET-CM.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 |
| 2018-P5 | PFC-2 | [Additional parameters for waves products](#A2018_P5) | FT2019-1 |  |
| 2018-P6 | PFC-2 | [New code for atmosphere composition modelling](#A2018_P6) | FT2019-1 |  |
| 2018-P7 | PFC-2 | [Additional parameters for ocean products](#A2018_P7) | FT2019-1 |  |
|  |  |  |  |  |
| 2018-2.2.1 | CM-II | [Additional elements for optimal cloud analysis and instantaneous rain rate products](#A2018_2_2_1) | FT2018-2 |  |
| 2018-2.2.2 | CM-II | [New fixed surface type in Code table 4.5](#A2018_2_2_2) | FT2018-2 |  |
| 2018-2.2.3 | CM-II | [New entry in GRIB2 Code table 4.9](#A2018_2_2_3) | FT2018-2 |  |
| 2018-2.2.4 | CM-II | [New lightning GRIB parameters](#A2018_2_2_4) | FT2018-2 |  |
| 2018-2.2.5 | CM-II | [New GRIB2 Code table 4.2 entries](#A2018_2_2_5) | FT2018-2 |  |
| 2018-2.2.6 | CM-II | [New “freezing drizzle” precipitation type](#A2018_2_2_6) | FT2018-2 |  |
| 2018-2.2.7 | CM-II | [Representing gnomonic grids](#A2018_2_2_7) | Validation |  |
| 2018-2.2.8 | CM-II | [New GRIB2 Code table 4.9 entries](#A2018_2_2_8) | FT2018-2 |  |
|  |  |  |  |  |
| 2016-2.2.8 | DRMM-IV | [GRIB templates and tables entries to support specific issues of limited area models](#A2016_2_2_8) | FT2019-1 |  |
|  |  |  |  |  |
| 2014-2.2.2 | DRMM-II | [A product definition template for statistics over an ensemble](#A2014_2_2_2) | Val |  |

**FM 94 BUFR/FM 95 CREX**

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| ID | Approval for Validation | Proposals | Status | Confirmed at meeting |
| 2018-2.4.2 | CM-II | [New BUFR sequence for describing satellite observations compressed using principal component analysis](#A2018_2_4_2) | FT2018-2 |  |
| 2018-2.4.3 | CM-II | [BUFR descriptors for IASI Level 2 Products](#A2018_2_4_3) | FT2018-2 |  |
| 2018-2.4.4 | CM-II | [New BUFR sequence for snow water equivalent (SWE)](#A2018_2_4_4) | FT2018-2 |  |
| 2018-2.4.5 | CM-II | [Revision of BUFR sequence 3 09 056 – Sequence for representation of radiosonde descent data](#A2018_2_4_5) | FT2018-2 |  |
| 2018-2.4.6 | CM-II | [New sequence for representation of radiosonde observation data with higher precision of pressure and geopotential height](#A2018_2_4_6) | FT2018-2,ABC2019 |  |
| 2018-2.4.7 | CM-II | [New BUFR sequence for describing the "First five" Fourier components of the directional wave spectrum](#A2018_2_4_7) | Validation |  |
| 2018-2.4.8 | CM-II | [New BUFR sequence for reporting of basic ship AWS data](#A2018_2_4_8) | FT2019-1 |  |
| 2018-2.4.9 | CM-II | [Review sequence 3-10-067](#A2018_2_4_9) | FT2018-2 |  |
| 2018-2.4.10 | CM-II | [Revised BUFR template for surface observations from n-minute period](#A2018_2_4_10) | FT2018-2 |  |
| 2018-2.4.11 | CM-II | [New BUFR sequence and code and flag tables for Sentinel-3 SRAL product](#A2018_2_4_11) | FT2018-2 |  |
| 2018-3.1 | CM-II | [Amendments to B/C Regulations for standard time](#A2018_3_1) | ABC2019 |  |
|  |  |  |  |  |
| 2017-2.4.5 | CM-I | [New BUFR sequence for describing satellites contributing to an observed geophysical quantity](#A2017_2_4_5) | Val |  |
| 2017-3.1.2 | CM-I | [Regulations for reporting SHIP data in TDCF (B/C10)](#A2017_3_1_2) | ABC2018 |  |
| 2017-3.1.3 | CM-I | [Implementation of the Decision 15 of EC-69 regarding the International Exchange of Snow Data](#A2017_3_1_3) | ABC2018 |  |
|  |  |  |  |  |
| 2016-3.2.7 | DRMM-IV | [Additional bio-geochemical sequences for data from Argo profiling floats](#A2016_3_2_7) | Val |  |

**COMMON CODE TABLES** |
| ID | Approval for Validation | Proposals | Status | Confirmed at meeting |
| 2018-P1 | PFC-2 | [Amendment to Common Code table C-2 by Russian Federation](#A2018_P1) | FT2019-1 |  |
| 2018-P2 | PFC-2 | [New entry in Common Code table C-8 by EUMETSAT](#A2018_P2) | FT2019-1 |  |
| 2018-P3 | PFC-2 | [New entries in Common Code table C-12 by Brazil](#A2018_P3) | FT2019-1 |  |
| 2018-P4 | PFC-2 | [New entries in Common Code tables C-1, C-11 and C-12 by Brazil](#A2018_P4) | FT2019-1 |  |
| 2018-P8 | PFC-2 | [Amendment to Common Code table C-2 by Germany](#A2018_P8) | FT2019-1 |  |
|  |  |  |  |  |
| 2018-2.5.1 | CM-II | [Proposal for new entries in Common Code table C-5 and C-8](#A2018_2_5_1) | FT2018-2 |  |
| 2018-2.5.2 | CM-II | [New entry in Common Code table C-2 for new radiosondes](#A2018_2_5_2) | FT2018-2 |  |
| 2018-2.5.3 | CM-II | [New entries in Common Code Table C-12](#A2018_2_5_3) | FT2018-2 |  |
| 2018-2.5.4 | CM-II | [New entries in Common Code tables C-5 and C-8](#A2018_2_5_4) | FT2018-2 |  |
| 2018-2.5.5 | CM-II | [New entries in Common Code Table C-3](#A2018_2_5_5) | FT2018-2 |  |
| 2018-5.1 | CM-II | [New data designator for space weather](#A2018_5_1) | FT2018-2 |  |
| 2018-5.2 | CM-II | [Global exchange of daily climate data](#A2018_5_2) | FT2018-2 |  |
|  |  |  |  |  |
| 2017-2.5.4 | CM-I | [Common Code table for master table version numbers of GRIB, BUFR and CREX](#A2017_2_5_4) | ABC2018 |  |

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