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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. 6.1 (1)(8. 7. 2015)-------------------------ITEM 6.1ENGLISH ONLY |

Traditional Alphanumeric Codes

**Amendment 77 to ICAO Annex 3**

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**Summary and Purpose of Document**

Review of current status and actions before the TT-AvCI in relation with Amendment 77 to ICAO Annex 3

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**ACTION PROPOSED**

 The Team and the Secretariat are requested to note the content, provide input into the questions raised and support the proposed amendment to code forms FM15 METAR and
FM 16 SPECI.

**ANNEXES:**

 1.  Excerpt of Annex 3, Appendix 3, 4.8.1.1 and associated table contents

# **Discussion**

**Amendment 77 to Annex 3**

The ICAO Air Navigation Commission (ANC) final review of this amendment proposal will take place in the Fall Session of the ANC which will most likely be in October 2015.

The only part of the amendment which affects the WMO codes is the removal of reporting of RERASN in the supplementary information of METAR and SPECI. (See further discussion below.) The final adoption by the ICAO Council would be expected in March 2016 with applicability in November 2016.

It is also expected that the state of runway groups in METAR and SPECI will be proposed for removal altogether. This change is being proposed for applicability in November 2018.

**Recent weather**

ICAO Annex 3, Appendix 3, 4.8.1.1 recommends the reporting of recent weather in METAR and SPECI. The application of this practice results in the inclusion, in the report, of recent weather groups such as REBLSN (recent blowing snow), RETSRA (recent thunderstorm) and RERASN (recent rain and snow). The relevant regulation is excerpted in ANNEX I for further reference.

RERASN is the only group that contains two separate precipitation types. The ICAO study group involved considers that to be not within the intent of the provision. The agreed interpretation is that only one precipitation type is permitted in a recent weather group although still allowing three such groups to be reported. ICAO would support this being reflected in WMO No 306 Manual on codes (specifically, FM15 METAR and FM16 SPECI).

Currently, the WMO regulations governing FM15 and FM16 code forms are silent regarding which specific combinations of up to three abbreviations may be combined to represent recent weather. WMO No 49 contains such indications, which essentially reproduce the content and tables of ICAO Annex 3 on this topic. We propose to add a short clarification text to regulation 15.13.2.1 in FM15/16 to indicate that RERASN shall not be reported (with applicability in November 2016 or any date deemed agreeable between the ICAO and the WMO). See proposal section below and Annex II. Furthermore, appropriate coordination should be undertaken to ensure that WMO publication No 49 will undergo a timely and coordinated amendment process to reflect this change.

**IWXXM logical data model and XML Schema**

Further to the above it would be important to understand the process for amending the METAR and SPECI requirements in the recently developed IWXXM. It is our understanding that these codes have now been approved by the WMO Congress and as such would need to be updated in line with the alphanumeric codes. It is also our understanding that this would be the function of the ET-DRMM for the changes required above. If so, the TT-AvCI, with the support of the IPET-DRMM and the Secretariat, will endeavour to provide appropriate amendments.

**Approval cycle and coordination of updates to WMO and ICAO documents**

One of the mandates of the TT-AvCI is to ensure that amendments to ICAO Annex 3 are reflected in a timely manner with corresponding amendments to the WMO Manual on Codes. The TT should be mindful that it is dealing with codes and data representation and that by the time matters are brought to the attention of the IPET-DRMM, the requirements angle has been dealt with by the ICAO, in consultation with the WMO.

The TT-AvCI is to help ensure that the date of applicability for corresponding amendments is synchronized between the WMO and the ICAO. Each organization has its own set of rules and approval cycles for amendments. For each amendment, simultaneous applicability requires coordinating the work of the TT-AvCI with the Secretariats of each organization in order to arrive at a single date of applicability through appropriate approbation mechanisms in both organizations. This may be facilitated through existing fast track amendment approval processes, where applicable, but cases where this is not possible should be identified as soon as possible so that issues may be mitigated.

It may be noted that the ICAO Annex revision cycle has recently been updated to a two-year cycle (previously three year), with the next amendment scheduled to be adopted in 2018 by the ICAO Council.

**PROPOSAL**

We propose to add a short clarification text to regulation 15.13.2.1 in FM15/16 to indicate that only one precipitation type shall be reported in the a recent weather group and, consequently, RERASN shall not be reported (with applicability in November 2016 or any date deemed agreeable between the ICAO and the WMO). See Annex II. Furthermore, appropriate coordination should be undertaken to ensure that WMO publication No 49 will undergo a timely and coordinated amendment process to reflect this change.

**ANNEX I**

Relating to the requirements for the reporting of recent weather in METAR and SPECI, Annex 3, Appendix 3, 4.8.1.1 reads as follows:

***Recommendation.* –** *In local routine and special reports and in METAR and SPECI, the following recent weather phenomena, I.e. weather phenomena observed at the aerodrome during the period since the last issued routine report or last hour, whichever is shorter, but not at the time of the observation, should be reported, up to a maximum of three groups, in accordance with the templates shown in Table A3-1 and A3-2, in the supplementary information:*

-          *Freezing precipitation*

-          *Moderate or heavy precipitation (including showers thereof)*

-          *Blowing snow*

-          *Duststorm, sandstorm*

-          *Thunderstorm*

-          *Funnel cloud (tornado or water spout)*

-          *Volcanic ash*

The tables simply provide a list of the permissible phenomena which for METAR and SPECI amounts to the following:

REFZDZ

REFZRA

REDZ

RE[SH]RA

RE[SH]SN

RESG

RESHGR

RESHGS

REBLSN

RESS

REDS

RETSRA

RETSSN

RETSGR

RETSGS

RETS

REFC

REVA

REPL

REUP

REFZUP

RETSUP

RESHUP

And of course RERASN

**Annex II**

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| **15.13.2.1** | **Up to three groups of information on recent weather shall be given by the indicator** |
| **letters RE followed, without a space, by the appropriate abbreviations, in accordance** |
| **with  Regulation  15.8  (but  no  intensity  of  the  recent  weather  phenomena  shall  be** |
| **indicated) if the following weather phenomena were observed during the period since** |
| **the  last  routine  report,  or  last  hour,  whichever  is  shorter,  but  not  at  the  time  of** |
| **observation:** |

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| **–** | **Freezing precipitation;** |
| **–** | **Moderate or heavy drizzle, rain or snow;** |
| **–** | **Moderate or heavy: ice pellets, hail, small hail and/or snow pellets;** |
| **–** | **Blowing snow;** |
| **–** | **Sandstorm or duststorm;** |
| **–** | **Thunderstorm;** |
| **–** | **Funnel cloud(s) (tornado or waterspout);** |
| **–** | **Volcanic ash.** |
| **Only one precipitation type may be reported in the recent weather group. For example, abbreviations such as RERASN shall not be used.****When an automatic observing system is used and when the type of the precipitation** |
| **cannot be identified by this system, the abbreviation REUP shall be used for recent** |
| **precipitation. It may be combined with the characteristics of the present weather in** |
| **accordance with Regulation 15.8.6.** |
| **Note: The meteorological authority, in consultation with users, may agree not to provide recent** |
| **weather information where SPECI are issued.** |

