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| **WORLD METEOROLOGICAL ORGANIZATION****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****COMMISSION FOR BASIC SYSTEMS****THE INTER-PROGRAMME EXPERT TEAM ON WIGOS FRAMEWORK IMPLEMENTATION (IPET-WIFI)*****(Third Session)*** Exeter, United Kingdom, 1 to 4 September 2015 | CBS/IPET-WIFI-3/Doc. 6(24.VIII.2015) \_\_\_\_\_\_\_\_\_ITEM: N/AOriginal: ENGLISH ONLY |

**OSCAR DEVELOPMENT**

(Submitted by Mr. S. Gilbert, UK, Chair IPET-WIFI SG-OD)

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| **Summary and purpose of document**This document provides a report of the work of the IPET-WIFI Sub-Group on OSCAR Development in preparation of the third meeting of the IPET. |

**Action proposed**

The IPET-WIFI is invited to take the contents of this report into consideration during its deliberations.

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**OSCAR DEVELOPMENT**

1. The first meeting of the IPET-WIFI SG-OD took place on the 6-8 July 2015 at the headquarters of DWD in Offenbach. The status of the OSCAR/Surface development project was reviewed, advice was provided on outstanding issues and the likely future role of the SG-OD was discussed. The report of the meeting is available at http://www.wmo.int/pages/prog/www/CBS-Reports/IOS-index.html.

2. A comprehensive database of metadata is widely recognised as a central pillar in the implementation of WIGOS and the importance of OSCAR to provide this was agreed. In the immediate term, the focus of the SG-OD will be on the development and implementation of OSCAR/Surface although the group will also keep an overview of OSCAR/Space and OSCAR/Requirements.

3. The accuracy of the metadata captured within OSCAR is of prime importance. The group recognised that due to the cross cutting nature of WIGOS there can be many organizations within a WMO Member country involved in the provision of OSCAR/Surface content, so maintenance of the information will require a comprehensive mechanism to be developed. As well as metadata provided by individual data owners, OSCAR/Surface will also contain metadata obtained from various sources, including for example from national or regional databases, and programmatic global databases such as the World Data Centres (such as ozone, radiation, greenhouse gases, etc.) and JCOMMOPS (met-ocean observing platforms). This metadata will be obtained by bulk machine-to-machine downloads, so it will be critically important for errors in such metadata to be corrected at source, and a mechanism will need to be developed to facilitate this.

4. The group was briefed on the progress of a pilot project between the DWD, MeteoSwiss, and the WMO Secretariat for the development of a generic machine-to-machine interface between national WIGOS metadata databases and OSCAR allowing the automatic and routine update of OSCAR with metadata from such databases. The Pilot Project will involve defining appropriate interfaces, protocols, and formats in consultation with the CBS OPAG-ISS. The national database of DWD for WIGOS metadata will be used for the pilot project. The members of the group expressed interest in the outcome of the pilot project and requested to be kept informed of progress.

5. It was clear from discussions at the meeting that, in contrast with OSCAR/Space, much more of the responsibility for maintenance of OSCAR/Surface content would need to lie with the owners of the data, the WMO Member organizations and their appointed staff, to ensure currency of the information content of OSCAR and to correct or update it when required, although a centralized monitoring role (perhaps a regional WIGOS centre) would also be warranted.

6. The transition from the maintenance and use of Vol A as the primary source of station metadata to OSCAR was discussed in detail. The multiple dependencies on Vol A were described, especially the Global NWP centres and the need to liaise closely with stakeholders at an early stage was agreed. OSCAR will have the capability to produce a file that is structurally similar to Vol A, and this will allow users to transition over a two year period. It was noted however that this file is not identical to Vol A and the importance of communicating this change to users at the earliest opportunity was underlined.

7. The current role of the SG-OD is mainly to respond to requests for advice from the project team and to ensure that OSCAR/Surface implementation continues in line with expectations. In the longer term OSCAR will remain a central pillar to the implementation of WIGOS and therefore expert oversight will remain important. The group noted that the governance structure of WIGOS contains both the ICG-WIGOS and the IPET-WIFI, and that a number of Task Teams exist under both groups with some overlap. The group requests IPET-WIFI to keep this issue under review in order to ensure the effective use of expert resources and if appropriate to recommend to ICG-WIGOS changes to the TT structure.

8. The actions and work plan agreed by SG-OD are provided in the report of the sub-group’s first session, available at (http://www.wmo.int/pages/prog/www/CBS-Reports/IOS-index.html).