#### ANNEX IX. OSCAR UPDATING/MAINTENANCE PROCEDURE

OSCAR Updating/Maintenance Procedure<sup>1</sup>

Proposed update to the OSCAR Updating/Maintenance Procedure<sup>2</sup>

WIGOS Information Resource

OSCAR/Space updating/maintenance procedure

V 2.0

#### Document change record

Date and Version	Description	Authorized by
10.04.2013 / v0.1	Initial draft	
29.04.2013 / v0.2	Edits by J. Lafeuille	
29.04.2013 / v0.3	Editorial changes, paragraph on content versioning, paragraph on user feedback	
1.10.2013 / v1.0	Implementation	J. Lafeuille C/SBOS
21.2.2014 / v1.1	Insertion of Section 3 OSCAR/Requirements updating process	
3.4.2014	Section 3 approved by IPET-OSDE-1	IPET-OSDE1
29.2.2016 / v1.2 (Draft)	- Section 4.2 and Step 2.1 for OSCAR/Space V. 2 - Section 8: IPET-SUP	
14.4.2016 / v1.3	Reviewed by IPET-OSDE-2 (no change)	IPET-OSDE-2
3.11.2017 / v1.4	Rationalization of management of variables in WIGOS context. Making it mandatory to record source of the requirements.	
1.2.2018 / v.1.5	Point of Contacts for Application Areas are responsible for making	IPET-OSDE-3

Note: the OSCAR/Requirements parts added to the ET-SAT approved document are highlighted in green. IPER-OSDE concurred with the Space part, and approved the Requirements part.

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Date and Version	Description	Authorized by
	sure that the Application Area "owner", i.e. the relevant Commission or Expert Group, is agreeing with the proposed requirements in OSCAR/Requirements	
17.7.2018 / v1.6	Reflected the role of O/SST and O/SSAT.  Reflected the role of CGMSSEC and its support in ensuring the factual content of OSCAR/space and the link to the annual CGMS Risk Assessment	CGMS-46
12.11.2019 / v1.7	Procedure for OSCAR/Requirements updated, so that the PoC for AAs should check whether there is any possible conflict with the WIGOS Metadata Standard; if not, the Chair of IPET-OSDE has authority to approve a new variable.	IPET-OSDE action
08.06.2022 / v2.0	Procedure updated to reflect the new RRR process	JET-EOSDE

## OSCAR/REQUIREMENTS UPDATING/MAINTENANCE PROCEDURE

#### 1. INTRODUCTION

### 1.1 Purpose and scope

This procedure defines the roles, responsibilities and steps to be followed to update content, functionality and interface of the OSCAR/Requirements module with the aim to ensure that the database content is up-to-date, correct, quality-controlled, accessible and fit for purpose.

## 1.2 Document plan

The document contains seven sections:

Section 1: Introduction

Section 2: Roles

Section 3: OSCAR/Requirements updating process

#### 1.3 Background documents

• ISO/IEC 14764:2006 Software Maintenance

• Guide to Instruments and Methods of Observation (WMO-No. 8)

• Rolling Review of Requirements (RRR) process

#### 1.4 Definitions

Acronym	Definition
AA	Application Area
JET-EOSDE	Joint Expert Team on Earth Observing System Design and Evolution
OSCAR	Observing System Capability Analysis and Review Tool
TT-WIGOSMD	Task Team on WIGOS Metadata
WIGOS	WMO Integrated Global Observing system
WMDR	WIGOS Metadata Repository

## 2. ROLES

The updating and maintenance processes involve the following roles. In practice, one person can take multiple roles.

Role name	Description
PoC	Point of Contact in charge of reviewing and updating the requirements for a given Application Area identified in the RRR process
JET-EOSDE	Joint Expert Team on Earth Observing System Design and Evolution, responsible for providing oversight on the RRR
TT-WIGOSMD	Task Team on WIGOS Metadata Standard, responsible for maintaining the WIGOS Metadata Standard and associated terminology
WIGOS Tools Project Manager	Person responsible for coordinating the overall WIGOS Tools developments including OSCAR developments
OSCAR Developer	Person(s) responsible for the technical developments of the OSCAR tool
OSCAR Technical Administrator	Person(s) responsible for the maintenance and operation of the OSCAR tool [Note: possibly different persons for OSCAR/Requirements, OSCAR/Space, OSCAR Surface]

**Requirements owner**: In addition, observational user requirements in OSCAR/Requirements shall be owned by an identified body or expert group representing the relevant community (e.g. Technical Commission). The PoC for Application Areas are responsible for making sure that the Application Area "owner" is agreeing with the proposed requirements in OSCAR/Requirements.

# 3. OSCAR/REQUIREMENTS UPDATING PROCESS

## 3.1 Explanations

This section applies to the updating of the <u>contents</u> of OSCAR/Requirements. For changes to the <u>functionality</u> of OSCAR, please refer to Section 5.

The variables registered in OSCAR are generally shared by several application areas. Each variable has the following attributes, which can only be updated by the administrator.

TABLE IX.1: Attributes of a variable in OSCAR

Attribute	Example
Name	Sea-surface temperature
Applicable cross-cutting tags	Cryosphere, Tropical Meteorology
Domain or sub-domain	Ocean
Definition	Temperature of the sea water at surface. The "bulk" temperature refers to the depth of typically 2 m, the "skin" refers to within the upper 1 mm
Comment	Detailed SST definitions are available from GHRSST: https://www.ghrsst.org/ghrsst-science/sst-definitions/
Measuring unit	K
Uncertainty unit	K
Stability unit per decade	K
Unit for horizontal resolution	km
Unit for vertical resolution	
Applicable layers	Sea-surface, Bulk

## 3.2 New variables or changes to the attributes of a variable

The following steps shall be followed when entering a new variable or updating any attribute of an existing variable:

Step	Description	Responsibility	Frequency
1	When identifying the need to either register a new variable or amending the attributes of an existing variable, the Point of Contact or a relevant expert submits the proposed attributes (as listed in Table IX.1) to the administrator with a brief justification	PoC or other expert	When needed
2	The administrator checks the formal consistency of the recommended change, seeking clarification from the initiator if necessary.  Check whether there is any possible conflict with the WIGOS Metadata Standard.  If the change is minor (e.g. adding a layer, or editorial correction on the definition, etc.) the administrator jumps to step 6	Administrator	When contacted by a PoC or other expert
3	If the recommended change is substantial and/or has a potential impact on the requirements of several applications, the administrator should consult WMDR first and then seek confirmation from the JET-EOSDE Chair	Administrator	When appropriate
4	The JET-EOSDE Chair reviews the proposed change, may contact the expert for further discussion, or submits the proposal to discussion by JET-EOSDE, and then submits proposal to the Chair of the TT-WIGOSMD for decision	JET-EOSDE Chair	When appropriate
5	The TT-WIGOSMD Chair either confirms the proposed change or consults with TT-WMD and/or other experts for clarification or alternate proposal	TT-WIGOSMD Chair	When appropriate
6	Upon confirmation by the TT-WIGOSMD Chair, or if the recommended change is minor, the OSCAR/Requirements administrator implements the change	Administrator	When a proposed change is confirmed

## 3.3 Requirements applicable to an existing variable

The provisions below are applicable when a requirement is updated, or a new requirement is entered, for a variable which is recorded in OSCAR, without changing the definition, unit, or applicable layers of this variable.

Step	Description	Responsibility	Frequency
1	The PoC reviews the requirements of his/her application area in consistency with the SoG, taking into account the evolution occurred in the application area.	PoC	Yearly
2	If updates are necessary, the PoC consults with the group which is the owner of the application area, and then obtains concurrence about the proposed changes.	PoC, AA Owner	Yearly
3	If updates are necessary, and concurrence of the AA owner is obtained, the PoC logs in as Editor, and updates the requirements or enters new requirements as appropriate. If necessary he/she contacts the administrator for assistance. Information about the source of the requirement ought to be added in the database in the corresponding field.	PoC	Yearly
4	When the update is ready, the PoC informs the OSCAR/Requirements administrator that requirements are in draft status.	PoC	When update is ready for validation
5	The administrator checks the formal consistency of the new or updated requirement. If the updates are purely editorial or a factual correction, the administrator jumps to step 7.	Administrator	When requested
6	If the updates are substantial, the administrator seeks confirmation from the JET-EOSDE Chair.	Administrator	When relevant
7	The JET-EOSDE Chair either confirms the updated requirement, or contacts the PoC for further discussion, or submits the proposed update to TT-WIGOSMD for discussion.	JET-EOSDE Chair	When relevant
8	Upon confirmation by the TT-WIGOSMD Chair, or endorsement by JET-EOSDE, or if the draft update is minor, the OSCAR/Requirements administrator validates the update.	Administrator	When confirmed