

WMO OSCAR Space Database Contents Maintenance Scheme

CGMS-46-WMO-WP-02

Presented to CGMS-46 Plenary session, agenda item C
WMO Secretariat

The WMO ***Observing System Capability Analysis and Review tool (OSCAR) Space*** has been developed since 2012, when it replaced, as a database, the previous ***Dossier on the Space-based Global Observing System***, published from 2004 to 2012. As compared with other major databases, such as:

- **ESA-sponsored *EO portal***;

<https://directory.eoportal.org/web/eoportal/satellite-missions>

that provides detailed descriptions of both Earth observation and Space weather satellites;

- **CEOS *Mission, Instruments and Measurements (MIM)***;

<http://database.eohandbook.com/>

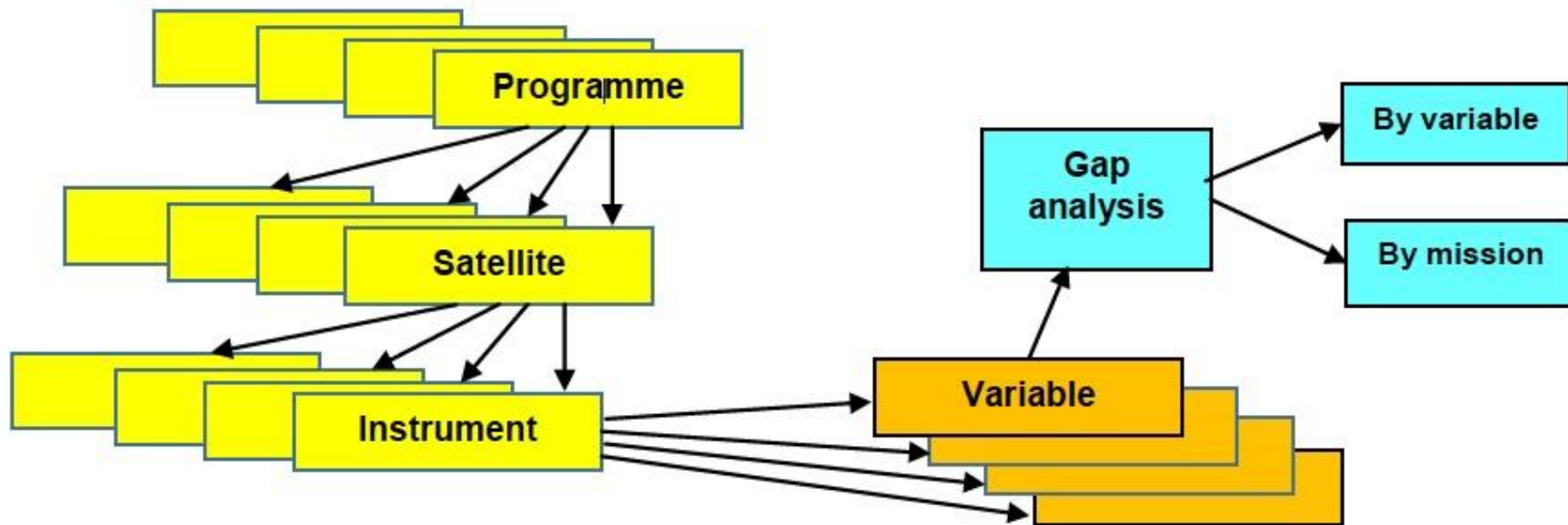
briefly describing all EO (not including Space weather) programmes declared by the CEOS members

- **WMO *OSCAR/Space*** (<https://www.wmo-sat.info/oscar/spacecapabilities>) includes estimates of the geophysical variables potentially retrievable from the various instruments, including **rating of the achievable performances** and the indication of **possible operational limitations**. In addition, on request of CGMS, the **radio frequency plan** of meteorological and some associated satellites is reported.

Possible Synergy with CEOS MIM Database

A45.03: WMO to, in collaboration with CEOS, to investigate the possibility of aligning the reporting templates for OSCAR/Space with those used to update the CEOS MIM database, at least for common parameters, thus facilitating the reporting task at the agency level.

- A proposal “*A possible Collaboration in the Collection of Information from Space Agencies for OSCAR/Space and MIM*”, was delivered to ESA, dated 4 November 2017.
- Through the discussion, it was become obvious that the templates used in WMO have a level of detail (and complication) by far exceeding what is needed for MIM.
- The WMO templates cannot be simplified because the information is due to feed the OSCAR/Space architecture, designed to evaluate and rate the Variables potentially retrievable from an instrument, and support the Gap analyses by Variable and by Mission.
- However, WMO are interested in continuing and extending discussion with ESA on a possible cooperation for the development of both data base.



Templates to input information on satellite programmes, series of satellites and instruments for OSCAR/Space Database are now available tentatively from the following link;

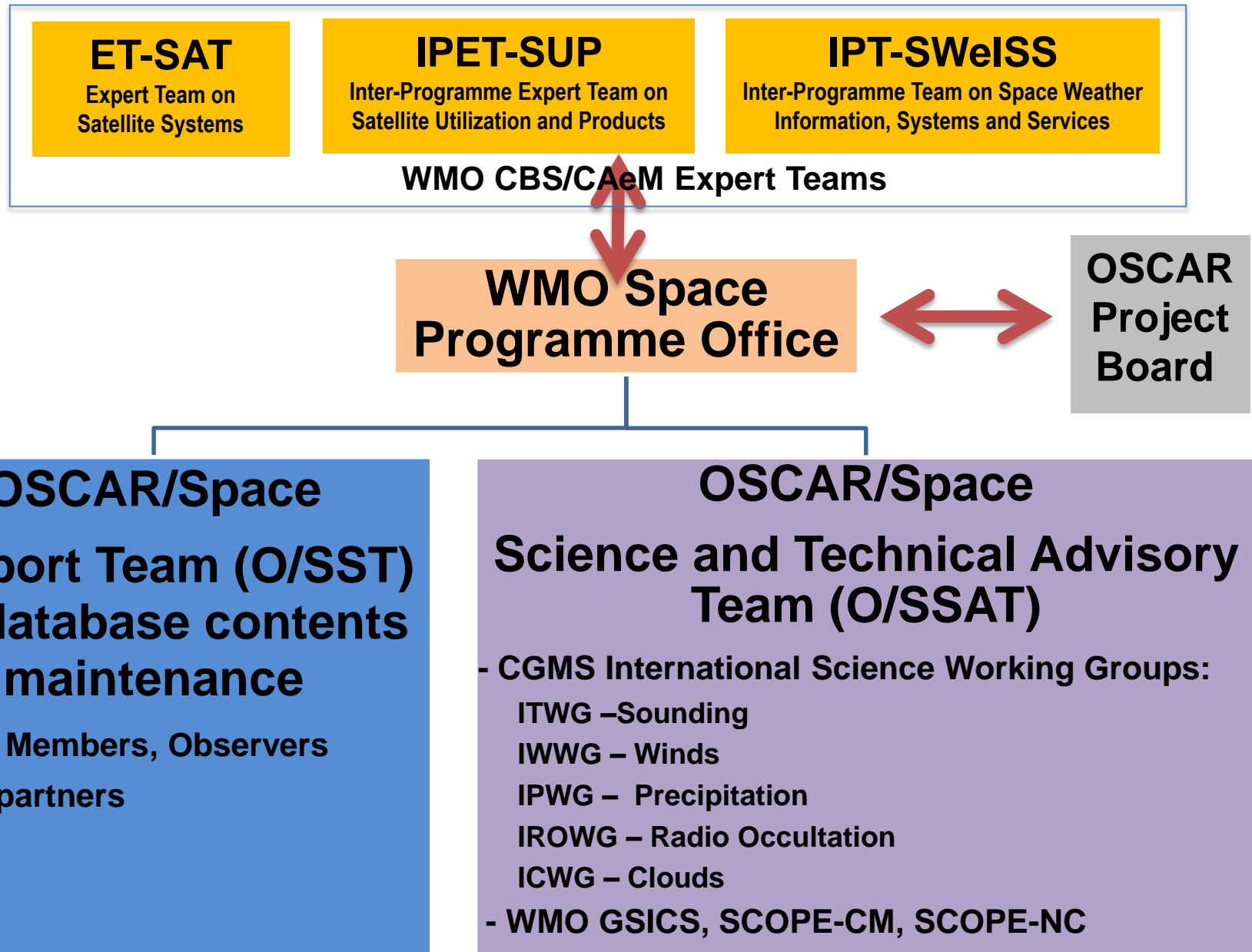
http://www.wmo.int/pages/prog/sat/meetings/GSICS-EP-19/documents/CGMS-46-WMO-WP-02_Annex1_Templates.xlsx

Two Actions for OSCAR/Space Database Contents Maintenance

WGIII/A44.03: CGMS operators nominate focal points for maintaining these elements (dates, landing pages), and other elements included in OSCAR/Space (e.g., instrument characteristics)

A45.04: CGMS to invite the ISWGs to nominate experts for participation in the OSCAR/Space Science and Technical Advisory Team

Maintenance and Support Scheme for OSCAR/Space



OSCAR/Space Support Team (O/SST)

- It is obviously important to ensure that information on satellite launches and instrument descriptions in OSCAR/Space is accurate and up-to-date. However, difficulties are to collect and update information on satellite and instrument status.
- This scheme is currently not well implemented, and, as a result, will produce significant biases in the Gap Analysis, **where satellites and instruments that are no longer operational, some since long ago, still continue to be reported as active.**
- Inquiry letters have been prepared for 14 CGMS members and observers, and delivered from WMO. The inquiry provides templates indicating the satellites and the instruments for which the information on status should be updated.

Agency	Country	Inquiry	Replay	PoC
CMA	China	27 Nov 2017	-	Yes*
CNES	France	18 Apr 2018	-	
CNSA	China	27 Nov 2017	-	
CSA	Canada	22 Feb2018	-	
ESA	International	11 Dec 2017	-	Yes**
EUMETSAT	International	27 Nov 2017	-	Yes*
IMD	India	NA	NA	Yes*
ISRO	India	27 Nov 2017	13 Feb 2018	Yes*
JAXA	Japan	27 Nov 2017	-	Yes**
JMA	Japan	27 Nov 2017	20 Feb 2018	Yes**
KMA	Korea	27 Nov 2017	26 Dec 2017	Yes**
NASA	USA	27 Nov 2017	-	Yes*
NOAA	USA	27 Nov 2017	12 Jan 2018	Yes*
Roscoms	Russia	04 Dec 2017	-	yes***
RosHydroMet	Russia	04 Dec 2017	-	yes***

OSCAR/Space Science and Technical Advisory Team (O/SSAT)

O/SSAT is well organized/functioning with dedicated contributions from the CGMS ISWGs' experts (ITWG, IWWG, IPWG, ICWG, IROWG) and GSICS.

The following topics are under review;

- Definition of the relevant spectral intervals and identification of the relevant instruments;
- Identification and flagging of the reference instruments
- OSCAR/Space Database System “Bugs and Requirements”

A45.06: CGMS Agencies to implement Landing Pages on calibration events accessed via WMO-OSCAR/Space

The landing pages has been provided through CGMS representatives. Reports are available from 5 agencies (as of February 2018): CMA, EUMETSAT, JMA, KMA, NOAA, and expected to be provided from other CGMS members: ESA, IMD, NASA, ROSHYDROMET

CGMS WG-III Workshop on Contingency Planning, new CGMS Baseline and Gap Analysis, and follow-up discussion in WG-III

- The workshop recommended;
CGMS Members to utilize OSCAR/Space database as a reference common tool for CGMS gap analysis and risk assessment.

and a significant expert effort is expected to ensure that the OSCAR/Space information regarding upcoming and future missions is accurate, up-to-date and consistent.

- For replying this request a new CGMS action was therefore proposed:

CGMSSEC in cooperation with WMO to investigate the provision of dedicated resource to support the annual CGMS risk assessment.

Action/Recommendations proposed

- CGMS Members and observers to nominate experts for membership in the OSCAR/Space Support Team (O/SST). (as a follow-up CGMS action 44.03)
- The OSCAR/Space Support Team (O/SST) to continue providing information on their satellite programmes to be recorded in OSCAR/Space, according to the recommended procedure with templates provided by WMO.
- CGMS Members are recommended to utilize OSCAR/Space database as a reference common tool for gap analysis and risk assessment.
- CGMS secretariat in cooperation with WMO to investigate the provision of dedicated resource to support CGMS Risk Assessment and coordinate the provision of OSCAR/Space Database content.

OSCAR/Space Users' Workshop

OSCAR/Space Users' Workshop was held in October 2017 in EUMETSAT Users' Conference for:

- (1) further promote the use of OSCAR/Space;
- (2) inviting users to present their experiences in using OSCAR/Space
- (3) seeking contributions from users to the maintenance of OSCAR/Space.

Information on OSCAR/Space

- Most up-to-date and relevant is the User Manual
http://www.wmo.int/pages/prog/sat/documents/OSCAR_User_Manual-2016-09-10.pdf
- it is currently linked on the OSCAR homepage
<https://www.wmo-sat.info/oscar/>
- On the same page, we also have a flyer but it needs updating:
http://www.wmo.int/pages/prog/sat/documents/oscar_brochure.pdf



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Thank you



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