

# Working Group III Key Recommendations to CGMS Plenary 53

Presented to CGMS-53 Plenary, agenda item 5

## Objectives

Working Group III has the following objectives:

1. Review and propose the **CGMS Baseline**, with reference to the Vision for WMO Integrated Global Observing System (WIGOS) 2040 and taking into account the strategic plans of the CGMS members.;
2. Monitor the implementation of the CGMS Baseline;
3. Conduct an **annual risk assessment** of CGMS member contributions against the CGMS Baseline;
4. Identify service continuity issues and initiate risk analysis as appropriate;
5. **Propose contingency planning** addressing specific observational gaps or disruption to services to CGMS Plenary;
6. Propose optimisation measures for the observing systems as appropriate;
7. **Map relevant R&D missions into the baseline and risk assessment**; and
8. **Ensure the OSCAR/Space information is up to date** and utilise the database for CGMS risk assessment activities.
9. Develop capacity **to assess socio-economic benefits** of CGMS satellite missions.

## WG III meetings (CGMS-52 -> CGMS-53)

- **7th CGMS WGIII Risk Assessment Workshop**

- The 7th CGMS WGIII RAWS has been held from Feb. 25th to 27th, 2025.
- The risk assessment on meteorological satellites operational continuity in 2025 has been conducted, the risk assessment results have been updated.



- **CGMS-53 plenary working group III session**

- Held in March 27 in Xi'an, China.
- The CGMS baseline, HLPP documents, etc. have been updated and submitted to the plenary meeting for endorsement.

- **Intersessional meeting**

- 10 March 2025;
- 22 January 2025;
- 6 November 2024;
- 9 September 2024.



## Key Activities of WGIII in the Intersessional Period

- Received updates on significant observational missions (CMA missions, China's GHG missions, ESA's CIMR-A and –B, EUMETSAT's approach for continuation of IODC observations, etc.), Member engagement with the private sector (CMA and NOAA), CGMS Socioeconomic benefit activities and member socioeconomic benefit studies (Eumetsat、JMA), the WIGOS Vision, OSCAR Space, as well as WMO's efforts to establish core satellite data and received a presentation from CMA on their best practices for regional EW4ALL for the benefit of the local government.
- Conducted the [7<sup>th</sup> CGMS Risk Assessment](#)
  - Agreed to add assumption statement to Risk Assessment regarding the risk of ground segment (e.g. low data latency)
- Recommended updates to the [CGMS Baseline](#) and CGMS Contingency Plan
- Advanced the [CGMS Futures 2022+ Relationship with the Private Sector Theme](#) by publishing the CGMS Best Practices for Commercial Data Buys (endorsed by CGMS-52), implementing the standing WGIII agenda item for member updates on engagement with the private sector, institutionalizing a mechanism to engage commercial industry by developing a mutually beneficial partnership with the WMO Public-Private Engagement (PPE) Office.

## WGIII Proposed Edits to the HLPP:

### Propose for Closure: Working Group III proposes to consider these achieved:

1.2.5 Work towards ensuring low frequency microwave imagery for all-weather SST and ice monitoring from at least 2 sun-synchronous orbits.

- CIMR to be confirmed by ESA. Could then be considered achieved as the measurement will be provided from AMSR-3 (PM orbit) and CIMR (EM orbit).

1.2.7 Work towards increasing geographical resolution and coverage for altimetry measurements, including very high latitudes.

- CRISTAL to be confirmed by EU/ESA. Regarding the general coverage of altimetry missions, very promising results are achieved by SWOT, but any operational mission in the future is unknown.

1.3 Ensure long-term continuity of OSCAR/Space as a primary tool to support the CGMS Risk assessment and the WMO Rolling Review of Requirements including gap analysis against observing system requirements for satellite data and make OSCAR/Space the primary repository for WIGOS satellite metadata records generated by CGMS operators -

- To be removed in HLPP due to highlighted elsewhere already

1.6.1. Identify/evaluate potential or commercial Earth observation technologies -- and share information on pilots/testbeds etc. to evaluate new commercial EO technologies.

- WGIII has successfully institutionalized this action through the adoption by CGMS 52 of the WGIII standing agenda item, and item 1.6.1 could be considered complete.

1.6.2 Assess the operational maturity of commercial observation technology

- CGMS WGIII will consider technologies presented under its standing agenda item on public private engagement with collaboration of WMO PPE office, and the item 1.6.2 can be considered completed.

1.6.3 Develop best practices/templates for end user license agreements/ procurements, for considering the value of public access and the additional costs of data sharing rights, including quality control considerations

- CGMS 52 endorsed the best practices document in 2024. WGIII has an action to review the best practices document every two years an update if needed. item 1.6.3 can be considered completed.

## WGIII Proposed Edits to the HLPP:

**Propose Change to Yellow:** 1.2.3 Work towards operational hourly daytime UV/VIS mapping of air quality from geostationary orbit as GEMS has now been removed from baseline and the UV GEO capability will only be provided by MTG-S1/Sentinel-4 for the foreseeable future.

**Propose to Edit:** WGIII reviewed CGMS baseline to reflect all aerosol capabilities and proposes the following edit:

1.2.1 Work towards establishing optimum constellations for new observations introduced in the CGMS baseline:

- Short-wave IR spectrometers for monitoring of greenhouse gases (CO<sub>2</sub> and CH<sub>4</sub>).
- ~~Multi-viewing, multi-channel, multi-polarisation imaging for aerosols.~~
  - The main capability will be provided by 3MI on Metop-SG A. Requirements for more frequent observations have not been stated in WMO GA. Action could be considered closed.
- UV limb sounding spectrometry for profiles of Ozone and trace gases.

**WGIII also reviewed the following HLPP items with no proposed changes:**

1.1 Mitigate the impact of identified degradation or loss of capabilities of the CGMS Baseline and ensure appropriate contingency measures **(GREEN)**

(1.1.1, 1.1.1, 1.1.2, 1.1.4)

1.2 Advance the response to the WIGOS 2040 Vision for space **(YELLOW)** (1.2.3, 1.2.4, 1.2.5, 1.2.7, 1.2.8, 1.2.9, 1.2.11, 1.2.12, 1.2.13, 1.2.14)

1.4 Assess impact and benefits of CGMS satellite missions **(GREEN)** (1.4.1, 1.4.2, 1.4.3)

## To be considered by CGMS plenary:

- Approve the [CGMS Baseline](#)
- Approve the [CGMS Contingency Plan](#)
- Accept the [7<sup>th</sup> CGMS Risk Assessment](#)
- Accept proposed updates to the High Level Priority Plan (HLPP)
- Endorse conclusion of the [CGMS Futures Project 2022+: Relationship to the Private Sector theme](#)
- Members are encouraged to participate in the presenting under the two WGIII standing agenda items: Socioeconomic Benefits and Relationship with the Private Sector, and engage in WMO Open Consultative Platform efforts and discussions when appropriate.
- Note that the **8<sup>th</sup> CGMS Risk Assessment Workshop** will be held virtually from 3-6 February 2026