

Report of Working Group III

OPERATIONAL CONTINUITY & CONTINGENCY PLANNING

Participants

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Scope of the working group

- Monitor status of satellite programmes of CGMS Members to identify any risk that could affect the continuity of observation
- Maintain a contingency planning framework and address potential contingency situations through coordinated actions
- Monitor implementation of the CGMS baseline and contribution to climate monitoring architecture
- Support optimization of the space-based observing system

HLPP 1.1 Coordination of observing systems

- o *Coordinate the implementation of the CGMS baseline missions (updated nominal locations/orbits, operators), including optimisation of the distribution of Low Earth Orbit (LEO) sun-synchronous orbits to ensure efficient temporal sampling of the atmosphere and of the oceans;*
- o *Support satellite impact studies including regional verification;*

- Outcome of the Tiger Team (WMO-WP-13)
- Progress of CMA/CNSA technical studies (CMA-WP-09) for the adaptation of an FY-3 satellite to a 6:00 ECT orbit; earliest possibility would be FY-3E (2016 launch)
- **WMO to send a letter to the PR of China to commend CMA on progress made, report on the outcome of CGMS-41 discussions on FY-3 redeployment, and confirm the strong support of the international community on this endeavour.**
- **NOAA to provide a report on the benefit of Day-Night imagery (e.g. as experienced with SNPP/VIIRS) at CGMS-42 in order to assist CMA in refining its requirements for an imager for the early morning orbit mission.**

HLPP 1.1 Coordination of observing systems (cont'd)

- o Facilitate the evolution of research short-term missions to an operational status (where appropriate e.g. HEO missions);*
 - No discussion on this topic
 - **NOAA to report at CGMS-42 on its activities towards transitioning mature R&D missions to an operational status.**
- o Identifying partnership opportunities on space and ground segments and establish CGMS coordinated mechanisms for hosted payloads, e.g. for solar wind monitoring;*
 - Not addressed in this session.

HLPP 1.1 Coordination of observing systems (cont'd)

- o *Investigate through IROWG how a coordinated and optimized system could be set up for radio-occultation observations for atmosphere and ionosphere monitoring;*
- o *Identify potential gaps and ensure appropriate contingency measures are in place including analysis of budget constraints and associated risk assessment.*
- Review of gaps and risks, WMO EC Resolution on “avoiding gaps on essential observations”
- **WMO to circulate an updated mapping of CGMS members’ missions to the CGMS baseline for operational/sustained missions, for review by CGMS Members (31/8)**
- **All CGMS Members to provide feedback on the updated mapping of satellite plans with the CGMS baseline (30 /09/2013).**
- **EUMETSAT to initiate the dialogue with ISRO/IMD, CMA, ROSHYDROMET/ROSCOSMOS and other interested partners to investigate a medium-term strategy for ensuring coverage of the Indian Ocean coverage with advanced geostationary imagery. (15 January 2014)**
- **NOAA to provide update on the study to optimize the GOES-E scanning mode with a view to ensure a sufficient number of South America scans during North America rapid scan periods.**

HLPP 1.1 Coordination of observing systems (cont'd)

- **IROWG to update its assessment of the planned availability of radio-occultation data taking into account the risks on the funding of the US part of the COSMIC-2 polar constellation, and to report at the IROWG workshop to be held in Graz, Austria on 5-11 September 2013. (September 2013)**
- **WMO to send a letter to the United States (appropriate authority t.b.d.) recalling the demonstrated impact of radio-occultation observations on NWP and their use in climate monitoring and space weather, highlighting the major role expected to be played by the COSMIC-2 programme in the global observing system, and stressing the concerns of the global community about the risks on the funding of the US contribution, which would dramatically affect the implementation of this programme. (Mid October 2013)**
- **EUMETSAT to report on its study on RO constellation optimization at CGMS-42.**

HLPP 5.1 Advancing the architecture for climate monitoring from space

- o *Assess how CGMS can optimally contribute to the implementation of the GFCS by taking an active role in the construction of the Architecture for Climate Monitoring from Space;*
- o *Evaluate the “CGMS baseline for the operational contribution to the GOS” in the light of the logical view of the architecture;*
- o *Ensure the data holdings of CGMS members are appropriately reflected in the Architecture for Climate Monitoring from Space (physical view) through their systematic contributions to the Essential Climate Variable (ECV) Inventory;*
- o *Work with CEOS towards a sustainable implementation of the global architecture for climate monitoring from space*

- Joint Climate WG, mapping of ECV inventory to the CGMS baseline
- **Recom: Extend the ECV product inventory to FCDRs**
- **Recom: Sensor design phase should analyze compatibility with heritage instruments**
- **G III (TBD) to review the categorization of missions in the CGMS baseline and refine it in order to support a high-level mapping with FCDRs.**
- **WG III (TBD) to define a first list of FCDRs that CGMS Members can commit to provide on a sustained basis, as a contribution to the architecture, building on the CGMS baseline, and communicate it to the new climate-WG.**

HLPP 4.1 Impact and benefit of EO satellite missions

- o *Develop a credible methodology for assessing the socio-economic benefit of investment in EO satellite missions;*
- o *Engage in communication and outreach activities to promote EO benefits.*

- Terms of reference and suggested membership of a Tiger Team on assessing the impact and socio-economic benefits of space missions
 - (i) to develop a credible methodology and common terminology for articulating the socio-economic benefit of satellite observing systems,
 - (ii) to explore most effective ways to communicate this information to desired stakeholders

- **CGMS members to nominate participants in the Tiger Team on socio-economic benefits of space missions.**

- **NOAA, as the initiator of the Tiger Team on socio-economic benefits, to request inputs from all CGMS members on available socio-economic benefit studies and case studies in order to allow the Tiger Team to compile the existing information as soon as members are nominated.**

- **WGIII co-chairs to plan addressing the Tiger Team on Socio-economic Benefits actions at the first WG III intersession meeting.**

Intersessional milestones

9 October 2013

- Updated mapping of the agencies' plans to the CGMS baseline
- Status of the letter to CMA on the progress of LEO Tiger Team
- Status of the letter to the USA on US contribution to COSMIC-2
- Outcome of IROWG workshop on RO constellation assessment
- Implementation of the Tiger Team on Socio-economic benefits

15 January 2014

- Update on Indian Ocean coverage strategy
- Update on GOES-East scan mode optimization
- Update on SNPP-JPSS transition and COSMIC-2 funding
- mapping of the current/future constellations to the climate architecture model

2 April 2014

- Status of EUMETSAT/CMA dialogue and FY-3 data assimilation
- Preparation of CGMS-42