

WGI action items & recommendations Title

Presented to CGMS-52 WG-I session, agenda item 8

Executive summary of the WP

This presentation provides a status of WGI actions and recommendations in the lead up to CGMS-52.

The purpose is to:

- Review all existing actions and update them based on the inputs and discussions throughout today's WGI meeting
- Agree on new actions to be opened based on the inputs and discussions throughout today's WGI meeting

Action items review – RFI (1/2)

Action e	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
TGRFI	3.1	WGI/A51.04	Analyse the inputs provided by CMA, EUMETSAT, KMA and NOAA on spectrum concerns and activities on RFI detection, monitoring and mapping, and pursue the establishment of a draft set of best practices, based on the common aspects of the approaches already adopted by members.	<p>2024 Apr 22 (WGI): The draft best practice was presented and well received. The completed best practice will be presented for endorsement in CGMS-53.</p> <p>2024 Mar 15: Best Practice preparation progressing, to be finalised after intersessional on 26 March.</p> <p>2024 Jan 24: A draft Best Practice is being prepared and will be presented to WGI in April.</p> <p>2023 Sep 26: Action on this will be taken following first TG on RFI intersessional, expected in October 2023.</p>	CGMS-53	OPEN	2.2.3
TGRFI	3.1	WGI/A51.05	Explore the potential / existing uses of AI/ML and pattern recognition in the area of RFI detection	<p>2024 Apr 22 (WGI): The group will place more focus on this action in the lead up to CGMS-53. Markus highlighted that uses of AI/ML may be relevant for RFI management in view of large constellations.</p> <p>2024 Jan 24: To be discussed in more detail in next intersessional.</p> <p>2023 Sep 26: Action on this will be taken following first TG on RFI intersessional, expected in October 2023.</p>	CGMS-53	OPEN	

Action items review – RFI (2/2)

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLP P ref
CGMS Members	2.1	WGI/A50.02	CGMS members to urge their national regulatory authorities, when establishing new regulations for use of active services and applications, to appropriately take into account the protection requirements of passive sensors and that the bands listed in RR FN 5.340 will not be opened for a shared use with active services.	<p>2024 Jan 24: WRC took place and Markus presented an overview to WGI. If necessary, a new action will be opened in the future. Action closed.</p> <p>2023 26 Sep: ESA and EUMETSAT have worked together to ensure this is on the WRC-27 agenda. Further work needed in other regions outside Europe.</p> <p>2023 24 Apr (CGMS-51 WGI): Keep action active until WRC-23 and update thereafter.</p> <p>Past activities:</p> <p>2023 21 Mar: There will be a WRC preparatory meeting in next 2 weeks. This is a permanent activity. This action should remain open to increase visibility within CGMS and highlight the importance of this activity. Markus will highlight this issue again in his report.</p> <p>2023 24 Jan: EUMETSAT and ESA actively provide inputs to WRC and WRC 2027 agenda.</p>	WRC-23	CLOSED	2.2.2
WMO	2.1	WGI/A51.03	WMO to introduce the templates agreed with the SFCG for updating the remote sensor information in OSCAR/Space into the current procedure through the OSCAR/Space Support Team (O/SST).	<p>2024 Apr 22 (WGI): Closed.</p> <p>2024 Mar 15: Completed, proposed for closure.</p> <p>2024 Jan 24: Same as previous report.</p> <p>2023 Sep 26: Information has been shared with O/SST. Final confirmation expected.</p>	End of 2023	CLOSED	1.3

Action items review – LLDA (1/2)

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
LLDA TG	5.1	WGI/A51.06	<p>Merge the Direct Broadcast Systems and LEO Coordination tasks groups into a single “Low latency Data Access from LEO Satellites” task group, with Andrew Monham and Antoine Jeanjean as Co-chairs.</p> <p>Finalise the draft Terms of Reference with inputs from WGI and taking into account the specific goals from the CGMS Position Papers, in particular the “Future Information Technologies” and “Future Observing (Hybrid) Space Infrastructures”.</p> <p>Present the finalised ToRs for endorsement to CGMS-52.</p> <p>The work of the TG should include keeping the SWOT analysis current (process to be noted in the ToRs).</p> <p>As part of the merge, update and present the list of members, create a new mailing list LWGI_LLDA@LISTSERV.EUMETSAT.INT, remove old mailing list.</p>	<p>2024 Apr 22 (WGI): WGI endorsed the Low Latency Data Access Task Group Terms of Reference. Action closed.</p> <p>2024 Mar 15: ToRs are included in the TG Report. TG mailing list created, some technical problems being addressed.</p> <p>2024 Jan 24: Draft ToR prepared and will be part of the TG report.</p> <p>2023 Sep 26: ToR under preparation. Draft was presented last year, and comments from TG welcome.</p>	CGMS-52	CLOSED	2.9.2
LLDA TG	5.5	WGI/A51.09	<p>Merge the LEO (Global) and DB (regional) best practices into a single “Low Latency Best Practices” document proposed to be structured as follow:</p> <ul style="list-style-type: none"> • Common BPs for both regional and global missions • BPs specific for DB • BPs specific for global mission <p>Present the merged BPs for endorsement to CGMS-52.</p>	<p>2024 Apr 22 (WGI): A draft was presented to CGMS-52. TG will continue work on the merged best practices in the lead up to CGMS-53 and present them for endorsement in CGMS-53. Once endorsed, the agencies can begin to present on their status against the updated best practices in CGMS-54. In CGMS-53, EUMETSAT would already present against the proposed merged best practices, to serve as a template for all agencies in CGMS-54.</p> <p>2024 Mar 15: Draft will be presented to CGMS-52 WGs, final iteration will be presented to CGMS-53.</p> <p>2024 Jan 24: First draft under preparation – ongoing.</p> <p>2023 Sep 26: Work underway.</p>	CGMS-52	OPEN	2.3.3

Action items review – LLDA (2/2)

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
LLDA TG	5.1	WGI/A51.07	Distribute a summary of the SWOT analysis on Low Latency Data Access from LEO meteorological satellites to the remaining CGMS Working Groups.	<p>2024 Apr 22 (WGI): SWOT presented. Closed.</p> <p>2024 Mar 15: SWOT drafted, on track for CGMS WGs. 2024 Jan 24: Summary prepared and will be presented in WGI as a separate item. It will then be distributed to CGMS members after CGMS-52. Frequency protection to be added, in coordination with Markus. 2023 Sep 26: Work underway.</p>	CGMS-52	CLOSED	2.3.3
LLDA TG	5.1	WGI/A51.08	Analyse potential role of satellite platform as a service (SPaaS), considering current and expected providers, internet connection speed, hosted instruments specifications (size/weight/power), orbit type, satellite lifetime and cost breakdown. Report to CGMS-52.	<p>2024 Apr 22 (WGI): SPaaS Analysis made - forms part of the SWOT Analysis. Closed.</p> <p>2024 Mar 15: Part of SWOT drafted, on track for CGMS WGs. 2024 Jan 24: This is identified as an opportunity in the SWOT. 2023 Sep 26: Work underway. There are satellite providers that can host a small/medium instrument. NASA are looking at a Rapid Space Programme making use of an existing platform.</p>	CGMS-52	CLOSED.	2.9.1

Action items review – Space Environment Sustainability

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
TG on Space Environment Sustainability	5.1	WGI/A5 0.07	Deliver a Best Practice document on Space Environment Sustainability, with supporting presentation to CGMS WGI, for recommendation for endorsement in CGMS-52.	<p>2024 Apr 22 (WGI): To be developed in the lead up to CGMS-53.</p> <p>2024 Mar 15: Target continues to be CGMS-53. 2024 Jan 24: The TG activities are starting and ToR being prepared, but best practice will not be ready for CGMS-52. Target would be CGMS-53. 2023 26 Sep: Action on this will be taken following first intersessional of the TG (expected November 2023). 2023 24 Apr (CGMS-51 WGI): Action to be kept open, and pursued by TG in the lead up to CGMS-52. This should be based on previous inputs from EUMETSAT and NOAA, and seek wider participation from CGMS agencies. 2023 21 Mar: No updates, way forward to be discussed in CGMS-51 WGI. 2023 24 Jan: No updates. Tom will follow up with Brian Walling. 2022 27 Sep: Task Group meeting to be held</p>	CGMS-53	OPEN	2.6.2

Action items review – Satellite Data and Codes

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
TG SDC, WMO	WGIV/5	WGIV/A49.02	<p>The CGMS Task Group on Satellite Data and Codes to work closely with WMO on addressing the following points:</p> <ul style="list-style-type: none"> i. Linking between OSCAR/Space and the WSI and/or CCT C-5 identifiers (WMO internal) ii. Potential extension of the use of the Issue Number in the WSI for satellites in order to explicitly indicate metadata which are otherwise only implicitly embedded in the Local Identifier (CGMS-50) iii. Identification of when and how the WSI should be included in the satellite products exchanges in the context of the WIGOS (CGMS-50) <p>(ref CGMS-49-WMO-WP-08)</p>	<p>2024 Apr 22 (WGI): C-5 identifiers completed, C-8 identifiers in progress.</p> <p>2024 Jan 24: Ongoing</p> <p>2023 26 Sep: Well in progress. Should be implemented before INFCOM-3. Submission expected to INFCOM-3 in April 2024.</p> <p>2023 24 Apr (CGMS-51 WGI): Action is progressing and expected to be closed soon.</p> <p>2023 21 Mar: No update</p> <p>2023 24 Jan: Simon is in discussion with Heikki, who is working on this. Progress on this action will be reported in the TGSDC report for CGMS-51.</p> <p>2022 27 Sep: First intersessional meeting was held in September 2022. Participation was very low. Broader participation in intersessional meetings is encouraged, but communication is handled also via offline email communication.</p> <p>CGMS-50: The Task Group is continuing to work on the use of WIGOS Station identifiers for satellite products. CGMS-50-CGMS-WP-14 includes text prepared by WMO Secretariat for the guide on the WIGOS explaining the use of WIGOS Station Identifiers for satellites. The Task Group continues to assess the best use the Issue Number (currently fixed to 0) in the future.</p> <p>2022 11 Apr: Transferred to WGI. To be discussed with WMO (Simon, Chair, to follow up). WMO will first complete the ongoing WSI for satellites design and documentation in WIGOS Guide and its implementation in OSCAR/Space. CCT-C5 will be tentatively covered by that work.</p> <p>2022 18 Jan: WMO to address latest on 27 October, ongoing work, done through WGI</p>	CGMS-53 WGI	OPEN	2.4

Action items review – DCS (1/2)

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
TG on DCS	5.1	WGI/A49.03	Analyse existing DCP standards taking into account user feedback, and propose a common standard that could be used as a future IDCS standard. This would be an evolution of an existing standard. Following approval of the new EDCP standard, develop an implementation plan including prototyping, validation and outreach to users.	<i>2024 Apr 22 (WGI): The EDCP Standard proposal was presented. WGI agreed to present the draft EDCP Standard, prototype development and related funding requirements for endorsement by CGMS-52 Plenary, noting that the report would need further work in the lead up to CGMS-52 Plenary to further detail the use cases for the new EDCP (not related to international use), as well as how this new standard would be introduced into operations (e.g. alongside or in addition to existing standards, as well transition plans). If this is endorsed by CGMS-52 Plenary, this action will be closed and a new action will be opened to track the development of the EDCP prototype.</i> 2024 Mar 15: EDCP Standard progressing. To be finalised after final intersessional on 28 March. 2024 Jan 24: A draft EDCP Standard document has been prepared and sent for review. To be discussed in upcoming intersessional on 25 Jan. NOAA and EUMETSAT looking into funds for prototype. FTS may also support the activity. 2023 26 Sep: Progressing well. Microcom and Sutron have been joining DCS intersessionals, which contributes to the definition of the standard. 2023 24 Apr (CGMS-51 WGI): Action description updated. The plan is for the new EDCP standard to be proposed for endorsement in CGMS-52. 2023 21 Mar: Progress has been made and will be presented as part of the task group report. The main topic for WGI will be how to move forward. 2023 24 Jan: DCS Workshop in October 2022, in conjunction with Satcom Forum. Some progress has been made on EDCP Standard discussions. A further Manufacturers workshop was held on 19 January to continue the EDCP Standard discussions. OTT, Microcom and Dr. Paul Crawford were present. This involved also a discussion on whether there is still the need for the EDCP standard, and the feedback was positive. Target is to have a draft outline and timeline for the EDCP standard for CGMS-51.	CGMS-52 Plenary	OPEN	2.1.2
TG on DCS	8.1	WGI/A51.10	DCS TG to complete the DCS SWOT analysis and provide current conclusions and recommendations to WGI.	<i>2024 Apr 22 (WGI): The DCS SWOT was presented. Closed.</i> 2024 Mar 15: Same status as January. 2024 Jan 24: Will be updated and presented <i>as a separate report</i> . 2023 Sep 26: Work underway.	CGMS-52	CLOSED	2.1.1

Action items review – DCS (2/2)

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HL PP ref
TG on DCS	8.1	WGI/A51.11	As part of the routine DCS TG activities (to be reflected in the ToR), review and update DCS SWOT analysis yearly and provide to WGI – the next update, which will also take as input the outcomes of the CGMS 2022+ project.	2024 Jan 24: The TG Chair has confirmed that the ToR will be regularly included in the TG Report. Action closed. 2023 Sep 26: This would be part of the TG on DCS reports to CGMS.	CGMS-52	CLOSED	2.1.1
TG on DCS	8.4	WGI/A51.12	DCS TG to arrange a dedicated meeting with JMA to give information from the SWOT analysis, including information from the 2022 Satcom Forum.	2024 Mar 15: As agreed with JMA, the action has been noted as withdrawn, in line with the CGMS-51 WGI report review comments. 2024 Jan 24: Meeting still to be arranged. Nick will reach out to JMA. 2023 Sep 26: Nick and Skip will coordinate on behalf of EUMETSAT and NOAA a meeting with JMA. This would also confirm JMA's future plans for DCS on Himawari.	CGMS-52	WITHDRAWN	2.1.1
TG on DCS	8.9	WGI/A51.13	Prepare a proposal on the agreed permitted Smallsat use of DCS by satellite systems and under what conditions, for discussion and endorsement at CGMS-52.	2024 Apr 22 (WGI): The proposal was presented. New actions came out of this. CLOSED. 2024 Mar 15: Same status as January. 2024 Jan 24: A paper on this will be presented to the WGI meeting in April. 2023 Sep 26: New launch opportunity under clarification. Q2/Q3 2024 launch. Smallsat use on DCS has been tested, discussions to be held on practices for use of Smallsat (what it can and cannot be used for in the frame in DCS). The proposal on agreed permitted Smallsat use of DCS would need to be a separate paper to CGMS-52. This would go to plenary for endorsement.	CGMS-52	CLOSED	

Action items review – WGI overall

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLP P ref
All WGI Task Groups	6	WGI/A50.1 2	<p>Each of the WGI Task Groups to present its latest Terms of Reference to CGMS-50, which following endorsement should be added to the CGMS Website by CGMS Secretariat.</p> <p>The updated Terms of Reference of the Task Groups can then be used as inputs to the review of the WGI ToRs in 2023.</p>	<p>2024 Jan 24: All TG will presented their ToRs on regular basis as part of their annual TG reports. Action closed.</p> <p>2023 26 Sep: ToRs of the Task Groups, taking into account comments from CMGS-51, should be presented also in CGMS-52.</p> <p>Past activities:</p> <p>2023 24 Apr (CGMS-51 WGI): Draft ToR for the new TG on LLDA were presented, and will be finalised for CGMS-52.</p> <p>There were some comments on the TG on DCS ToRs, so these would need to be revised.</p> <p>The TG on SDC ToRs were not presented and will be provided offline.</p> <p>The TG on RFI ToRs were presented and endorsed.</p> <p>The TG on Space Debris and CA ToRs were not presented.</p> <p>The ToRs that exist and are already agreed should be put on the CGMS website.</p> <p>2023 21 Mar: The Task Groups are preparing updated ToRs to be presented in CGMS-51 WGI. Following CGMS-51 endorsement, these should be added to the CGMS website. The ToRs should then be reviewed annually as part of the Task Group report preparation.</p> <p>2023 24 Jan: Now that all Task Groups are established, we would like to ensure the Terms of Reference of the groups are consistent. WGI Task Group Chairs to please include the TG Terms of Reference in the CGMS-51 WGI TG reports.</p> <p>2022 27 Sep: Integrated in the draft CGMS-51 WGI agenda</p>	CGMS-51 Plenary	CLOSED	
WGI Co-Chairs / Rapporteur / WGI Task Group Chairs	1.1	WGI/A51.0 1	<p>Propose an updated WGI Terms of Reference, based on the CGMS Future Directions Project outcomes and inputs from the WGI Task Groups, to be presented for endorsement to CGMS-52.</p> <p>The WGI Terms of Reference will be based on inputs from the WGI Task Groups on their latest Terms of Reference.</p>	<p>2024 Apr 22 (WGI): WGI approved the updated WGI Terms of Reference. A summary will be presented to CGMS-52 Plenary for endorsement.</p> <p>2024 Mar 15: Draft reviewed in WGI intersessional on 15 March. Draft will be presented in CGMS-52 WGI.</p> <p>2024 Mar 15: Draft reviewed in WGI intersessional on 15 March. To be presented to CGMS-52 WGs.</p> <p>2024 Jan 24: Updated ToR to be presented in WGI in April. Draft to be distributed beforehand.</p> <p>2023 26 Sep: Sean and Karolina will prepare WGI ToRs, with inputs from the TG ToRs and support from TG Chairs.</p>	CGMS-52	OPEN	

Action items review – CGMS Members

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
CGMS Members	5.1	WGI/A50.08	<p>All CGMS Members involved in spacecraft operations are strongly encouraged to nominate participants for the CGMS WGI Task Group on Space Environment Sustainability. The names of nominated participants are to be provided to the Task Group lead and CGMS WGI Co-chairs / rapporteur before CGMS-51 Plenary, so that the names of members can be reported to CGMS-51 plenary.</p> <p>This is to allow the formulation of the initial Best Practice on collision avoidance and debris mitigation before CGMS-52.</p>	<p>2024 Apr 22 (WGI): A formal call for membership will be made by WGI in CGMS-52 Plenary.</p> <p>2024 Mar 15: Andy sent out an email to CGMS WGI, Plenary, SWCG mailing lists. We should continue to encourage membership in WGs and Plenary.</p> <p>2024 Jan 24: Andy Monham will send out to CGMS mailing lists with a call for members, including CGMS plenary.</p> <p>2023 26 Sep: There is also a CGMS plenary action on this. Sean/Karolina to follow up with Anne to communicate to all CGMS members and encourage participation.</p> <p>Past activities:</p> <p>2023 24 Apr (CGMS-51 WGI): Action still valid. Due date updated.</p> <p>2023 21 Mar: No updates, way forward to be discussed in CGMS-51 WGI.</p> <p>2023 24 Jan: No updates.</p> <p>2022 27 Sep: KMA have nominated a member for the task group. Reminder for further nominations to be sent.</p>	CGMS-52	OPEN	2.6.2
CGMS Members	6	WGI/A50.11	<p>CGMS agencies to consider nominating additional members for all the WGI Task Groups (listed below) by CGMS-51 Plenary, especially ones where no representatives of the agencies are currently participating in the Task Group(s).</p> <ul style="list-style-type: none"> - Task Group on Low Latency Data Access - Task Group on Satellite Data and Codes - Task Group on Data Collection Services - Task Group on Space Environment Sustainability - Task Group on RFI detection, monitoring and mapping 	<p>2024 Apr 22 (WGI): ISRO was invited to join the DCS Task Group. CLOSED.</p> <p>2024 Mar 15: The RFI TG has had some additional members. To be discussed in WGI meeting if further encouragement of participation is needed for any of the TGs.</p> <p>2024 Jan 24: A call for members to CGMS Plenary mailing list for RFI TG and potentially SDC.</p> <p>2023 26 Sep: There is also a CGMS plenary action on this. Sean/Karolina to follow up with Anne to communicate to all CGMS members and encourage participation.</p> <p>2023 24 Apr (CGMS-51 WGI): Members were welcome to nominate additional members, particularly for the merged Task Group on Low Latency Data Access and Task Group on Space Debris and Collision Avoidance. Additionally, participation of ISRO would complement the Task Group on DCS and Task Group on SDC. Anne to contact JV Thomas about ISRO participation.</p> <p>2023 21 Mar: Task Group Chairs to identify any gaps in membership and propose in CGMS-51 WGI invite for nominations as necessary.</p> <p>2023 24 Jan: WGI Task Group Chairs to please create an up-to-date list of Task Group members and provide to the Co-Chairs / Rapporteur + include in CGMS WGI TG reports.</p> <p>2022 27 Sep: Reminder for nominations to be sent.</p>	CGMS-52	CLOSED	

New actions based on CGMS-52 WGI meeting

Discussion and agreement on new actions based on the inputs and discussions throughout the CGMS-52 WGI meeting.

These will be included in the CGMS-52 WGI report and were reviewed in the meeting.