

# WGI action items & recommendations

Presented to CGMS-51 WG-I session, agenda item 10.6



#### Scope

This presentation provides a status of WGI actions and recommendations following CGMS-50.

The purpose is to:

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



# **Review of existing actions - DCS**

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Actionee WGI Task Group on Data Collection Services	5.1	Action # WGI/A49.03	standard.	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.  2022 27 Sep: The EDCP Standard will be the main topic of the DCS Workshop, which will take place on 12 October in Paris, as part of Satcom Forum 11-13 October, held in conjunction with the Met Tech Expo. WGI members are invited to join the DCS Workshop. The plan would be to have an outline of the EDCP Standard for CGMS-51 and a proposed EDCP Standard for CGMS-52.  CGMS-50: WGI agreed to update action as follows "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. There would also be workshops with the manufacturers to understand the best way to identify and implement this standard taking into account the SWOT analysis and the results of the survey commissioned by ESA."  2022 22 Mar: Discussions have been held in the DCS Task Group intersessionals. An update will be provided in the CGMS-50 WGI Task Group Report, including a proposal of approaching manufacturers. A DCS Workshop planned in the Satcom Forum.  2021 13 Sep IS: Discussions at next intersessional in December 2021/January 2022  The DCS Sub Group are working on this and plan to provide a report to CGMS 50. It was envisaged to organise a face to face meeting to discuss this topic	CGMS-52	OPEN	HLPP ref 2.1.2/2.13
				but this has not been possible due to COVID. We are indeed looking to adapt and existing standard rather than start with a new one from scratch. It is hoped that following this path will mean existing platfors could be updated with firmware patches.			AT CO

# **Review of existing actions - DCS**

	GN em	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
WGI Task Group on Data Collection Services	.1	WGI/A50.06	Build on the work of the SWOT analysis on the DCS from Geostationary Meteorological satellites, and particularly progress on the five proposals for further work (covering RFI Mitigation, joint DCS PR materials, DCS introduction video, manufacturer workshop, discoverable information) and present the outcome to CGMS-51.	2023 24 Apr (CGMS-51 WGI): Manufacturer workshop was held in October 2022. DCS PR materials and DCS introduction video to be progressed. DCS RFI register to be created and passed on to TGRFI. Further work on the SWOT to be covered under new action on completing the SWOT.  2023 21 Mar: Progress has been made on the various SWOT areas and will be presented in the task group report.  2023 24 Jan: As part of the SWOT analysis follow-up, options for raising the profile of the DCS have been explored. Nick has been in touch with the World Bank on potential podcast on DCS.  2022 27 Sep: RFI, DCP Standard and DCS Outreach will be discussed in the DCS Workshop on 12 October.		CLOS ED	2.1



#### **Review of existing actions – Satellite Data and Codes**

CGMS Task Force on Satellite Data and Codes, with WMO on addressing the following points:  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 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)  (ref CGMS-49-WMO-WF)  WGIV/A49.02 The CGMS Task Group on Satellite Data and Codes, with WMO (and the week of the WSI and Codes to work closely with WMO on addressing the following points:  I. Linking between OSCAR/Space and the WSI and/or CCT C-5 identifiers (WMO (itematal) 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)  (ref CGMS-49-WMO-WP-08)  WGIV/A49.02 The CGMS-47 WGI): Action is progressing and expected to be closed soon.  223 24 Apr (CGMS-51 WGI): Action is progressing and expected to be closed soon.  224 Am: Smon is in discussion with Heikki, who is working on this. Progress on this action will be reported in the TSDC report for CGMS-51.  222 27 Sep: First intersessional meeting was held in September 2022. Participation was very low. Broader participation in intersessional meetings is encouraged, but communication.  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 guides on the use of WIGOS Station identifiers for satellite products. CGMS-50: The Task Group is continuing to work on the use of WIGOS Station identifiers for satellite products. CGMS-50: The Task Group is continuing to work on the use of WIGOS Station identifiers for satellit	Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
	on Satellite Data and Codes,	WGIV/5	WGIV/A49.02	on Satellite Data and Codes to work closely with WMO on addressing the following points:  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)	progressing and expected to be closed soon.  2023 21 Mar: No update  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.  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.  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.  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.	Plenary	OPEN	3.9.1



# **Review of existing actions - RFI**

Task Group on RFI, establish and confirm the ToR for the Task Group, and investigate collectively mechanisms for detection and long-term monitoring of and mapping of RFI (for example, but not limited to, from IMT-2020/5G into the 24 GHz passive band) at satellite or instrument level, or any other means, as the knowledge base for assessing the impact on the passive sensor measurements. The draft ToR is to be discussed in the intersessional meetings before		AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
OCIVIO-30 Fichary.	n RFI n, ng and		WGI/A50.01	Task Group on RFI, establish and confirm the ToR for the Task Group, and investigate collectively mechanisms for detection and long-term monitoring of and mapping of RFI (for example, but not limited to, from IMT-2020/5G into the 24 GHz passive band) at satellite or instrument level, or any other means, as the knowledge base for assessing the impact on the passive sensor measurements. The draft ToR is to be discussed in the intersessional	closed based on the Task Group's paper to CGMS-51 WGI.  2023 21 Mar: No update  2023 24 Jan: Useful presentations from CGMS agencies in intersessionals. The report for CGMS-51 will include a proposed way forward for the future of the Task Group. Markus noted that there is now good awareness on what CGMS agencies are doing in this area. Any further action requires resources and commitment that need to be agreed by CGMS (and needs to be reflected in HLPP).  2022 27 Sep: In the intersessional meetings so far, NOAA, EUMETSAT and CMA presented their work in these areas.	CGMS-51	CLOS	

	AGN tem	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
CGMS 2 Members	2.1	WGI/A50.02	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	2023 24 Apr (CGMS-51 WGI): Keep action active until WRC-23 and update thereafter.  Past activities:  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.  2023 24 Jan: EUMETSAT and ESA actively provide inputs to WRC and WRC 2027 agenda.	WRC-23	OPEN	2.2.2





Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
SFCG Rep	2.1	WGI/A50.0	SFCG rep to circulate (by the end of 2022) the updated WMO preliminary position paper on WRC-23 after being updated by ET-RFC at its August/September 2022 meeting and afterwards adopted within WMO. CGMS members would then need to ensure the updated WMO positions known to its members' national and international preparation processes for WRC-23.	18-20 April 2023, so it would be worth re-circulating this again. Action reopened.  2023 24 Jan: The updated WMO positions paper on WRC-23 agenda was circulated to WGI members on 4 Nov 2022. As there will be the Conference Preparatory Meeting (CPM) from 27 March to 6 April 2023, a major milestone in the ITU-R preparation for WRC-19, CGMS members are invited to make this updated WMO positions known to its members' national and international preparation processes for WRC-23. Further, this will be reported in the CGMS-51 WGI SFCG Report (in conjunction with WMO). Action closed. 2022 27 Sep: The paper has been updated and will be circulated to WGI shortly - timeline to be confirmed with Markus.		CLOSED	

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
CGMS Members	2.1	WGI/A50.04	to propose a process for providing accurate and timely updates on	Markus, with inputs from Heikki.  2023 24 Jan: A proposal for the process was distributed to WGI.  This will be presented in the SFCG		ED	





Description	Action feedback/closing document	Deadline	Status	HLPP
				ref
frequency information in their updated templates to OSCAR/Space Support Team			CLOSE D	
5	WMO to include the frequency information in their updated templates to OSCAR/Space	WMO to include the frequency information in their updated templates to OSCAR/Space Support Team  WMO to include the standard procedure. Action closed.	WMO to include the frequency information in their updated templates to OSCAR/Space Support Team  WMO to include the standard procedure. Action closed.  2022 27 Sep: Completed, this is now standard procedure. Action closed.	WMO to include the frequency information in their updated templates to OSCAR/Space Support Team  WMO to include the standard procedure. Action closed.  2022 27 Sep: Completed, this is now standard procedure. Action closed.  D  CLOSE 2022  D



#### **Review of existing actions – Space Debris and Collision Avoidance**

	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
Task Group on Space Debris and Collision Avoidance	5.1	WGI/A50.07	document on collision avoidance and debris mitigation, with supporting presentation to CGMS WGI, for recommendation for endorsement in CGMS-51.	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	CGMS-52	OPEN	





# **Review of existing actions – Space Debris and Collision Avoidance**

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
CGMS Members	5.1	WGI/A50.08	All CGMS Members involved in spacecraft operations are strongly encouraged to nominate participants for the CGMS WGI Task Group on Space Debris and Collision Avoidance. The names of nominated participants are to be provided to the Task Group lead and CGMS WGI Co-chairs / rapporteur before CGMS-51 Plenary.  This is to allow the formulation of the initial Best Practice on collision avoidance and debris mitigation before CGMS-51.	2023 24 Apr (CGMS-51 WGI): Action still valid. Due date updated.  2023 21 Mar: No updates, way forward to be discussed in CGMS- 51 WGI.  2023 24 Jan: No updates.  2022 27 Sep: KMA have nominated a member for the task group. Reminder for further nominations to be sent.	May 2023	OPEN	
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#### **Review of existing actions - Coordination of LEO Orbits + Direct Broadcast Systems**

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
WGI Task Group on the Coordination of LEO Orbits + WGI Task Group on Direct Broadcast Systems	5.2 / 3.1	WGI/A50.09	Build on the SWOT analysis on Low Latency Data Access from LEO meteorological satellites (CGMS-50-CGMS-WP-08) work and broaden its scope to include the following, thereby removing historical requirement and architectural boundaries between global data access and direct broadcast systems:  • Global data coverage and access;  • Temporal coverage over a given geographic area;  • Low latency data delivery;  Perform further study on the possible usage of emerging technologies identified by the SWOT analysis.  The two Task Groups should hold meetings and agree on a proposed way forward for a consolidated SWOT analysis, and present to CGMS-51 for consideration.  All CGMS agencies are encouraged to nominate participants to contribute to this activity.	2023 24 Apr (CGMS-51 WGI): The SWOT can be considered closed based on report to CGMS-50 WGI (CGMS-51-WGI-WP-06). Three ways for low latency data access were explored.  2023 21 Mar: SWOT is ready and extensive comments have been received from ESTEC. A draft SWOT will be included in the Task Group report. Integration of the comments from ESTEC will be done by CGMS-52.  2023 24 Jan: Main finding of SWOT analysis is the lack of standards for inter-satellite communication. This will be included in the group's report for CGMS-51. It can then be decided whether CGMS wants to explore this topic further and open an action for CGMS-52.  2022 27 Sep: One joint task group meeting has taken place, work ongoing.	CGMS-51	CLOSE	2.3.3



#### **Review of existing actions - Coordination of LEO Orbits + Direct Broadcast Systems**

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
WGI Task Group on the Coordination of LEO Orbits + WGI Task Group on Direct Broadcast Systems	5.2	WGI/A50.10		2023 24 Apr (CGMS-51 WGI): In view of the merge of the two task groups, this action was closed, in favour of a new action to merge the LEO and DB best practices.  2023 21 Mar: As a merged task group is being proposed for next year, it is proposed to make a proposal for the BP merge and provide a version ready for publishing for CGMS-52.  2023 24 Jan: Work on reviewing the overlap between the BPs has been ongoing.  2022 27 Sep: One joint task group meeting has taken place, work ongoing.	CGMS-51	ED	



# **Review of existing actions – CGMS Members**

AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
6	WGI/A50.11	CGMS agencies to consider nominating additional members for all the WGI Task Groups (listed below) by CGMS-50 Plenary, especially ones where no representatives of the agencies are currently participating in the Task Group(s).  - Task Group on Direct Broadcast Systems  - Task Group on Satellite Data and Codes  - Task Group on Data Collection Services  - Task Group on Space Debris and Collision Avoidance  - Task Group on the Coordination of LEO Orbits  - Task Group on RFI detection, monitoring and mapping	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.  2023 21 Mar: Task Group Chairs to identify any gaps in membership and propose in CGMS-51 WGI invite for nominations as necessary.  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.  2022 27 Sep: Reminder for nominations to be sent.		OPEN	



# **Review of existing actions – All WGI Task Groups**

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
All WGI Task Groups	6	WGI/A50.12	Each of the WGI Task Groups to present its latest Terms of Reference to CGMS-51, which following endorsement should be added to the CGMS Website by CGMS Secretariat.  The updated Terms of Reference of the Task Groups can then be used as inputs to the review of the WGI ToRs in 2023.	The TG on SDC ToRs were not presented and will be provided offline.  The TG on RFI ToRs were presented and endorsed.  The TG on Space Debris and CA ToRs were not presented.  The ToRs that exist and are already agreed should be put on the CGMS website.  2023 21 Mar: The Task Groups are preparing updated ToRs to be presented in CGMS-51 WGI. Follwing CGMS-51 endorsement, these should be added to the CGMS website.	CGMS-51 Plenary	OPEN	
				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.			
le					2022 27 Sep: Integrated in the draft CGMS-51 WGI agenda		

#### **Review of existing recommendations – All WGI Task Groups**

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
All WGI Task Groups	6	WGI/R50.01	Each of the WGI Task Groups to continuously present the following, starting with CGMS-51. All of the agencies are encouraged to provide inputs Existing / updated Best Practices - Status of implementation of Best Practices for each agency - Future work / recommendations / proposals (taking into consideration outcome of SWOT analyses)	2023 24 Apr (CGMS-51 WGI): This is now the standard way of reporting for the TGs implemented via the new CGMS WGI agenda structure. This agenda structure should be adopted for following CGMS meetings. CLOSED.  2023 21 Mar: This is now the standard way of reporting for the TGs implemented via the new CGMS WGI agenda structure. This agenda structure should be adopted for following CGMS meetings.  2023 24 Jan: As per the CGMS-51 WGI agenda, each task group is expected to ensure the following inputs:  • In the TG report - an up-to-date list of TG members, TG Terms of Reference, status of current and proposed activities  • Latest version and new proposals for all Best Practices under the responsibility of the Task Group  • Report from each Agency on the status of implementation of the Best Practices		CLOSE	
			CGMS-51 WGI agenda				



# Review of existing recommendations – WGI Lead

Actionee	AGN item	Action #	Description	Action feedback/closing document	Deadline	Status	HLPP ref
Plenary 2	WGIIR49.	Working Group II recommends to CGMS Plenary the adoption of the proposed GEO baseline products presented in CGMS-49-WMO-WP-14 with the addition of SSTs, to be considered for subsequent implementation by all Agencies.	2023 24 Apr (CGMS-51 WGI): This is being tracked by both WGII and WGIV. WGIV is waiting on WGII to confirm the GEO baseline products, in order to then proceed with discussions of the dissemination baseline. Action will be removed from the WGI actions list.  2022 10 Jan: Request sent to WGI leading group.  2022 28 Sep: To be addressed in the next WGII inter-sessional meeting 12 October.	Plenary	2	WGIIR49	
		lead.  2022 22 Sep MRa: Assuming that WGII has finally confirmed the GEO baseline products (unclear!), the question is how to reflect this in CGMS documentation (could be the CGMS Baseline or a self-standing doc, to be discussed in WGIII) and how to monitor the implementation in terms of production and dissemination (probably a question for WGIV).					
			2021 28 Sep: JV Thomas to address this with WGII co-chairs/rapporteurs. Principle endorsed by CGMS-49 plenary. WGII/Ken to send to WGIII and WGIV relevant parts of WGII report. Action to WGIII to update the baseline accordingly.				
			(WGII action to WGIV on related redistribution mechanisms).				

#### New actions – to be filled based on WGI TG inputs and discussions

New actions were opened based on the inputs and discussions throughout the CGMS-51 WGI meeting.

These have been be included in the CGMS-51 WGI report and were reviewed in the meeting.

