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Prepared by EUMETSAT Agenda Item: 4.2 Discussed in WG I

## Review of status and Terms of Reference of Task Force on Satellite Data and Codes

The CGMS Task Force on Satellite Data and Codes was established by CGMS in 2007 in response to the need for an expert body to coordinate activities on data formats between agencies and to support the work of WMO's expert teams working on format topics.

The Task Force had its first meeting in 2008 during which the Terms of Reference were refined.

In the meantime, the Task Force has continued to operate on a correspondence basis. The WMO expert teams routinely seek the confirmation of the Task Force that proposed data format changes are appropriate from the satellite community's perspective.

This paper recalls the current Terms of Reference and Membership of the Task Force and asks Members to update their nomination of participating experts.

Action/Recommendation proposed:

**Action**: CGMS Members are asked to update their nomination of experts to participate in the Task Force on Satellite Data and Codes.

# Review of status and Terms of Reference of Task Force on Satellite Data and Codes

#### 1 INTRODUCTION

This document recalls the background of the CGMS Task Force on Satellite Data and Codes and summarises its current status. It then proposes the next steps for the continuation of the group.

## 2 BACKGROUND

## 2.1 Initial triggering circumstances

At the annual meetings of the WMO Expert Team responsible for the maintenance and evolution of data formats many proposals have been made concerning the representation and exchange of satellite products for use by the meteorological community. Although the Expert Team provides a wealth of expertise on data representation, it does not represent the subject matter experts in the field of satellite meteorology. This situation made it difficult for the Expert Team to endorse proposals originating from the satellite meteorology community.

The Expert Team considered that a group might be established from within the CGMS community, comprising experts in data representation. This group could then be asked to consider data representation issues prior to their consideration by the WMO Expert Team.

This concept is described in the WMO Working Paper CGMS 34 WMO WP-36, "Proposal for a CGMS Working Group on Codes", an extract of which is provided in Appendix A. This paper also include the initial draft Terms of Reference.

### 2.2 Discussions at CGMS

Following the discussion on the matter at CGMS 34, two actions were agreed:

Action 34.27: WMO to set up a Task Force on Codes following the TORs spelled out in WMO-WP-36 and report progress at CGMS 35. Deadline: CGMS-35

Action 34.28: Each Satellite Operator is invited to nominate an expert to contribute to the WMO led Task Force on codes. Deadline: 31 December 2006

## 2.3 First meeting of TFSDC

In accordance with *Action 34.27* WMO convened the first session of the CGMS Task Force on Satellite Data Codes (TFSDC) on 26 and 27 February 2008, in Geneva.

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Among other activities, the Task Force following extract from the draft final report of the first meeting of the CGMS Task Force on Satellite Data Codes (TFSDC) proposed updates to the membership and organization of the group. These are given in the extract of the report of the meeting in Appendix B.

## 3 CURRENT STATUS

### 3.1 Membership

The current membership of the TFSDC is as follows:

EUMETSAT Simon Elliott – Chairman and liaison with WMO

JMA Akihiro Shimizu
JMA Kazuki Shimoji
KMA Jae-dong Jang
SRC Planeta Nikolay Zemlyachev

CMA Sun Anlai (pending new nomination)
NOAA Thomas Smith (pending new nomination)
WMO Toshiyuki Kurino (pending new nomination)

The membership from CMA, NOAA and WMO is currently in the process of being updated.

## 3.2 Recent activity

Despite the fact that the group has only had one physical meeting, it has remained active and continues to provide subject matter expertise as a resource to the WMO expert teams concerned with data formats.

Within the last year, the Task Force has considered issues such as:

- The identification of Sentinel-6A and -6B, and the POSEIDON-4 altimeter,
- The identification of Meteor-M N2 and N2 2, and the MTVZA-GY and IKFS-2 instruments, and
- The encoding of ScatSat L2A and L2B products produced by NOAA.

In the coming months the Task Force will also be asked to consider the encoding of Sentinel-6 altimeter products and level 1 spectra from IKFS-2. Upcoming satellite programs and improved product processing systems continue to give rise to encoding and data format issue to be addressed by the Task Force.

## 4 CONTINUATION OF THE TASK FORCE

Noting that there will continue to be satellite product formatting issues which will need to be addressed by WMO's expert teams, and that the expert teams will not have the necessary domain specific expertise to evaluate these issue, there is a clear need for the TFSDC to continue its work. The Task Force should also consider an update to its Terms of Reference in order to reflect the *de fact* o situation.

A broad participation in the work of the TFSDC by CGMS Members will continue to ensure its efficacy.

# 5 ACTIONS AND/OR RECOMMENDATIONS FOR CONSIDERATION BY CGMS WORKING GROUP I

**Action**: CGMS Members are asked to update their nomination of experts to participate in the Task Force on Satellite Data and Codes.

## 6 CONCLUSIONS

The Task Force on Satellite Data and Codes was established by CGMS in order to coordinate work on satellite product format issues within the CGMS community and to support the work of WMO's expert teams.

The Task Force is fulfilling these functions as intended. It would benefit from a broader support from CGMS Members in order to continue to do so in the future.

### APPENDIX A - DRAFT TERMS OF REFERENCE

The following an extract from CGMS 34 WMO WP-36, "PROPOSAL FOR A CGMS WORKING GROUP ON CODES" gives the originally proposed draft terms of reference:

## Draft Terms of Reference for a Working Group on Codes and related matters

The CGMS Working Group on Codes will have the following tasks:

- 1. To review the issues related with satellite data representation, identification and handling within the IGDDS, and express guidance to CGMS satellite operators with a view to facilitate the use of satellite data and products worldwide within the operational context. The WG shall anticipate the changes that may be necessary as a result of the increasing number of satellites, improved spectral and geometrical resolution of instruments, new instrument concepts and operating modes and of the evolving use of satellite data. The WG shall express guidance for implementing the recommendations from relevant WMO bodies as concerns the evolution of code forms, bulletins headings and other data identifiers in the overall framework of the WMO Information System;
- 2. To review specifically the plans for new satellite data and products before they are made available to operational centres, in particular in the case of new instrument types generating new geophysical variables, and to propose suitable representation of these data and products in WMO agreed code forms (e.g. GRIB edition 2, BUFR, etc.) In particular, the WG would propose additions to WMO BUFR Master Table or to a Satellite BUFR Master Table, as appropriate. Such proposals shall be forwarded for review and endorsement by the WMO/CBS Expert Team on Data Representation and Codes (ET-DRC) for ensuring their conformity with the WMO Codes regulations, and further approval by CBS.
- 3. To review the issues related with the circulation of satellite data and products over the GTS and other components of the WMO Information System, and provide guidance to CGMS satellite operators to define suitable headings or data identifiers for new bulletins and data files as appropriate. In particular, the WG would review existing tables of satellite data designators, or propose new tables, to be included in future amendments of Attachment II-5 of the Manual on the GTS. Such proposals shall be forwarded to the WMO/CBS Expert-Teams on WIS Operation and Implementation (ET-OI).
- 4. To interact as appropriate with ET-DRC and ET-OI with cross-representation at relevant meetings;
- 5. To report to CGMS plenary;

6. The working group will nominate a Rapporteur and a Chairman. It will meet at least once a year, and more if necessary, and will pursue its work by correspondence between its meetings.

### **NOTES**

- (a) With respect to item (3) above it should be noted that WMO is considering to allocate the specific data designators "T1T2= I N" for future satellite data bulletins in BUFR over the GTS, hence the need to define a new Cx table providing data designators for all space-based observation data. This change would be effective by November 2007. This should be among the first issues for consideration by the WG. The WG would be expected to support the ET-OI in developing a typology of satellite data and products to be used as a basis for the new Cx table:
- (b) The present draft TOR were reviewed and by the Expert Team on WIS Operation and Implementation (ET-OI) during its meeting in Geneva, 16-19 May, for items of their competence, i.e. items (3) and (4) and Note (a).

### APPENDIX B - DRAFT TERMS OF REFERENCE

The following extract from the draft final report of the first meeting of the CGMS Task Force on Satellite Data Codes (TFSDC) proposed updates to the membership and organization of the group:

### PROPOSED REVISION TO THE MEMBERSHIP AND ORGANIZATION

## Background

The CGMS Task Force on Satellite Data Codes (TFSDC) is established in response to CGMS Actions 34-27 and 34-28 agreed by the Coordination Group for Meteorological Satellites (CGMS) at its thirty-fourth session.

## **Purpose**

The TFSDC is established in order to advise CGMS and WMO on issues related to satellite data representation, identification and handling within the WMO Information System.

## Membership and organization

The TFSDC is comprised of experts nominated by CGMS satellite operators, assisted by WMO Secretariat and, <u>as appropriate</u>, by external experts <u>representing user communities</u> <u>as appropriate</u>.

It will nominate among its Members a Rapporteur and a Chairman.

The Task Force will meet at least once a year, and more if necessary. It will pursue its work by correspondence between its meetings.

The Task Force will interact as appropriate with the WMO/CBS Expert Team on Data Representation and Codes (ET-DRC), and the WMO/CBS Expert Team on WIS Operation and Implementation (ET-OI), and the Expert Team on Assessment of Data Representation Systems (ET-ADRS), with cross-representation at relevant meetings.

The TFSDC will report annually to the CGMS plenary which will decide on the need whether to continue the activity or to terminate it once the main objectives are completed in the same way or hand it over to a different structure.