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THIRD PARTY DATA EXCHANGE ACTIVITIES

This document summarises ongoing activities in the area of Third-Party Data Exchange.

The document is structured in two parts – an assessment of the 3rd Party Data Services under consideration, and a summary of the status of currently ongoing 3rd Party Data Service implementation activities.

CGMS is invited to take note of the status of EUMETSAT's third party data exchange activities.

Third Party Data Exchange Activities

1 INTRODUCTION

This document summarises ongoing activities in the area of Third-Party Data Exchange. These activities are based on interactions with EUMETSAT Member States.

The document is structured in two parts – an assessment of the 3rd Party Data Services under consideration, and a summary of the status of currently ongoing 3rd Party Data Service implementation activities.

The document serves to consolidate the status of all Third Party Data Exchange activities currently in progress.

2 3RD PARTY DATA EXCHANGES OVERVIEW

Prospective 3rd Party Data Exchange activities arise out of direct interactions with Member States and ECMWF.

Direct interactions with Member States take place in the context of STG-OPSWG in line with the 'Policy for Near Real Time Data Provision for non-EUMETSAT Satellite Missions' agreed by 67th Council in summer 2009.

Proposals for specific involvement in the provision of any 3rd Party data services will be presented to Member States for endorsement.

Any proposed new data service will therefore also result in a EUMETCast Dissemination Baseline update which will detail the product size, timeliness and overall impact on EUMETCast.

The following tables summarise and consolidate the 3rd Party data services currently under consideration and their associated priorities. It includes the already implemented 3rd Party data services. The tables are split into data services from R&D Agencies (table 1) and those from Operational Agencies (table 2).

	Satellite	Instrument(s)	Application area	Launch	Priority 1-3	Implemented
N A S A	Aqua/Terra	Modis	Aerosol	2002/1999	1	y
	GLORY	VNIR	Aerosol/climate	Launch failed	2	
	Aquarius/SAC-D	L-band radiometer/scat	Sea surface salinity	Launched 2011	2	
	SMAP	L-band radar/radiometer	SoMo thaw/freezing	2012	2	
	GPM Core	Radar/ μ wave	Precipitation	2013	1	In progress
E S A	SMOS	L-band radiometer	SoMo & Ocean salinity	Launched 2009	1	In progress
	ADM/Aeolus	Lidar	Wind profiling	2013	1	
	Earthcare	Lidar/Radar/MSI/BBR	Cloud & aerosol	2013	2	
	Sentinel-5 precursor/SRON	NIR	Atmospheric composition	2014	3	
C N E S	Megha-Tropiques	μ wave/VIS/IR	Precip/cloud/radiation	2011	1	In progress
	Taranis	Charged particles	Lightning/TLE/TGF	2012	3	
N S O A (C h i n a)	HY-1B	Ocean colour	Marine	Launched 2007	2	
	HY-2a	Altimeter/scat/ μ wave	Marine	2011	2	
	HY-2b	Altimeter/scat/ μ wave	Marine	2012	2	
C N S A	CFOSAT	scat/ Ku-radar	Marine	2014	2	
J A X A	GOSAT	VNIR/IR	Greenhouse gases	Launched 2009	2	
	GCOM-W	AMSR Follow on	Water Cycle	2011	1	In progress

	GCOM-C	VNIR	Carbon Cycle	2013	3	
I S R O	Saral	ARGOS/Altika	Marine	2012	2	In progress
	Oceansat-2	Scat/ROSA	Marine/Atm	Launched 2009	1	In progress

 Table 1 – 3rd Party Data Services (R&D Agencies)

	Satellite	Instrument(s)	Application area	Launch	Priority 1-3	Implemented
N O A A	GOES-E & W	75, 135 degW IR,VIS,WV	Meteorology		1	Y, part of FSD
	GOES-R	ABI 135 or 75 degW IR,VIS,WV	Meteorology	2015	1	To be part of FSD evolution
	N-19	ATOVS, AVHRR	Meteorology	2009	1	Y
	NPP/JPSS-1	ATMS, CrIS, VIIRS	Meteorology Ocean colour	2011/2016	1	In progress
	DMSP	SSMIS	Precipitation	2009	1	In progress
C M A	FY-2D	S-VISSR 86.5 degE IR,VIS,WV	Meteorology	2006/2008	1	In progress
	FY-2E	S-VISSR 123 degE IR,VIS,WV	Meteorology	2006/2008	1	Y
	FY-3A,B	MWTS, MWHS, IRAS, VIRR, MERSI	Meteorology Ocean colour	2009/2010	1	In progress
K M A	COMS	MI, GOCI 128 degE IR,VIS,WV	Meteorology Ocean colour	Launched 2010	2	
R O S H Y D R O M E T	ELEKTRO-LN1	MSU-GS 76 degE IR,VIS, WV	Meteorology	Launched 2011	1	
	ELEKTRO-LN1	MSU-GS 76 or 14.5 degE IR,VIS, WV	Meteorology	2012	1	

J M A	MTSAT-2	145 degE IR,VIS, WV	Meteorology	2006	1	Y, part of FSD
	Himawari-8	140 degE IR,VIS, WV	Meteorology	2014	1	To be part of FSD evolution

Table 2 – 3rd Party Data Services (Operational Agencies)

3 STATUS OF 3RD PARTY ACTIVITIES

3.1 Existing 3rd Party Data Services

GOES and MTSAT:

- EUMETSAT receives image data from Météo France (Lannion) hourly for retransmission via EUMETCast to end users. Image data is received from NOAA (GOES-11 and GOES-13) and from JMA (MTSAT-2).

FY-2E:

- FY-2E image data and meteorological products have been operationally disseminated on EUMETCast for over a year.

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MODIS:

- EUMETSAT receives the following MODIS data from NASA for redistribution via EUMETCast:

Level 1 calibrated radiances (MOD02, MYD02)

Geo-location data (MOD03, MYD03)

Fire product (MOD14, MYD14)

MODIS chlorophyll Alpha

MODIS direct broadcast polar winds from the Cooperative Institute for Meteorological Satellite Studies (CIMSS)

- The level 1 calibrated radiances and geo-location data are processed at EUMETSAT in order to retain only those data over the geographical region north of 25° North between 60° West and 45° East, and north of 65° North elsewhere.
- Furthermore, the level 1 radiance data are further reduced by retaining only measurements from 18 spectral channels (1, 2, 5, 6, 8, 9, 10, 12, 15, 20, 23, 26, 27, 28, 29, 31, 32 and 33).
- In response to evolving requirements from user community, EUMETSAT is currently in the process of adding MODIS precipitable water products from NASA (MOD05 and MYD05). Prior to redistribution via EUMETCast, these data will be processed by EUMETSAT in order to retain only near infrared measurements over land during daytime.

FY-3A:

- Dissemination of FY-3A products on EUMETCast started in December last year. Global FY-3A MWTS and MWHS level 1 products have been available for all orbits with a timeliness of between 4 – 6 hours.

DMSP:

- The implementation of reformatting SSMIS products in BUFR format and subsequent dissemination on EUMETCast is ongoing.

3.2 3rd Party Data Services under consideration

This section summarises the status of those 3rd Party Data Services under consideration where there has been an evolution in status.

GPM Core:

- A bilateral agreement with NASA regarding access to GPM Core data is being prepared.

SMOS:

- After the presentation of the mission results so far at the STG in Helsinki initial interactions with the ESA Project Manager regarding product availability and size are in progress.

ADM/Aeolus:

- Launch delay until end 2013. NRT availability of wind products is still uncertain. Hence, concrete steps to provide the data have yet not been taken.

Megha-Tropiques:

- Interactions have taken place with CNES regarding how to access data from the MADRAS, SAPHIR, SCARAB and ROSA instruments. The data processing centre for the mission is located ISRO SAC in Ahmedabad, with acquisition ground stations in Kourou and Bangalore. A data communications network is being set up between ISRO, CNES and ICARE (in Lille) for product distribution and further processing. A 3 Party Cooperation Agreement involving CNES, EUMETSAT, and ISRO has been prepared and is now ready for endorsement by Member States.

HY-2A:

- Discussions with NSOA have not yet reached the stage where it's possible to assess if access to this data in NRT is feasible or not.

GCOM-W:

- Informal discussions with JAXA have been initiated regarding access to GCOM-W data in NRT. The high priority of the GCOM-W service is related also to the scatterometer, which is no longer part of the baseline. Hence the priority needs to be confirmed.

ELEKTRO-L N1:

- Commissioning of this satellite is still in progress. Informal discussions indicate that there is a possible problem with the stability and calibration of the IR channels which could affect the usability of the channels. These issues are planned to be addressed during the construction of the next satellite model – ELEKTRO-L N2.

3.3 3rd Party Data Services being implemented

This section summarises the status of 3rd party Data Services which are in the process of being implemented.

SARAL:

- The launch of the SARAL spacecraft is expected in Q1 or Q2 of 2012. This should result in the global ALTIKA data service being available to Users from every orbit in the second half of 2012. Installation and test of the ground infrastructure hosted by EUMETSAT is underway, the data communication network has been installed and will be tested later this year.

OCEANSAT-2:

- The current status of the OCEANSAT-2 data service is presented later in the agenda of this meeting.

NPP/JPSS:

- Following the endorsement of the NPP Service Specification at the last round of Delegate Body meetings the modifications to the operational ground segments required to support both the global and regional services are in progress.

FY-2D:

- FY-2D image data has recently been made available by CMA. The flow seems stable and is in the process of being added to EUMETCast. The availability of the product set associated with the image data is being addressed with CMA.

FY-3B:

- Global level 1 products from the MWTS and MWHS instruments on FY-3B (which is in the pm orbit similar to NOAA-19) have recently been made available by CMA. After some stability testing, the products will be made available on EUMETCast.

4 CONCLUSIONS

CGMS is invited to take note of the status of EUMETSAT's third party data exchange activities.