

# Indian Ocean Data Coverage (IODC) service – endorsement of the CGMS roadmap implementation

Presented to CGMS-[44] [Working Group III/7 and Plenary E 3.3]

## Introduction

The Indian Ocean Data Coverage (IODC) mission is a best effort undertaking which reflects a decision of the EUMETSAT Council to use a residual Meteosat First Generation capacity for this purpose, in the context of a temporary data gap over the Indian Ocean.

Meteosat-7, the last satellite of the Meteosat First Generation, will reach its End-of-Life in March 2017 with the re-orbiting of the satellite to follow in early 2017, thereby ending the EUMETSAT IODC mission.

CGMS 42 endorsed the baseline requirements for IODC and CGMS 43 endorsed the CGMS IODC roadmap and timeline with associated actions that aimed at establishing resilient multi-partners IODC services in the region.

## Satellites in Orbit

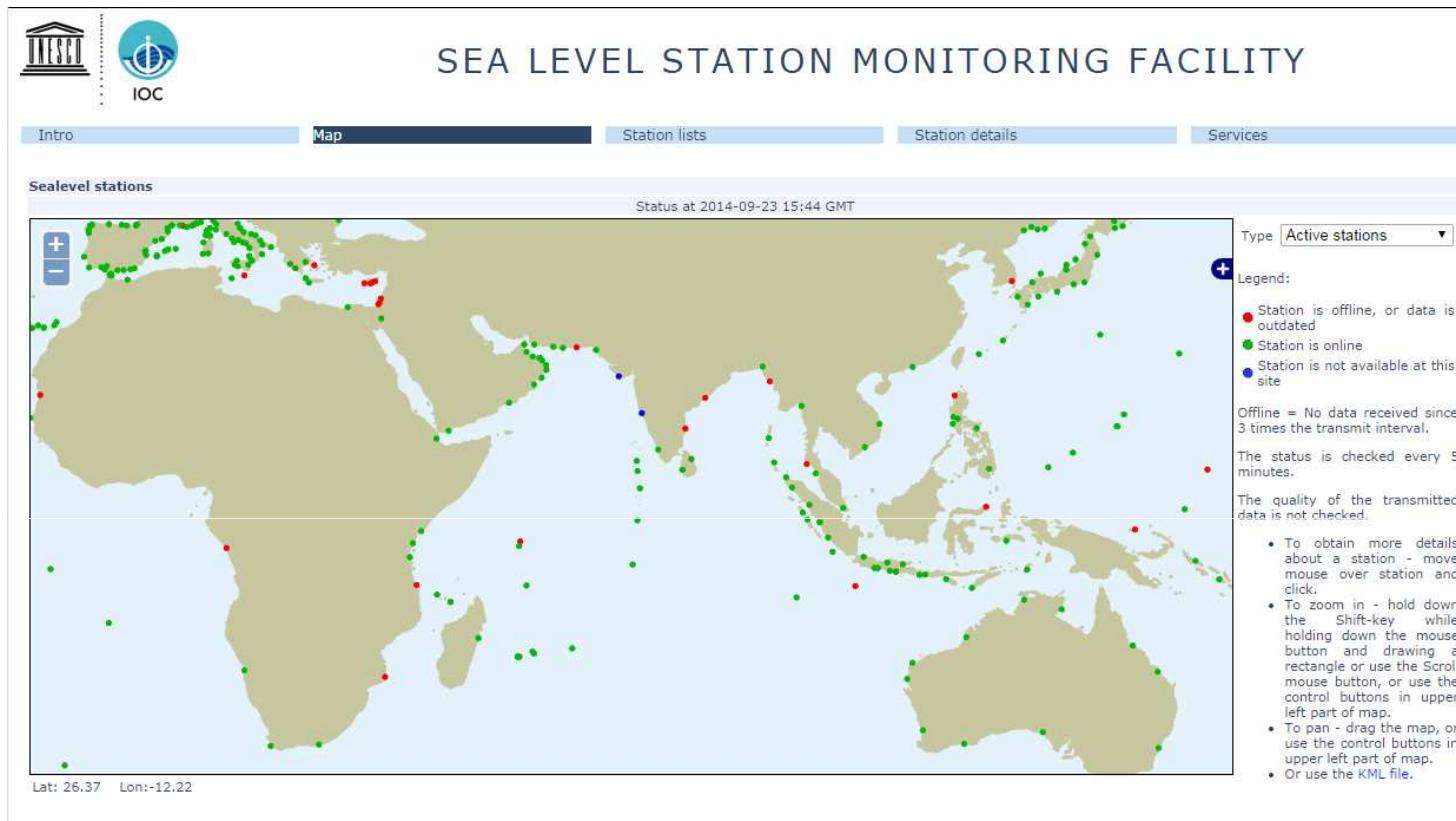
Satellite	Longitude	Operator	Launch date	Projected EOL
Meteosat-7	57.5°E	EUMETSAT	02/09/1997	Q1 2017
Meteosat-8	3.5°E *	EUMETSAT	28/08/2002	2019 - 20
Elektro-L N1	76°E	Roshydromet	20/01/2011	≥ 2018
Elektro-L N2	77.8°E	Roshydromet	11/12/2015	≥ 2022
Kalpena-1	74°E	ISRO	12/09/2008	≥ 2016
INSAT-3A	93.5°E	ISRO	04/10/2003	≥ 2016
INSAT-3D	82°E	ISRO	25/07/2013	≥ 2021
FY-2E	86.5°E	CMA	19/10/2004	≥ 2017

\* Relocation from 3.5°E to 41.50°E, subject to decision of the EUMETSAT Council

## Future Satellites

Satellite	Longitude	Operator	Launch date	Projected EOL
INSAT-3DR (Repeat)	74°E	ISRO	≥ 2016/7	≥ 2024
INSAT-3DS (Spare)	74°E	ISRO	≥ 2022	≥ 2029
GISAT	85.5°E	ISRO	≥ 2017	≥ 2024
FY-2H	86.5°E (TBC)	CMA	≥ 2016	≥ 2020
FY-4A	86.5°E (TBC)	CMA	≥ 2016	≥ 2022
FY-4B	105°E (TBC)	CMA	≥ 2018	≥ 2022
FY-4C	86.5°E (TBC)	CMA	≥ 2020	≥ 2022

## DCP Service over IODC



- Most of the DCPs allocated to Meteosat-7 at 57°E could be re-allocated to Meteosat-8 at 41.5°E. Several DCPs at the eastern edge of the Indian Ocean are will be transferred to Himawari

## CGMS IODC Scenario

Satellite	Location	Image	Products	DCS
Meteosat-8	41.5°E	Yes	Yes	Yes (International)
INSAT 3D	82°E	Yes	Yes	Yes (regional)
Elektro-L N2	77.8°E	Yes	Yes	Yes (regional)
FY2-E	86.5°E	Yes	Yes	Yes (regional)

## CGMS IODC Scenario and Timeline status

### 2015

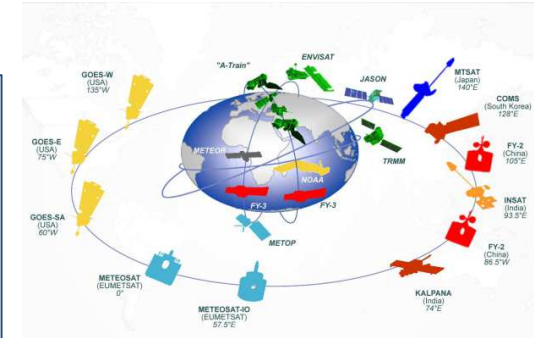
- ✓ EUMETSAT to disseminate INSAT-3D images and products via EUMETCast.
- ✓ CMA to relocate FY2-E to 86.5°E and commence an operational service.
- ✓ EUMETSAT to disseminate FY2-E images and products from 86.5°E via EUMETCast.

### 2016

- EUMETSAT relocate Meteosat-8 to 41.5°E.
- EUMETSAT commence a Meteosat-8 operational service including images and products via EUMETCast.
- Roshydromet commence an Elektro-L N2 operational service.
- EUMETSAT to disseminate Elektro-L N2 images and products via EUMETCast.

## To be endorsed by CGMS:

CGMS is invited to endorse the implementation of the CGMS IODC roadmap and timeline.





# Coordination Group for Meteorological Satellites - CGMS

## List of data and products declared Essential by CGMS agencies in support to IODC continuation

Agency	CMA	EUMETSAT	ISRO	ROSHYDROMET
Satellite	FY-2E	Meteosat-8 (MSG)	INSAT-3D	Elektro-L N2
Position	86.5°E	41.5°E	82°E	77.8°E
Essential data and products	Imagery	Imagery	Imagery	Imagery
	hourly	SEVIRI HR, 3-hourly		HRIT, half hourly
	<b>Products</b>	<b>Products (EUMETCast)</b>	<b>Products (MOSDAC)*</b>	<b>Products</b>
		Active Fire Monitoring (CAP/GRIB)		
	Surface incidence solar radiation	All Sky Radiances		
	Atmospheric Motion Vectors	Atmospheric Motion Vectors	Atmospheric Motion Vectors (On GTS and from MOSDAC)	Atmospheric Motion Vectors
	Outgoing long wave radiation		<i>Outgoing long-wave radiation</i>	
	Black body brightness temperature	Clear Sky Radiances		
		Clear-Sky Reflectance Map		
	Cloud type	Cloud Analysis		
	Cloud amount	Cloud Analysis Image – MSG	<i>Cloud Image</i>	
		Cloud Mask		Cloud Mask
		Cloud Top Height		Cloud Top Height
		Divergence Product		
		Global Instability Index		
	Precipitation Estimate	Multi-Sensor Precipitation Estimate	<i>Rain</i>	
		Normalised Difference Vegetation Index (daily and decadal)		
	Humidity Profile derived from cloud Analysis		<i>Humidity profiles (from sounder)</i>	
			<i>Temperature profiles (from sounder)</i>	
		Optimal Cloud Analysis		
		Total Ozone	<i>Ozone</i>	Clear sky SST
		Tropospheric Humidity	<i>Upper tropospheric humidity</i>	Total Ozone