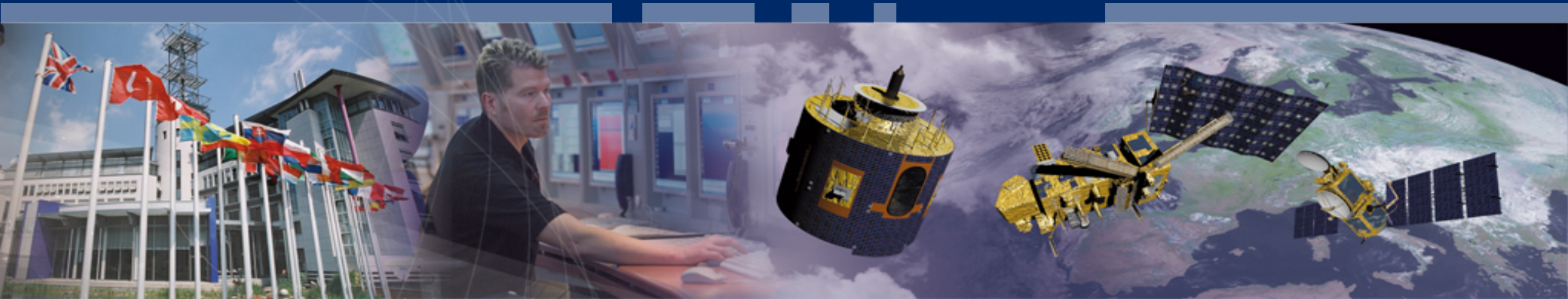




EUMETSAT Plans Poster 2.1



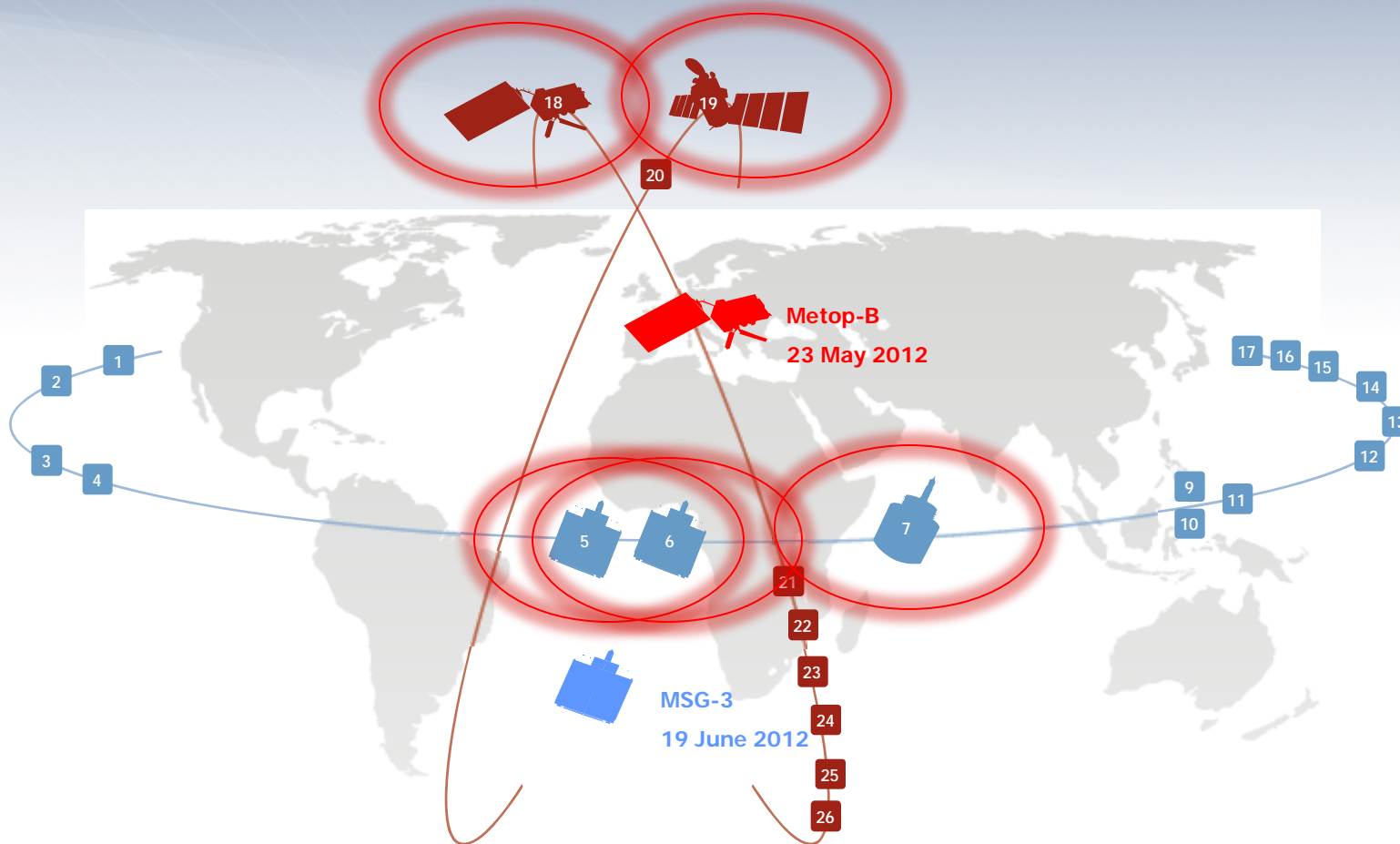
EUM/MET/VWG/12/0167

Issue 1.0

15 March 2012



Global Satellite Observing System



GEOSTATIONARY

- 1 GOES-11 (USA) 135°W
- 2 GOES-13 (USA) 105°W
- 3 GOES-12 (USA) 75°W
- 4 GOES-10 (USA) 60°W
- 5 METEOSAT-9 (EUMETSAT) 0°Longitude
- 6 METEOSAT-8 (EUMETSAT) 9.5°E
- 7 METEOSAT-7 (EUMETSAT) 57.5°E

- 9 KALPANA-1 (INDIA) 74°E
- 10 INSAT-3C (INDIA) 74°E
- 11 GOMS-N1 (RUSSIA) 76°E
- 12 FY-2D (CHINA) 86°E
- 13 INSAT-3A (INDIA) 93.5°E
- 14 FY-2C (CHINA) 105°E
- 15 FY-2E (CHINA) 123°E
- 16 MTSAT-1R (JAPAN) 140°E
- 17 MTSAT-2 (JAPAN) 145°E

LOW EARTH ORBIT

- 18 METOP-A (EUMETSAT)
- 19 JASON-2 (USA, EUROPE)
- 20 JASON-1 (USA, EUROPE)
- 21 NOAA-15 (USA)
- 22 NOAA-16 (USA)
- 23 NOAA-17 (USA)
- 24 NOAA-18 (USA)
- 25 FY-1D (CHINA)
- 26 FY-3A (CHINA)

EUM/MET/VWG/12/0167

Issue 1.0

15 March 2012

MTG will provide continuity and progress in geostationary orbit

1977



MOP/MTP
MOP/MTP



Observation mission:

- **MVIRI**: 3 channels

Spinning satellite

Class 800 kg

2002



MSG
MSG



Observation missions:

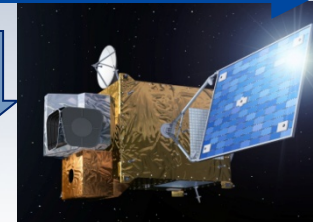
- **SEVIRI**: 12 channels

- **GERB**

Spinning satellite

Class 2-ton

Dec. 2017 and June 2019



MTG-I and MTG-S

Observation missions:

- **Flex.Comb. Imager**: 16 channels

- **Infra-Red Sounder**

- **Lightning Imager**

- **UVN**

3-axis stabilised satellites

Twin Sat configuration

Class 3.5-ton

Implementation of the EUMETSAT Mandate
for the Geostationary Programme

Atmospheric Chemistry Mission (UVN-S4):
via GMES Sentinel 4

EUM/MET/VWG/12/0167

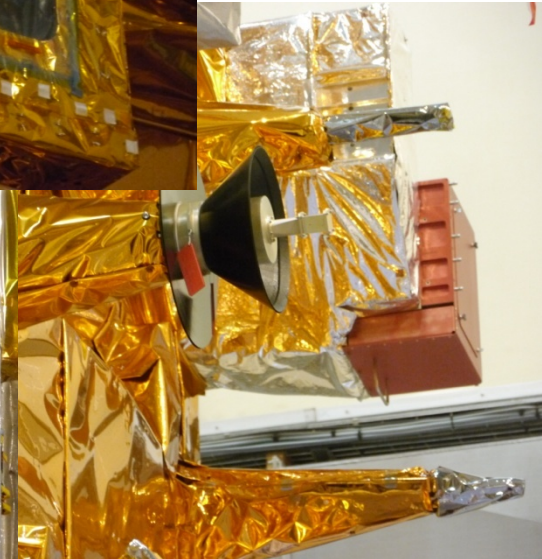
Issue 1.0

15 March 2012

Slide: 3



Metop-B is being prepared for launch...



Metop-B

at ASTRIUM
in Toulouse

November 2011

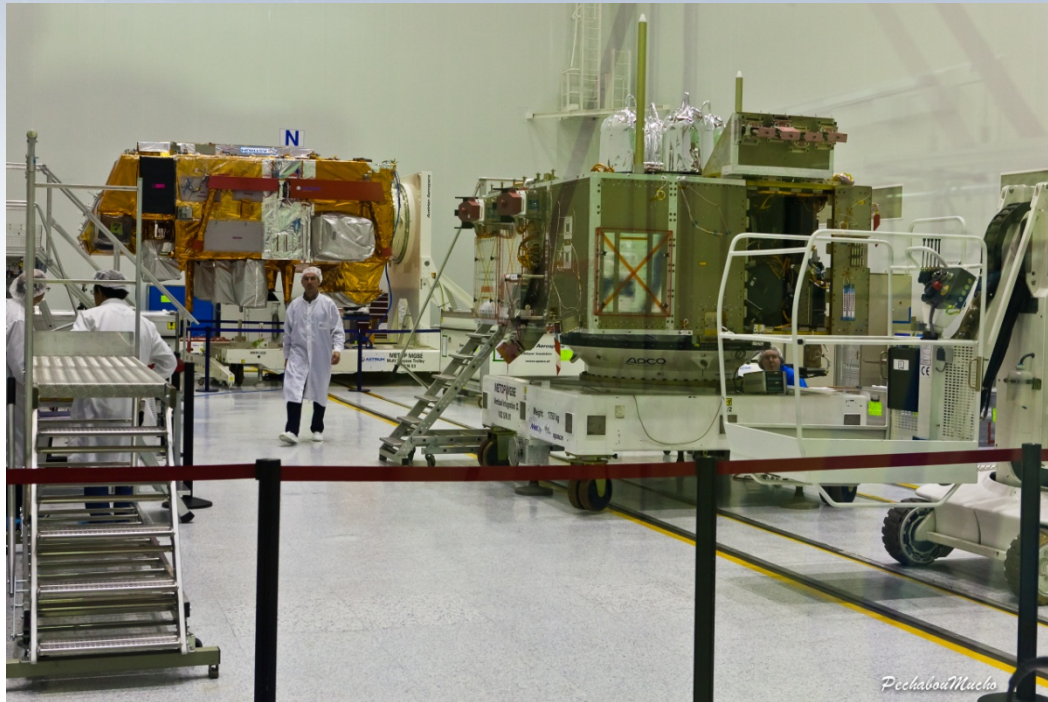
EUM/MET/VWG/12/0167

Issue 1.0

15 March 2012



Launch Campaign is ongoing



Metop-B in the cleanroom in Baikonour



EUM/MET/VWG/12/0167

Issue 1.0

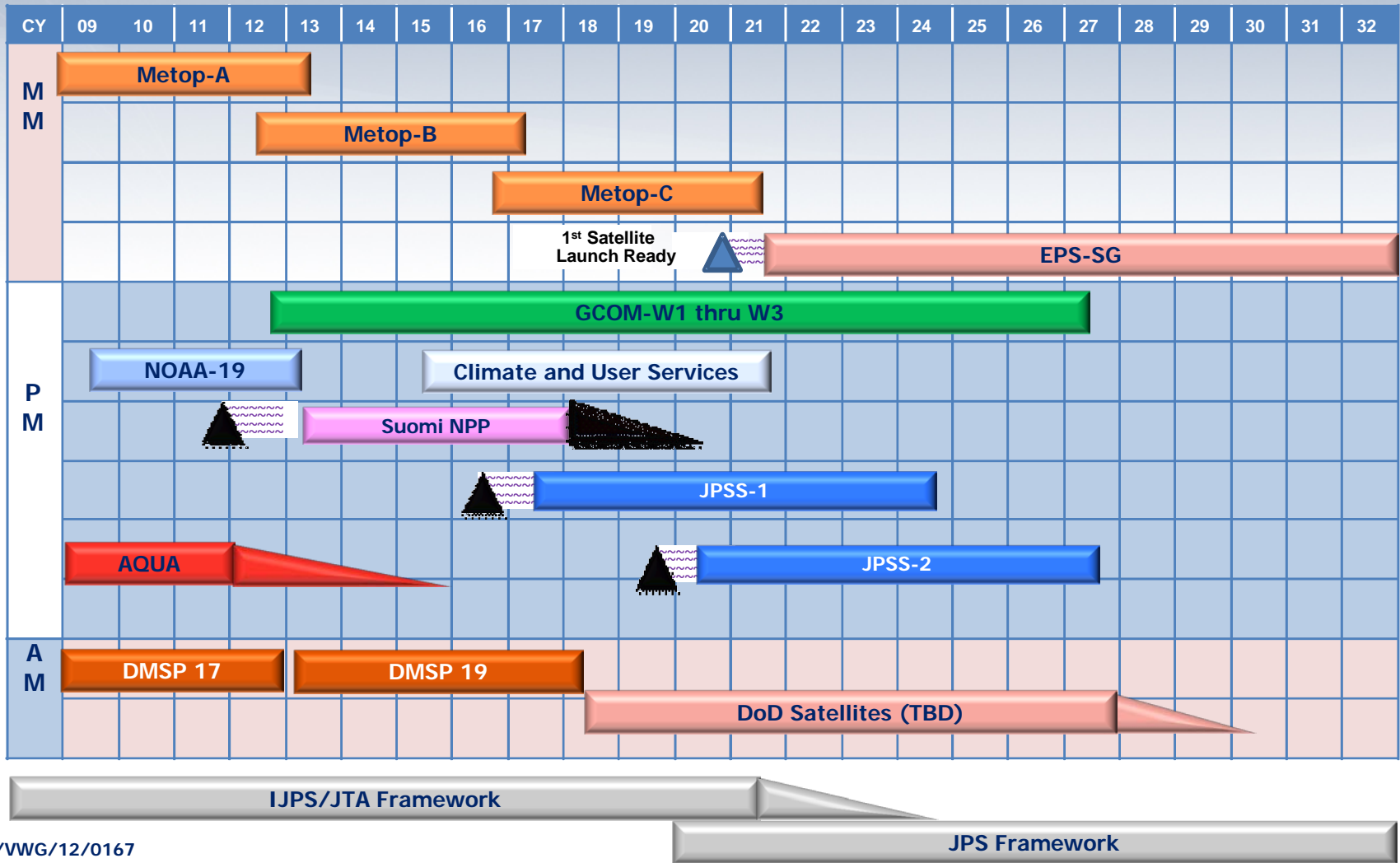
Slide: 5

15 March 2012

Timeline

The Joint Transition Agreement covers the Metop A/B/C, the NOAA Suomi NPP, and the NOAA JPSS-1

The JPS agreement will cover the Metop-SG Satellites, the JPSS-2 and follow-on satellites, and DoD satellites



EUM/MET/VWG/12/0167

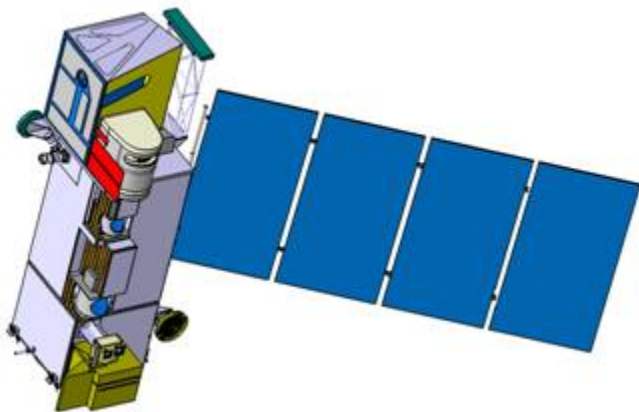
Issue 1.0

15 March 2012

EPS-Second Generation continues mid-morning orbit coverage

Satellite EPS-SG-A

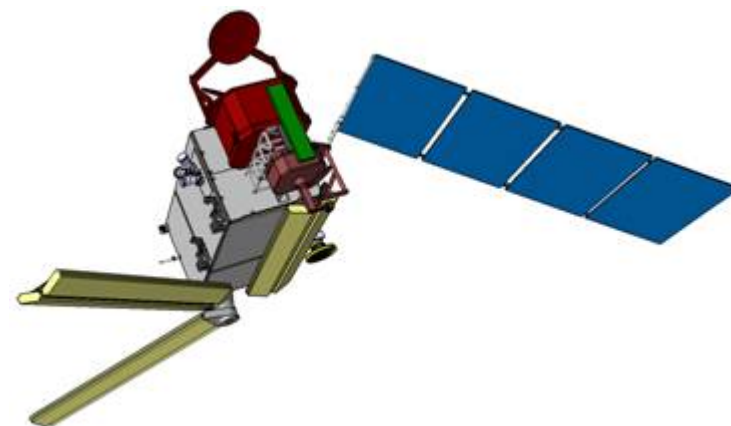
Payload	IAS VII MWS RO 3MI GMES Sentinel-5
Dry mass [kg]	~ 2500
Launch mass [kg]	~ 2900
Power [kW]	~ 2.2
P/L data rate [Mbit/s]	~ 60



Artist view

Satellite EPS-SG-B

Payload	SCA RO MWI ADCS
Dry mass [kg]	~ 2000
Launch mass [kg]	~ 2300
Power [kW]	~ 1.6
P/L data rate [Mbit/s]	~ 1.2



Artist view

Metop Second Generation Satellites (Metop-SG)

EUM/MET/VWG/12/0167

Issue 1.0

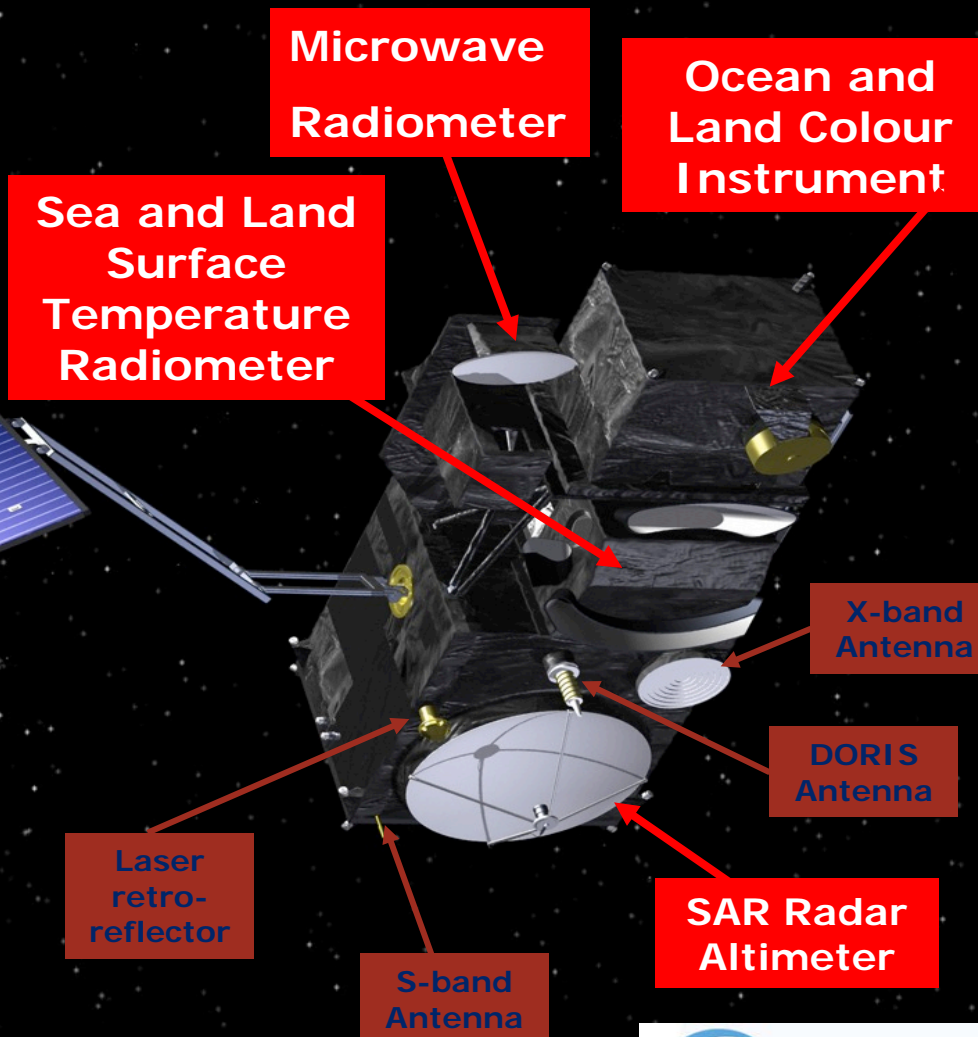
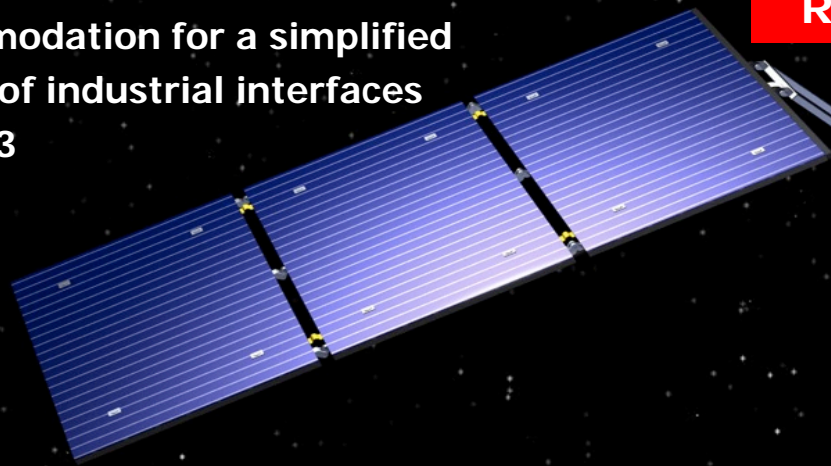
15 March 2012



GMES Sentinel-3

Main satellite characteristics

- 1250 kg maximal mass
- Volume in 3.89 m x 2.202 m x 2.207 m
- Average power consumption of 1100 W
- 7.5 years lifetime (fuel for 5 add. years)
- Large cold face for optical instruments thermal control
- Modular accommodation for a simplified management of industrial interfaces
- Launch Mid 2013



Observation Data Management

- 21.25 Gb (170 Gbit) of observation data per orbit
- Space to ground data rate 2 x 280 Mbps X-Band
- 1 ground contact per orbit
- 3h delivery timeliness (from satellite sensing)



Ocean Monitoring with Jason-2/-3/-CS

Jason-3



- Jason-3 follow on for Jason-2
- Launch envisaged 2014

- Jason-CS to continue services
- Programme proposal being prepared