

ESA EO Programmes for CM16

EOEP-5 Block 2

Bilateral meeting with
AT Delegation and
Industry

Vienna, 24/05/2016

FLEX (EE-8)

FLEX will:

- quantify actual photosynthetic activity of terrestrial ecosystems;
 - provide physiological indicators for vegetation health status;
- by direct measurements of vegetation fluorescence at relevant spatial scales.

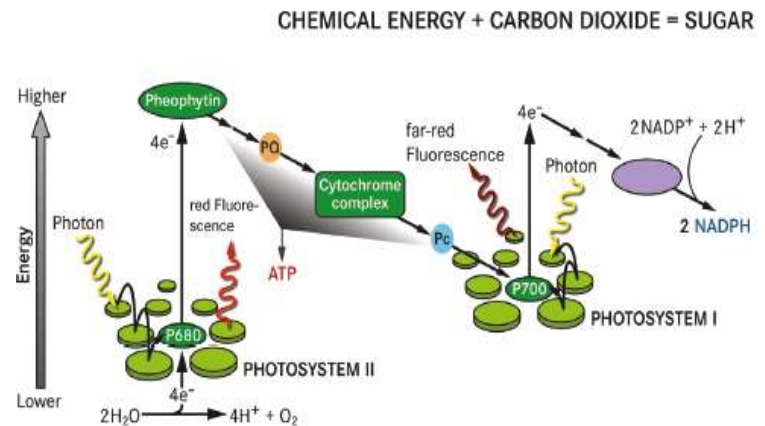
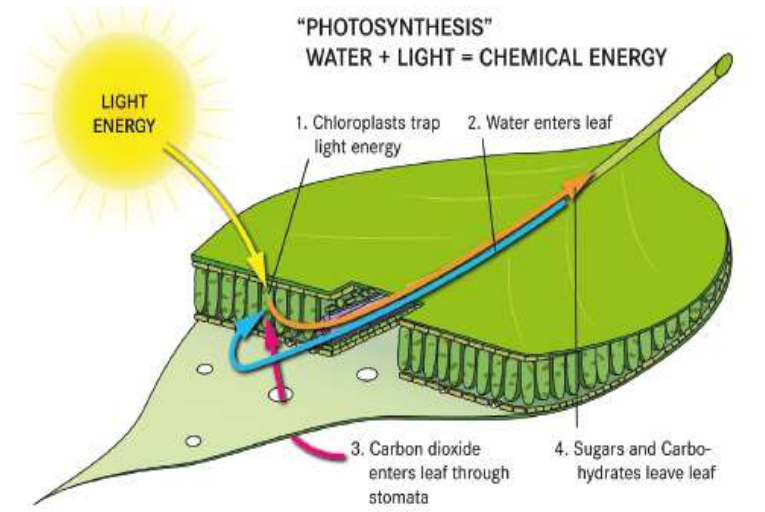
Procurement around two successive steps:

1. development of the technologically challenging FLEX Instrument;
2. development of the FLEX Platform and Satellite with a planned kick-off after successful I-PDR and technology readiness confirmation;

FLEX Instrument phase B2, C, D & E1 bid evaluation ongoing. Planned kick-off end of July 2016 with PDR and technology readiness confirmation in Q4 2017.

FLEX Satellite B2, C, D & E1 ITT planned to be released in Q1 2017 for a kick-off in Q4 2017.

Currently estimated launch readiness is Q4 -2022.



Courtesy Forschungszentrum Jülich

FLEX (EE-8)

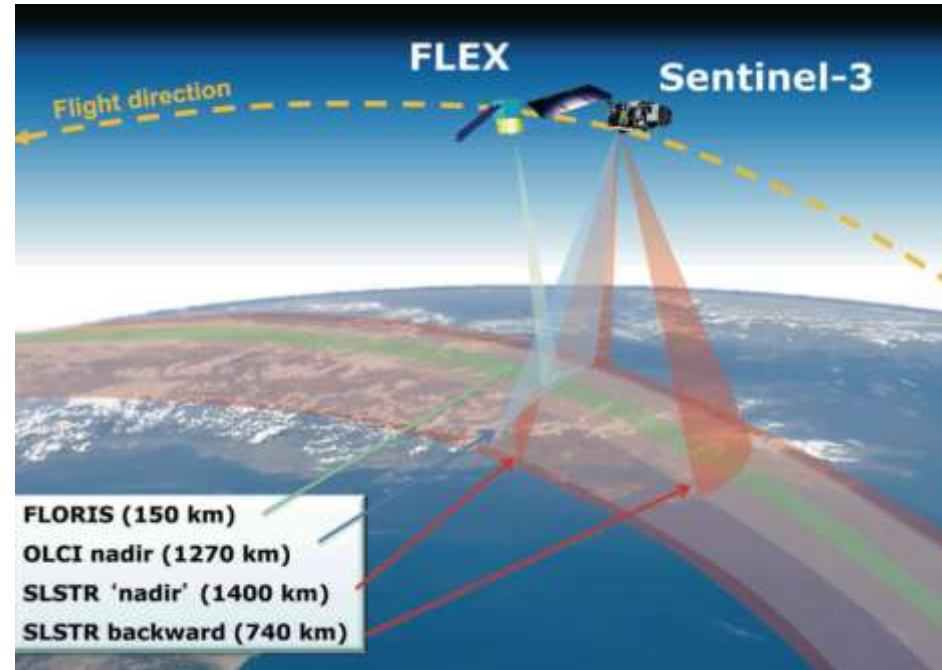
Potential contribution by Austrian Industries in FLEX development:

FLEX Instrument (FLORIS):

- Aperture mechanism & calibration unit
- (part of) Instrument Control Unit
- Harness
- MGSE/OGSE

FLEX Platform and Satellite:

- Thermal HW
- (part of) Avionics
- Harness
- MGSE
- EGSE



CSC Evolution

New Sentinels (aka Sentinels-7 / -8 / -9)

1. User Consultation on-going by/with COM
2. Prioritization to be achieved by C-MIN-2016 if we want to start substantial activities (at technology development and sub-system level) in 2017.
3. If prioritization slips to 2019:
 - significant industrial activities will only start in 2020;
 - they will at least partially overlap with the New Generation Sent-1/-2/-3;
 - it will be impossible to guarantee continuity (e.g. Cryosat Follow-On) or complement/augment existing missions via tandem implementation (e.g. between TIRI free-flyer and Sentinels-2C/-2D)

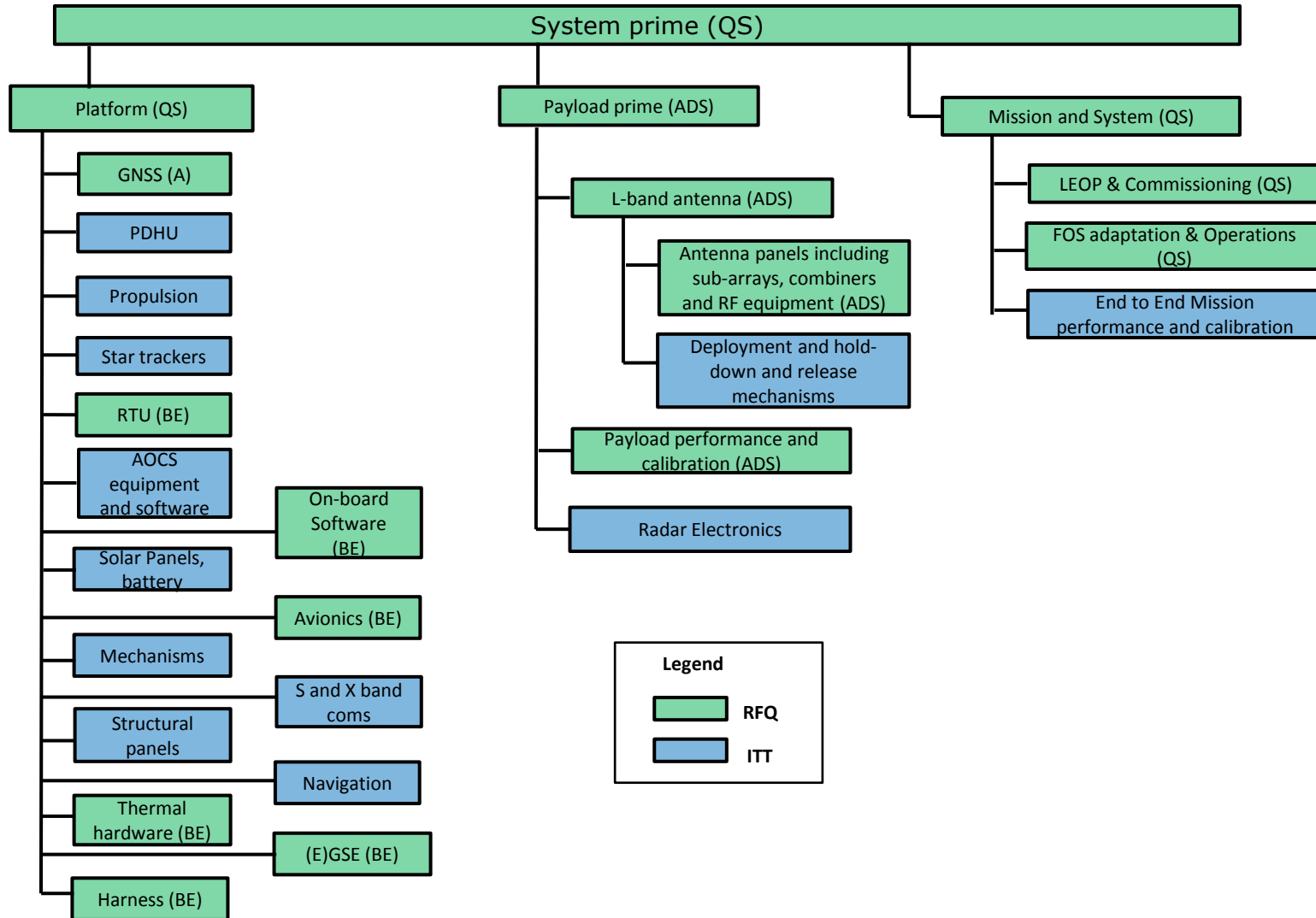
CSC Evolution

New Sentinels (aka Sentinels-7 / -8 / -9)

Potential Candidates (in arbitrary order):

- CO2 Monitoring System (not 1 satellite but a system – maybe implemented in cooperation)
- Cryosat Follow-On
- Thermal Infrared Imager (TIRI) companion of Sentinel-2C/-2D (instrument pre-development starting)
- Polaris
- Hyperspectral mission
- others

- Based on an ESA-CONAE cooperation, SAOCOM-CS will be a small companion satellite (CS) to the Argentinian SAOCOM mission.
- SAOCOM-CS will be implemented as a receive-only satellite, flying in formation with the L-band SAOCOM-1b satellite carrying the active SAR illuminator, and capturing its radar echoes from the Earth's surface.
- In February 2016, the PB-EO authorized the start of the SAOCOM-CS phase B2/C/D/E1 procurement and the execution of the phase B2, with the decision of the full implementation of the mission (i.e. phase C/D/E1) to be taken after the CMIN-16.
- It is foreseen to finance it by EOEP 4 and 5 envelope programme combined with indirect contributions from Belgium, Spain and Austria.
- Procurement proposal for SAOCOM CS phase B2, C, D & E1 approved by IPC on 10 May.
- RFQ in preparation and expected to be released end May/early June.
- Intermediate System Requirement Review (ISRR) on-going with a Board Meeting held today.
- RUAG (AT) is the subcontractor responsible for the high-precision navigation and timing receiver



Thank you for your attention