

GEO FCT & GFOI

CEOS Data Strategy & Institutional Arrangements

Stephen Ward
(for Australia, co-lead)

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SIT-26, Frascati



SIT-25 actions re FCT

- **25-10: CEOS FCT participants, supported by CEOS Chair, to develop a CEOS Strategy Report on continuity and coverage plans year by year for 2010 – 2015 using public good data sources and identifying the role for high resolution data**
- **25-11: CEOS & SIT Chairs to initiate a short study among participating agencies to report to CEOS Plenary on the institutional arrangements for management of the CEOS role in supporting FCT future development and expansion**



GFOI

- Coordinating framework under GEO for observation of the world's forests:
 - Sustained availability of satellite and ground observations in support of national forest information systems
 - Support countries in use of observations
- GFOI extends the current GEO FCT task
- CEOS has responsibility for coordination of the satellite data contribution to the observations component of GFOI
 - Draft data document begins to lay out a strategy and scenario for that coordination



Basic strategy

- Covers both sustained global observations in support of GFOI and the technical support activities on-going within the FCT, including the NDs and science questions
- 1. A baseline, coordinated global data acquisition strategy involving a small number of core public good data streams**
 - 2. A coordinated national data acquisition strategy**
 - 3. Data supply in support of FCT activities**



1. Baseline global strategy

- Twice-annual wall-to-wall acquisitions of forested areas globally
- Default forest observations data for all countries without specific technical requirements, heritage or preference



2. National data acquisition strategy

- In response to national needs assessments undertake within GFOI Implementation – starting late 2011
- Accommodates countries with specific technical requirements, or heritage and experience of particular data sources or types
- Includes numerous intergovernmental arrangements that exist or emerge for certain data supply
- Wider range of data sources



3. Data supply in support of FCT activities

- Science studies for GFOI methods & protocols
- Interoperability studies
- Validation activities
- National Demonstrator coverage will transition and expand to routine effort under 1. and 2. above



Core Data Streams

- Baseline global strategy built around core data streams, which:
 - must be available on public good basis, in support of any country's information requirements
 - should have capacity in coverage, processing and distribution consistent with global scale requirements of GFOI



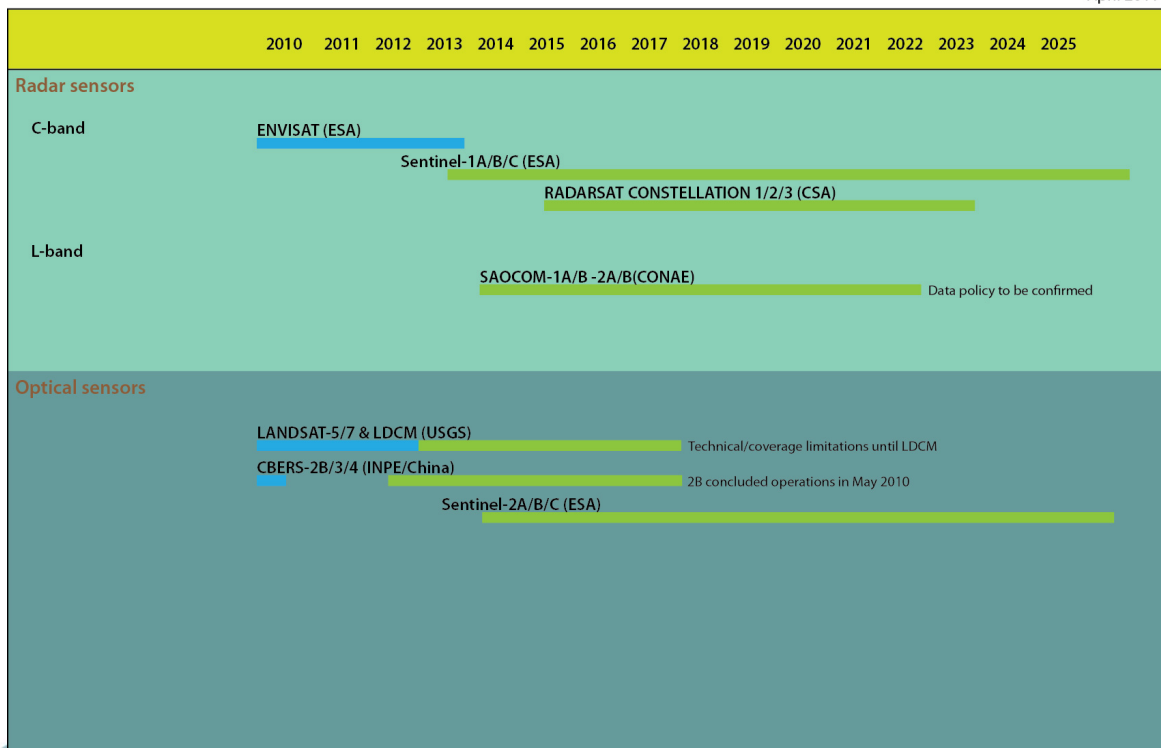
Core Data Streams

- Discussions among FCT-active CEOS agencies has produced a working list of core data streams based on known info re data policies and capacities:
 - Landsat-5/7/8 (USGS)
 - Envisat (ESA)
 - Sentinel-1 series (ESA)
 - Sentinel-2 series (ESA)
 - CBERS-3/4 (INPE)
 - Radarsat Constellation Mission (CSA)
- SAOCOM of interest pending confirmation vs criteria
- CSA, ESA, INPE, USGS assumed to be at the heart of global strategy planning



Sub 30m public good satellite data streams for continuous, annual, global coverage

April 2011

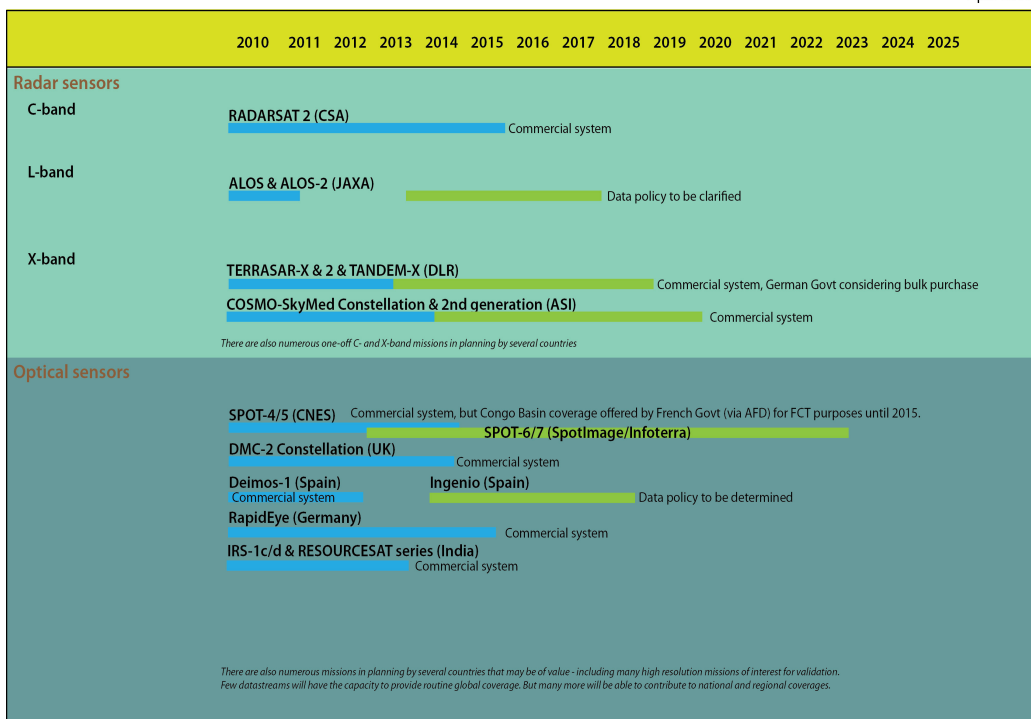


Further Data Streams of Interest

- Many more can contribute to national data acquisition strategy and to FCT needs – including higher-resolution, X-band and L-band data
- Larger number of CEOS agencies engaged in this coordination – may require engagement of their commercial counterparts
- Anticipate many different intergovernmental arrangements for supply of data in support of REDD+ and GFOI objectives
- Encourage non-core data streams to contribute to consistent wall-to-wall time series archives on scales from national to global – even if an explicit commitment to public good data provision cannot be currently guaranteed.

Further data streams of interest

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Timing

- Consistent with GFOI Implementation schedule, still in definition
- Core data stream availability is a consideration
- Full capacity from 2014?
- In the interim - only Envisat and Landsat missions from core data streams remain operating
- Ensuring necessary continuity/increase of coverage, and transition to a global scale operation in support of GFOI will need careful coordination by CEOS
- Detailed (draft) timing tables in Appendix



Institutional arrangements

- GFOI arrangements in definition – a Geneva-based project office is anticipated, starting from 2012
- CEOS can expect strong representation/links given the significance of the space data contribution
- Foundations for coordination of CEOS data strategy exist within FCT
- Propose to establish a reinforced space data coordination group covering all aspects of CEOS data strategy for GFOI/FCT:
 - Baseline global data
 - National data
 - FCT activity data
 - Early emphasis on the baseline global data acquisition strategy and ensuring core data streams are working in harmony



Space Data Coordination Group

- Core data stream agencies: CSA, ESA, INPE & USGS + national data acquisition agencies + FCT data contributors
- Bringing the analytical skills of the SEO and LSI teams
- Stakeholder agencies to explore and agree management and operation arrangements for the Group
- Subsume existing CEOS coordination activities within FCT



Way forward

- CEOS stakeholders invited to review and feedback on the draft CEOS data strategy document (aim for final version @ CEOS Plenary)
- Take first steps towards reinforced Space Data Coordination Group for GFOI/FCT
 - Stakeholder agencies to explore arrangements
 - Begin planning effort on baseline global data strategy
 - Confirm and formalise arrangements following GFOI Implementation Plan actions @ GEO-VIII
- CEOS participants in GFOI/FCT keep CEOS apprised of progress – reporting to CEOS plenary next

