

“Future Prospects for Satellite Environmental Information in support of Development Aid Activities”

Background & Context

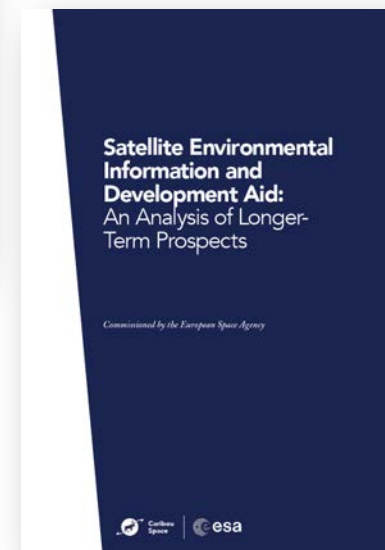
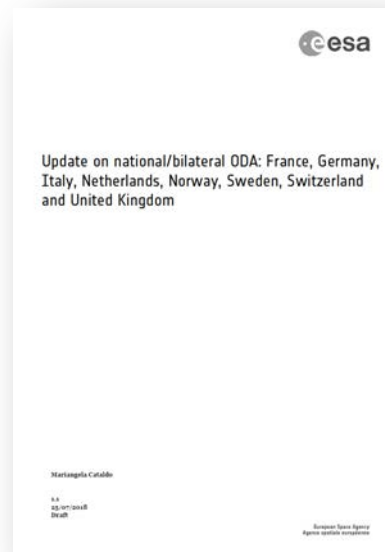
Stephen Coulson

Head of Sustainable Initiatives Office (EOP-SI),
ESA Earth Observation Programmes Directorate (EOP)

11th + 12th September, ESA/ESRIN, Frascati

Context

- First Meeting in Jan 2018 took stock of **current status on the use** of EO in some national Development Aid Agencies and activities,
- Results, lessons learnt and recommendations taken on-board,
- Discussions with **OECD** (Feb), **DAC ODA** decision (July)
- **Further analysis** undertaken,
- Now discuss potential **ways forward**.

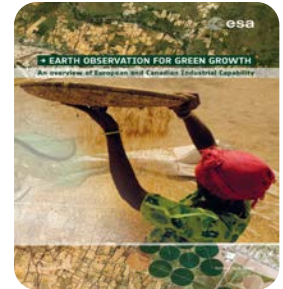


Background : Overview of experiences with International Financing Institutions (IFIs) projects/programs



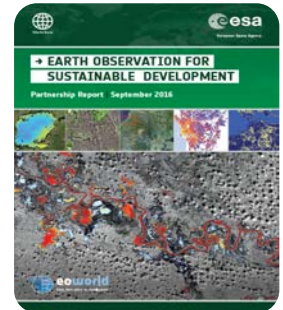
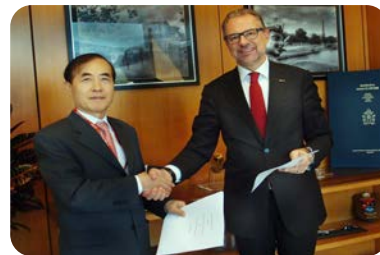
International Financing Institutions (IFIs)

- 65+ small-scale demonstrations of EO-based environmental information in the implementation of Official Development Assistance (ODA) projects during 2011-15, 10 M€ ESA financing.



World Bank, Dec 2015

Asian Development Bank, Nov 2016



Earth Observation for Sustainable Development

Scaling-Up, Specific Priorities



- Phase 1 (25 M€, 2016-2020):
Consolidate Requirements, engage stakeholders (IFIs & Client States) via Large-scale regional demonstrations of EO.



Priority thematic areas :

2016: Agriculture, Urban Development, Water Resources,

2018: Marine & Coastal, Disaster Risk Reduction, Fragile & Conflict States, Climate Resilience & Proofing,

2019: Forestry, Ecosystems Services,

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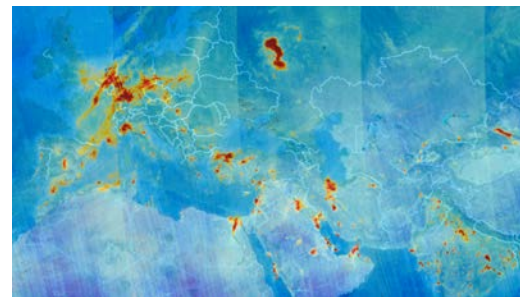
EO4SD Clinic



eo clinic
the walk-in satellite support



- Respond to ad-hoc, short-term, speculative requests for small-scale EO support,
- Can be from IFIs, Aid Agencies, Client States,
- For 24 months, start 2019 -> end 2020,
- Cruising-level capacity, **2-3 requests/month**, deliver **within 3 months** of request,
- Can be for more innovative types of environmental information.



Air Quality, NO2, Sentinel 5P



Semarang, Indonesia



Arusha, Tanzania





esa

A unique environment to cover different aspects of coastal environment.

→ COASTAL TEP



A matchless portfolio of ready-to-use data and services to generate innovative and actionable information that supports the realization of sustainable cities and communities.

→ URBAN TEP



Supporting sustainable food production from space

→ TEP FOOD SECURITY



The easier options for processing large volumes of EO data for the polar regions

→ POLAR TEP



A one-stop shop for forestry remote sensing services for the academic and commercial sectors.

→ FORESTRY TEP



esa

A unique set of tools to forge new applications globally and to address the challenges of monitoring tectonic areas, earthquakes, volcanic eruptions and landslides

→ GEOHAZARDS TEP



esa

A powerful community platform to generate and share your own water information from earth observation solutions.

→ HYDROLOGY TEP

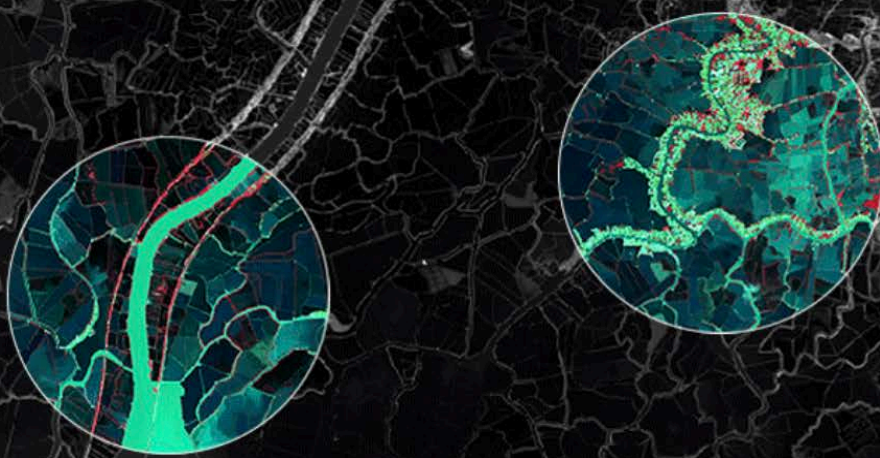


- A Discovery & Development environment,
- Big Data, Massive Computing, Cloud technology,
- Can be for IFIs, Aid Agencies, Client States,
- Requirements (functional, content) driven by Users,
- For 12 months, start mid 2019 -> mid 2020,



→ **E04SD**

an ESA initiative to support the uptake of EO-derived information in sustainable development



eo4sd.esa.int



VIDEO Posted on March 22, 2018 by [Mariangela](#)

→ **SAFEGUARDING OUR MOST PRECIOUS RESOURCE: WATER**



Posted on January 23, 2018 by [Mariangela](#)

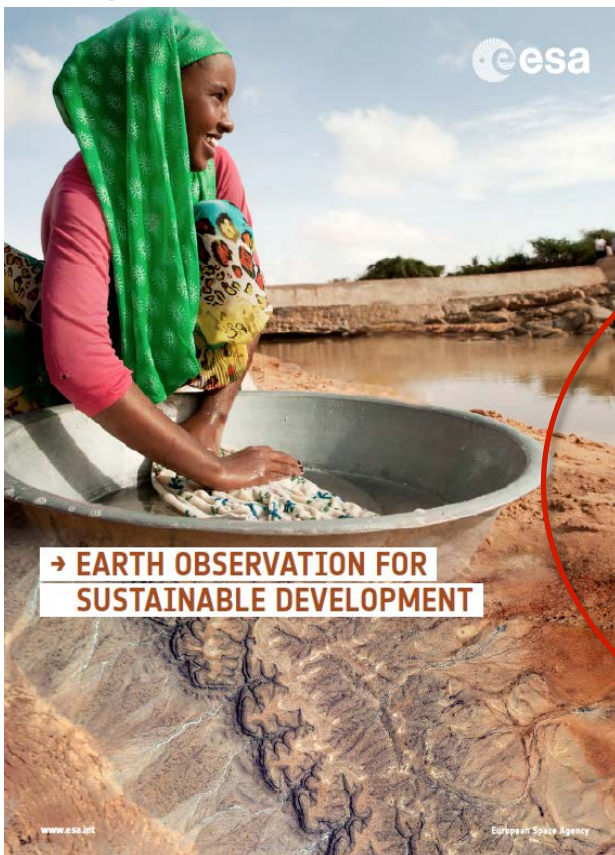
→ **ESA OPENING A DIALOGUE WITH NATIONAL AID AGENCIES**

MORE ABOUT EACH PROJECT



Earth Observation for Sustainable Development

Longer-Term Vision



Dedicated new ESA Programme (Space4IDA)

- **Phase 2** (TBD M€, 2020~2025):
Mainstream & Transfer EO into operational working processes & financing of Development Aid as 'best-practice' source of environmental information and in support of Environmental Safeguards Systems (ESS) and Monitoring & Evaluation (M&E) methodologies, SDGs reporting. **Capacity-Building, Knowledge Development & Skills Transfer** to developing countries.

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Thank You for participation !

