

→ E04SD – EARTH OBSERVATION FOR SUSTAINABLE DEVELOPMENT

Disaster Risk Reduction

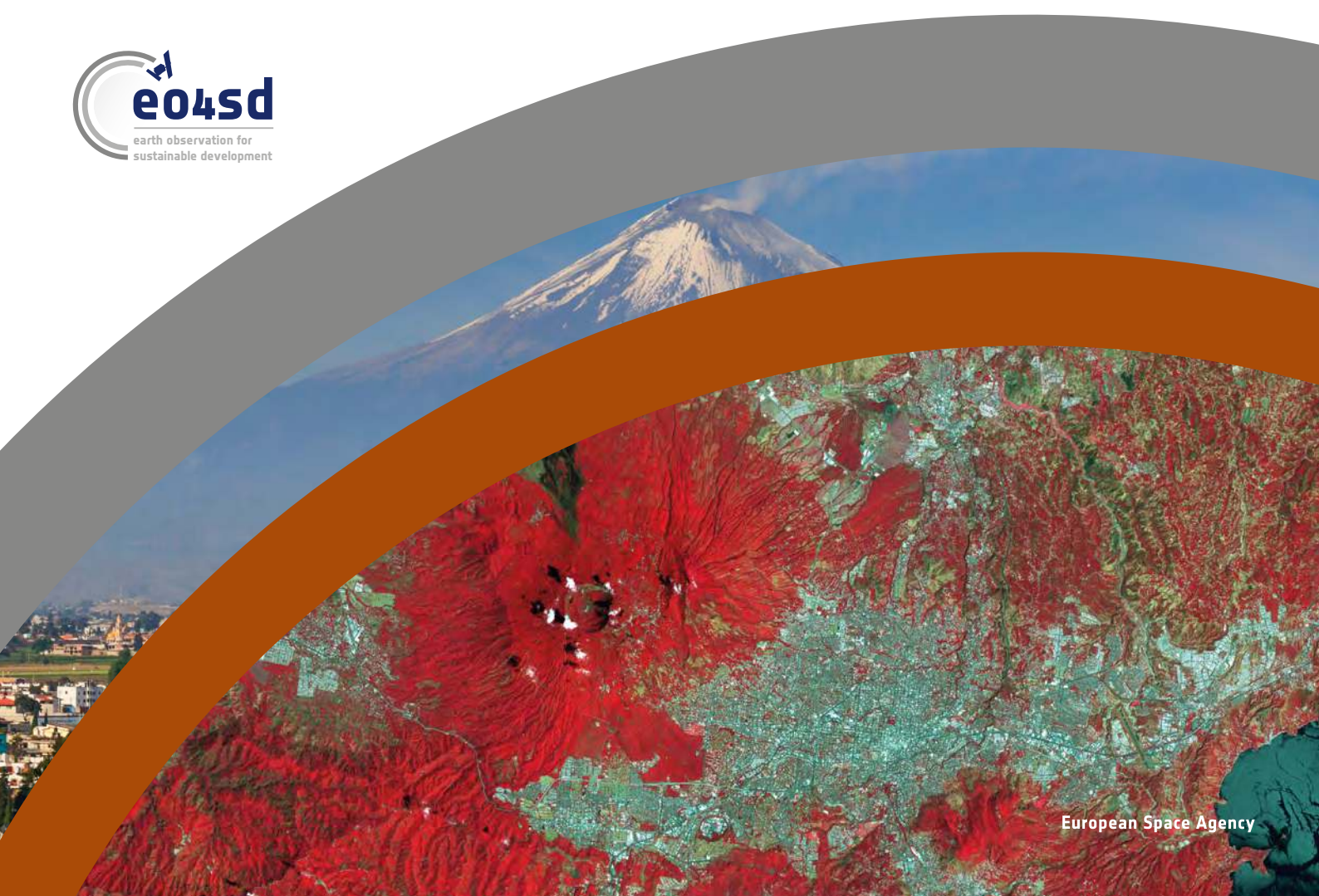
Understanding disaster risk in all its dimensions of vulnerability, exposure of persons and assets, hazard characteristics and the environment is the first priority action of the Sendai Framework for Disaster Risk Reduction (2015-2030).

International Financial Institutions (IFIs) play a significant role as facilitators of funding in developing countries, in direct cooperation with national mandated disaster authorities to prevent and mitigate the adverse effects of natural disasters and foster sustainable development..

The ESA E04SD Disaster Risk Reduction project aims to promote the adoption of Earth Observation-based products and services mainstreamed into the working processes of IFIs funded projects that seek to prevent or mitigate the adverse impacts of natural disasters in developing countries. Earth Observation applied to disasters is evolving quickly and has proven to be effective in all phases of the disaster risk management cycle such as prevention/ preparedness, early warning, post event recovery and reconstruction activities.

The project pursues the following objectives:

- Carrying out demonstrations of the benefit and utility of Earth Observation (EO)-based information in support of international development projects and activities in the thematic domain of Disaster Risk Reduction (prevention, preparedness, recovery and reconstruction phases);
- Supporting directly programs / projects, monitoring & evaluation methodologies and policy & planning of the IFIs and their respective Client States not only in the sector of disaster management but also in transportation, habitat, energy, water and sanitation;
- Mainstreaming and transferring EO-based information into operational working processes of the individual countries and development organizations.



MAIN PARTNERS

- World Bank (WB)
- Asian Development Bank (ADB)
- Inter-American Development Bank (IADB)
- African Development Bank (AfDB)
- Green Climate Fund (GCF)
- Development Bank of Latin-America (CAF)
- Caribbean Development Bank (CDB)

MAIN THEMATIC COMPONENTS AND EO-BASED INFORMATION

Hazard modelling for specific themes within Disaster Risk Management:

- › **Geo-hazards:** subsidence, landslides, earthquakes, volcanoes and tsunamis
- › **Hydro-meteorological hazards:** flooding, storm surge and other meteorological events
- › **Climatological hazards:** droughts, wildfires

High emphasis on **exposure, vulnerability and risk assessments.**

EO supporting services: Land Use/Land Cover, population density mapping, settlement characterization, change assessment, or Digital Elevation Models.

PRELIMINARY LIST OF CANDIDATE REGIONS

- Africa
- South Asia and East Asia and Pacific
- Latin America

Specific countries will be selected in liaison with IFIs within 2018.

MAIN DEVELOPMENT PROGRAMS AND INITIATIVES

A non-exhaustive list of DRR-related initiatives:

- › Disaster Risk Analytics and Solutions (D-RAS)
- › Disaster Risk Finance (DRF)
- › Hydromet program
- › Open Data for Resilience initiative
- › The African Risk Capacity (ARC)
- › Integrated Disaster Risk Management Fund (IDRF)
- › United Nations Office for Disaster Risk Reduction
- › Other initiatives in LATAM/Asia/Africa



© ESA 2018



More info

ESA Technical Officer: Philippe Bally - Philippe.Bally@esa.int | Project Lead: Angel Utanda: autanda@indra.es