

# **Terms of Reference**

## **for the**

### **CEOS Land Surface Imaging Virtual Constellation**

**Background:** The CEOS Land Surface Imaging Virtual Constellation (LSI VC) was established through a Declaration of Intent signed by seven CEOS agencies in 2007.

**Purpose:** The LSI VC primary role is to promote the effective and comprehensive collection, distribution, and application of Earth Observation (EO) data of the global land surface, especially to meet societal needs of the global population, such as those addressed by the Group on Earth Observations (GEO) societal benefit areas (SBAs).

**Scope:** The remit of LSI VC is to coordinate and focus land EO contributions from CEOS agencies supporting CEOS priorities. This includes considering space-based Remote Sensing from optical (visible and infrared including thermal) and microwave instruments. The CEOS Priority Actions are main drivers for the group with the current LSI VC focus on:

- Improved coordination support of Space Agency terrestrial activities related to climate initiatives;
- Direct support to key GEO initiatives that CEOS has endorsed including the Forest Carbon Tracking, the Global Forest Observations Initiative, the Joint Experiments on Crop Assessment and Monitoring and, as appropriate, the GEO Global Agricultural Monitoring;
- Investigating ways LSI can integrate or utilize the outputs from CEOS Quality Assurance for Earth Observation (QA4EO) efforts; and
- Developing tools and sponsoring forums for CEOS terrestrial mission planning.

**Deliverables:** The LSI VC will provide the following services and activities:

- Facilitate the distribution of terrestrial Essential Climate Variables (ECVs) as recommended by the WGClimat.
- Address the cross-cutting issues that are common and fundamental to all data coordination responses from CEOS (information extraction, cross calibration, inter-operability, long-term data records, availability and dissemination) in cooperation with the other CEOS Working Groups.
- Provide end users updated information on current CEOS data coverages, gaps and potential discontinuity in data availability.
- Investigate a land data coordination role with CEOS agencies utilizing Public-Private Partnership arrangements with the goal to facilitate data usage for CEOS sponsored activities.

**Membership & Representation:** LSI VC participation is open to all CEOS members and organizations willing to support and contribute to initiatives that would benefit from broad and open access to EO data to meet societal needs of humankind. The LSI VC is a CEOS working

body and agency representatives should possess relevant qualifications in satellite data acquisition planning for their agency missions.

**Management:** LSI VC participants shall nominate one or more Chairs responsible for the management of the Group. Chair roles should be reviewed after two years with a view to sharing the workload. LSI VC Chairs have the responsibility for day-to-day communications and documentation of LSI VC activities. This shall include an up to date, annual work plan and schedule for the LSI VC for the purposes of effective management and external communications – including progress reporting at key CEOS meetings.

**Linkages:** The LSI VC will get guidance from and report back to CEOS on contribution and progress achieved against the work plan. It will work closely with the CEOS Strategic Implementation Team (SIT), Space Data Coordination Group (SDCG), the Working Group on Information Systems and Services (WGISS), the Working Group on Calibration and Validation (WGCV), the Working Group on Capacity Building and Data Democracy (WGCapD), and the Working Group on Climate (WGClimate) to address potential overlaps and optimize land surface observation strategies and data access for CEOS initiatives.

**Schedule:** LSI VC participants will assess and define the overall timetable for the work plan implementation, to include specific CEOS agency responsibilities.

**Reporting:** LSI VC reports to the CEOS Plenary, the CEOS Secretariat, and to the SIT.

**Meetings:** The LSI VC will primarily utilize email exchanges, telecons or video conferencing sessions, and workshops as needed to fulfill its objectives.