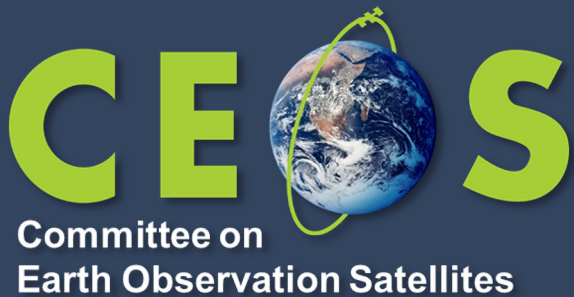


37th CEOS Plenary

Interoperability Framework





- ❖ At the 2022 CEOS Plenary, CEOS Principals confirmed that coordination of interoperability related work remains within the WGISS perimeter. WGISS was invited to propose an interoperability roadmap at SIT-38, considering the CEOS Interoperability Framework concept developed and presented by LSI-VC. (Decision 36-09).
- ❖ WGISS has coordinated across CEOS groups (ARD OG, LSI-VC, SEO, WGISS, WGCV, etc.) to develop a framework and mapping of CEOS activities / groups / people to each interoperability factor.
- ❖ **WGISS requests endorsement of the proposed Interoperability Framework and initial Roadmap.**

Proposed Interoperability Framework



Vocabulary (Semantics)

The (narrow) semantic aspect refers to the naming and meaning of data elements. It includes developing, harmonising, and maintaining vocabularies and schemata supporting provision, exchange, and analysis of data, and ensures that terms and data elements are understood in the same way by all communicating parties

Architecture

Architecture describes the organisational structure of concepts, processes, and assets, including data and workflows. It comprises the structural aspects of models and standards that govern the collection, storage, arrangement, integration, and use of data.

Interface (Accessibility)

Data exchange protocols, and application interfaces. These provide the means necessary to access and exchange data.

Quality

References are data and schemes that are used as benchmarks for (observational) data comparison or analysis. This could include instances such as geographic locations, product numbers, or official (authoritative) data and statistics.

Policy

Legal frameworks, policies and strategies regulating the relation between the different stakeholders.

Framework Roadmap



	2023-Q1	2023-Q2	2023-Q3	2023-Q4	2024-Q1	2024-Q2	2024-Q3	2024-Q4	2025-Q1	2025-Q2	2025-Q3	2025-Q4
INTEROPERABILITY FRAMEWORK	<i>Roadmap</i>				<i>Handbook v2</i>				<i>Maturity Matrix</i>			
VOCABULARY	CB-22-13 (WGCapD, WGISS)											
	CB-23-04 (WGCapD)											
	CB-23-08 (WGCapD)											
	CV-22-02 (WGCV)											
	VC-23-09 (CEOS-ARD-OG, LSI-VC)											
ARCHITECTURE	CV-17-01 (WGCV)											
	CARB-22-01 (WGCV LPV)											
	VC-22-06 (SIT Chair, CEOS-ARD-OG, All VCs)											
	VC-23-10 (CEOS-ARD-OG, OCR-VC, LSI-VC)											
	DIS-20-04 (WGDisasters)											
	CV-23-04 (WGCV TMSG)											
	VC-23-12 (CEOS-ARD-OG, All VCs)											
	VC-23-13 (CEOS-ARD OG, WGCV, All VCs)											
	VC-23-05 (CEOS-ARD OG, LSI-VC)											
	VC-23-08 (CEOS-ARD OG, SEO, WGCV, WGISS, LSI-VC)											
INTERFACE (ACCESSIBILITY)	DATA-22-05 (WGISS)											
	DATA-22-02 (WGISS)											
	SDG-23-06 (SDG OG, SEO)											
	tbd CEOS Analytis Lab (SEO)											
	VC-23-06 (CEOS-ARD-OG, LSI-VC, WGISS)											
QUALITY	CV-20-03 (EC, ESA)											
	CV-23-01 (WGCV)											
	OUT-23-05 (NSTT)											
	OUT-23-06 (NSTT)											
POLICY	OUT-23-03 (NSTT)											
	tbd Authenticity & Stewardship (WGISS)											

Interoperability Roadmap Activities



DATA-23-02	WGISS	0-FRAMEWORK	CEOS Interoperability Framework Roadmap
CB-22-13	WGCapD, WGISS	1-VOCABULARY	Jupyter Notebook Foundations Webinar
CB-23-04	WGCapD	1-VOCABULARY	Open-Source Science Outreach Plan and Training in support of NASA's Transform to Open Science
CB-23-08	WGCapD	1-VOCABULARY	Recommendations on learning objects joint repositories and metadata standards for learning objects
CV-22-02	WGCV	1-VOCABULARY	CEOS Terms and Definitions Wiki
VC-23-09	CEOS-ARD-OG, LSI-VC	1-VOCABULARY	CEOS-ARD Community Building
CV-17-01	WGCV	2-ARCHITECTURE	L1 top-of-atmosphere interoperability
DIS-20-04	WGDisasters	2-ARCHITECTURE	Landslide demonstrator showing value of combining optical and radar data for multi and cascading hazards
CARB-22-01	WGCV LPV	2-ARCHITECTURE	Production of harmonised biomass products from CEOS Agency missions
VC-22-06	SIT Chair, CEOS-ARD-OG, All VCs	2-ARCHITECTURE	CEOS-ARD Strategy 2023
VC-23-10	CEOS-ARD-OG, OCR-VC, LSI-VC	2-ARCHITECTURE	Expansion of the Aquatic Reflectance CEOS-ARD PFS to Cover Oceans
CV-23-04	WGCV TMSG	2-ARCHITECTURE	Launch of a GCP Intercomparison Exercise
VC-23-13	CEOS-ARD OG, WGCV, All VCs	2-ARCHITECTURE	CEOS-ARD Product Assessments
VC-23-12	CEOS-ARD-OG, All VCs	2-ARCHITECTURE	CEOS-ARD Product Family Specifications (PFSs)
VC-23-05	CEOS-ARD OG, LSI-VC	2-ARCHITECTURE	CEOS-ARD Impact Case Studies
VC-23-08	CEOS-ARD OG, SEO, WGCV, WGISS, LSI-VC	2-ARCHITECTURE	CEOS Representation to the Open Geospatial Consortium (OGC) Analysis Ready Data (ARD) Standard
NEW	SEO	3-INTERFACING	CEOS Analytics Lab (CAL)
DATA-22-05	WGISS	3-INTERFACING	Feasibility Study for Common Guidelines for the STAC Implementations
DATA-22-02	WGISS	3-INTERFACING	Discovery and Access for Data Analytics and Processing Tools and Services
SDG-23-06	SDG OG, SEO	3-INTERFACING	Open Data Cube Applications for SDGs
VC-23-06	CEOS-ARD-OG, LSI-VC, WGISS	3-INTERFACING	CEOS-ARD in the Cloud
CV-20-03	EC, ESA	4-QUALITY	DEMIX
CV-23-01	WGCV	4-QUALITY	Develop an FRM Assessment Framework
OUT-23-05	NSTT	4-QUALITY	ESA-NASA Earth Observation Mission Quality Assessment Framework - Optical Guidelines
OUT-23-06	NSTT	4-QUALITY	ESA-NASA Earth Observation Mission Quality Assessment Framework - SAR Guidelines
NEW	WGISS	5-POLICY	DSIG - Authenticity & Stewardship
OUT-23-03	NSTT	5-POLICY	Data licensing in partnership between Public and New Space sectors