

# 2026 Earth Observation Data Providers Collaboration Forum Summary

**Date:** 8 September 2026

**Location:** Washington D.C., USA

## Executive Summary

On September 8, 2026, representatives from the Committee on Earth Observation Satellites (CEOS) and the commercial Earth Observation (EO) sector convened in Washington D.C. for the EO Data Collaboration Forum. The event focused on bridging the gap between public space agencies and private data providers to foster deeper interoperability, streamline procurement, and establish robust, shared standards.

As space agencies increasingly rely on hybrid satellite architectures and commercial data buys, a primary theme emerged: the need to transition from fragmented, agency-specific requirements to unified global standards. The forum highlighted the critical importance of the CEOS Analysis Ready Data (CEOS-ARD) framework, the shared utilization of Calibration and Validation (Cal/Val) networks, and the urgent need to ensure data veracity and trust in an era of machine learning generated data. Moving forward, CEOS agencies are committed to co-creating standards with industry partners, driving ARD adoption through procurement pathways, and expanding commercial participation within CEOS Working Groups and Virtual Constellations.

## Session 1: CEOS and Commercial Sector Institutional Perspectives

The opening session established the historical context of CEOS collaborations and explored how to evolve the current partnership model beyond basic data transactions.

### Key Takeaways:

- **Evolving Beyond Data Buys:** While current data procurement programs are successful, relying solely on data buys limits deeper integration. Participants expressed a need to explore how analytics and advanced processing can play a larger role in public-private partnerships.

- **Unified Standards Over Fragmentation:** Commercial providers face friction when different agencies issue unique requirements. Developing a single, harmonized standard for governance and data policy language would vastly improve efficiency for commercial companies producing EO data.
- **Machine Learning-Readiness Requires Granularity:** As the industry shifts toward Machine learning driven analytics, machines require highly detailed, standardized metadata.
- **Shared Cal/Val Infrastructure:** Commercial companies are already leveraging CEOS Cal/Val infrastructure (like RadCalNet), providing a strong demand signal that justifies the continued funding and expansion of these inherently collaborative networks.

## Session 2: Member Agency and Company Exchange

Representatives from global space agencies presented updates on their respective commercial integration initiatives, revealing a universal shift toward hybrid observation architectures.

### Key Takeaways:

- **Major Procurement Initiatives:** Agencies outlined expansive commercial programs, including the USGS/NASA Sustainable Land Imaging (SLI) transition (aiming for commercial data to drive Landsat products by 2035), NASA's CSDA program (currently leveraging 23 vendors), NOAA's commercial data integration, and JAXA's CONSEO program. ESA also highlighted the Copernicus Contributing Missions' dynamic purchasing system.
- **The Open Data Threshold:** Under initiatives like SLI, foundational data (Level-1B and Level-2) will remain government-supported open data. The division of labor for higher-level products remains an ongoing discussion, with the expectation that very high-resolution data will continue to be provided on a commercial basis.
- **Defining "Commercial" Data:** A recurring challenge is the lack of a universal definition for commercial data, which varies across agencies depending on licensing, procurement structures, and usage rights.
- **Defense Sector Influence:** The intelligence and defense communities remain major procurers of commercial EO data, largely setting the tone for the standards that private providers prioritize.

## Session 3: Calibration and Validation

Trust and credibility were the focal points of the Cal/Val discussions, driven by presentations from the CEOS Working Group on Calibration and Validation (WGCV) and industry leaders like Vantor and Planet.

### **Key Takeaways:**

- **Defending Data Credibility Against Synthetic data:** With image generators making it increasingly easy to create convincing synthetic imagery, maintaining public and scientific trust is an existential priority. Robust, transparent Cal/Val processes are essential to ensuring the long-term credibility of the EO sector.
- **Commercial Reliance on Public Infrastructure:** Private operators heavily rely on public networks like RadCalNet and simultaneous crossovers with reference missions to prove system performance and data accuracy to their customers.
- **Machine-Readable Specifications:** Information regarding data provenance, quality, and uncertainty must transition from static PDFs into machine-readable formats (such as graph databases) to support automated processing and evaluation.
- **Awareness Gaps:** There is a notable lack of awareness within the commercial sector regarding WGCV activities. Clearer communication of Cal/Val fora (WGCV, JACIE, VH-RODA) is necessary.

## **Session 4: Data Interoperability and Analysis Ready Data (ARD)**

This session focused heavily on the practical implementation of interoperability frameworks, highlighting the CEOS-ARD initiative and joint evaluation frameworks.

### **Key Takeaways:**

- **Industry Co-Creation:** The CEOS-ARD framework is actively evolving through industry collaboration, exemplified by the new Surface Brightness Temperature specification developed jointly with private sector input.
- **Joint Evaluation Frameworks:** The ESA-NASA Joint EO Mission Quality Evaluation Framework provides trusted validation for commercial providers, supporting market growth. Aligning this framework with the CEOS-ARD Strategy will further unify quality evaluation.
- **Integration and Delivery:** OGC presented the Satellite Tasking API to integrate disparate systems, while Earth Daily and Esri demonstrated how CEOS-ARD certification builds trust, ensuring commercial multispectral data is treated with the same confidence as institutional data in platforms like the Esri Living Atlas.

- **Community vs. Formal Standards:** While formal ISO/OGC standards hold value, participants noted that achieving a critical mass of community participants adopting CEOS-ARD is practically more important than strict formal standardization.

## Session 5: Interactive Needs and Opportunities

The interactive dialogue identified specific tactical gaps in the current CEOS-industry relationship and brainstormed actionable solutions.

### Key Takeaways:

- **Procurement as an Adoption Driver:** The most direct way to drive ARD adoption is for CEOS agencies to write it into their procurement contracts. This should be a phased approach, starting as an optional recommendation before becoming a strict requirement, ensuring vendors have time to adapt.
- **Bridging the Civil-Defense Divide:** There is a stark lack of interoperability between civil and defense EO systems. Because many commercial providers rely on defense contracts for up to 90% of their revenue, CEOS must investigate ways to bridge this gap to make civil ARD standards economically viable for these companies.
- **Designated Commercial Liaisons:** Because commercial entities cannot be formal CEOS members, communication is fragmented. Industry requested the creation of an "executive sponsor" or designated commercial lead within CEOS to streamline engagement.
- **Building the CEOS Brand:** CEOS needs to position its logo and certification as a universally recognized mark of quality. If end-users recognize and demand CEOS-ARD compliance, commercial adoption will follow naturally.

## Workshop Conclusion and Next Steps

The forum concluded with a commitment to transforming the day's insights into concrete actions. CEOS leadership recognized that the rapid evolution of the EO ecosystem requires a more agile, inclusive approach to partnership.

### Key Takeaways:

- **Enhanced Communication:** CEOS must overhaul how it communicates its products, guidelines, and best practices to ensure the commercial sector is fully aware of available resources and certification pathways.

- **Open Doors for Co-Creation:** The private sector is explicitly invited and encouraged to participate in CEOS Working Groups and Virtual Constellations to co-author future standards.
- **Demonstrating Infrastructure Value:** CEOS agencies must continue to communicate the high value of publicly funded Cal/Val infrastructure, proving that rigorous underlying data quality is the necessary foundation for the coming wave of machine learning-driven EO analytics.