

Space Commerce Highlights News from the Office of Space Commerce April-May 2024

We welcome your feedback at: space.commerce@noaa.gov.

From the Director

Colleagues & friends,

It was wonderful seeing many of you last month at the Space Symposium conference! We were kept very busy in Colorado Springs - rolling out our "Global SSA Coordination" vision; participating in several panels and workshops focused on policy, regulations, and space situational awareness; and, of course, meeting with the community.

Back home, we've continued to make major strides on the Traffic Coordination System for Space. Our team recently held several public listening sessions on the specific data standards and formats TraCSS proposes to use - your feedback during these sessions is valuable as we develop the system. If you haven't already, I'd encourage you to engage: all of our TraCSS materials, including recordings of our listening sessions, are hosted on our website here.

The office continues to grow as we fill out critical positions on our TraCSS, advocacy, and regulatory teams. In the coming weeks and months, we'll continue to advertise our **new open positions**. If you know of great candidates who are eager to shape the future of the commercial space sector, please send them our way!

As always, with thanks,



Learn more about the TraCSS program at: www.space.commerce.gov/tracss OSC inbox for industry engagement on TraCSS: tracss.commerce@noaa.gov

OSC Holds Listening Session on Conjunction Data Messages (CDMs)

On April 3, the Office of Space Commerce held a virtual listening session on "space data" standards and formats - conjunction data messages."

The session covered the recommended conjunction data messages (CDM) fields in the CDM product that the Traffic Coordination System for Space plans to deliver for on-orbit conjunction assessment.

TraCSS format proposes to use the by Consultative recommended the **Committee for Space Data Systems (CCSDS)** CDM recommended standard 508.0.P1.1 understanding this version is under formal review by CCSDS.. TraCSS plans to modify its approach as necessary to meet the needs of the SSA community.

To view the handouts associated with this listening session, visit:

Recommendations on Conjunction Data Message Fields for Department of Commerce Traffic Coordination System for Space (TraCSS) Dianne Poster, Christine Joseph, Mariel Borowitz, Brian Walling, Clark Hudak NOAA Office of Space Commerce Jon Neff, Carson Coursey, Evan Wedell, Eric George, Sergio Alvarado, Matt Hejduk, Tom Kelecy, Patrick Bauer The Aerospace Corporation Nathan Holzrichter, Elizabeth Jaszkowiak MITRE Corporation Date: March 29, 2024 This document provides the space situational awareness (SSA) community with information on proposed conjunction data messages (CDM) fields in the CDM product that Department of Commerce (DOC) Traffic Coordination System for Space (TraCSS) will deliver for on-orbit conjunction assessment (CA). TraCSS will use the format recommended by the Consultative Committee for Space Data Systems (CCSDS) CDM recommended standard 508.0.P.1.0.1, with plans to modify as necessary to meet the needs of the SSA community. Section 3 of this document provides a comprehensive description of the recommended fields.

- This document also describes an opportunity to learn about the content of this document in use describes an appointment of the annual about the content of this document through a listening session to be held by OSC and provide comments during the session or by email following the webinar as described in Section 4 in this document. In particular, DOC welcomes feedback on:
- whether information in the CDM fields is considered proprietary;
 If there are operational considerations if the information in certain fields was not available;
 If the proposed fields are representative of an operationally actionable data set
- assembled for a CDM;

 4. if any of the proposed fields are considered to be not necessary; and

 5. if there are additional fields that should be included in the proposed list. This document does not provide an overview of TraCSS. More information on TraCSS.

including videos, is available at the TraCSS website¹. For more information on standards for data exchange and TraCSS, see the document "Recommendations on Standards for Provision of Space Situational Awareness Data from Department of

- **Recommendations on Conjunction Data Message Fields for Department of Commerce Traffic Coordination System for Space** (TraCSS) (PDF)
- Listening Session for TraCSS CDM Data Fields Presentation (PDF)

To view a recording of this listening session visit the session webpage, available here.

Stakeholder Engagements

OSC Organizes Session at NewSpace Africa Conference

The Office of Space Commerce led a U.S. interagency delegation to Luanda, Angola, to attend the **NewSpace Africa Conference** from April 2-5.

This conference attracted over 400 participants from 46 countries, including heads of many African space agencies, and provided an opportunity to enhance U.S.-Africa relations, engage African stakeholders to better understand the U.S. space landscape and key priorities, and to gain greater insight into the state of African space institutions, their ambitions, and areas of potential partnership.

The delegation held a dedicated session focused on U.S.-Africa cooperation, participated in several multinational panels, and held bilateral meetings with delegations from across Africa. NOAA and NASA jointly ran a booth that attracted numerous visitors and spurred informal discussions with government representatives, students, civil society, and companies.

Additionally, the U.S. Embassy Luanda hosted a U.S. Industry Roundtable with Ambassador Mushingi, attended by a number of American companies representing a cross-section of the U.S. space industry.

Deputy Secretary Don Graves delivers recorded remarks opening the "US-Africa Space Cooperation, Trade and Sustainability" session at the NewSpace Africa Conference.





U.S. interagency team standing at the joint NOAA/NASA booth at the NewSpace Africa Conference. DOC members included Gabriel Swiney (OSC), Rose Croshier (OSC), Jason Chauvin (BIS), and Heather McLeod (ITA/U.S. Embassy Luanda). The senior USG representative was NASA Associate Administrator Charity Weeden (white blazer, center).

OSC Releases the "Global SSA Coordination" Vision

The Office of Space Commerce released its "Global Space Situational Awareness Coordination" document at the Space Symposium in early April.

The Office envisions a future in which there will be a global, coordinated system of space situational awareness (SSA) providers, with a series of national or regional hubs providing SSA information and services to spacecraft operators. These centers will be supported by networks of international partnerships, and their services will be augmented by a robust global commercial SSA sector.

With its Traffic Coordination System for Space (TraCSS), the Office of Space Commerce is committed maintaining an open and transparent system that enables global coordination with other SSA providers and ensures reliable and efficient to global spacecraft services operators.

Official U.S. remarks regarding the Global SSA Coordination Vision were made at the U.N. Committee on the Peaceful Uses of Outer Space on April 22 and can be found on the U.S. Mission to Vienna website.



Space Symposium Highlights

The Office of Space Commerce had a busy schedule during this year's Space Symposium conference in Colorado Springs, participating in several events and making a number of announcements. This year's "conference highlights" included:

- Deputy Director Janice Starzyk offered an update on OSC's regulatory efforts and initiatives during the "Legal and Regulatory" session...
- Gabriel Swiney, Director of our Policy, Advocacy, and International Division, moderated a panel covering the legal and policy challenges to in-space commercial activities.

- Our TraCSS team and SSA experts contributed to an Aerospace Corporation-facilitated expert exchange and dialogue on international space situational awareness.
- Alongside colleagues from FAA-AST and the FCC, OSC coordinated an informal "regulatory stakeholders" forum to solicit industry perspectives and feedback on current and future space regulatory processes.
- With DOD's Principal Director for Space and Missile Defense Policy, Travis Langster, Director DalBello participated in a "fireside" conversation on the status of transitioning SSA responsibilities from the Department of Defense to the Department of Commerce - announcing that an operations center for OSC's Traffic Coordination System for Space will be stood up in Boulder, Colorado.



Director DalBello gave a keynote describing the United States' "mission authorization" efforts and highlighting the release of OSC's "Global SSA Coordination" document.

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NOAA Solicits Nominations for ACES Membership

OSC is seeking up to 25 individuals to serve on our newly chartered Federal Advisory Committee, the Advisory Committee on Excellence in Space (ACES). ACES will provide advice and recommendations on matters relating to OSC's statutory purview, including (but not limited to):

- Facilitating robust development of the commercial space sector;
- The status and recent developments of nongovernmental space activities:
- The manner in which the United States may facilitate and promote a robust and innovative commercial sector; including:
- Challenges faced by the United States commercial sector relating to:

- International obligations of the United States relevant to commercial space sector activities in outer space;
- Harmful interference with commercial space sector activities in outer space;
- Cybersecurity requirements, recommendations, or needs that affect the commercial space sector;
- Existing best practices for United States entities to avoid, including:
 - The harmful contamination of the Moon and other celestial bodies:
 - Adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter; and
 - Detrimental effects to the space environment resulting from new or existing space debris.

Nominations (including self-nominations) are sought by Wednesday, May 29. Applicant criteria and suggested information to include in a nomination package may be found on the **Federal Register**. For more information on ACES, visit the **ACES page** on the OSC website.

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OSC Participates in U.S.-New Zealand Dialogues

On the margins of the Space Symposium Conference, the Office of Space Commerce and the Department of State's Office of Space Affairs co-chaired a U.S.-New Zealand commercial space roundtable involving over twelve companies from the two nations. New Zealand's Minister for Space, MP Judith Collins, led the New Zealand delegation. During the roundtable, both sides discussed how to promote and pursue strengthened bilateral partnerships between our industries.

Later that week, back in Washington, D.C., OSC participated in the inaugural U.S.-New Zealand Space Dialogue, which featured a day of discussions underscoring the robust cooperation between the United States and New Zealand in outer space. Read the joint statement of the dialogue here.



Director DalBello offers welcoming remarks during the U.S.-New Zealand commercial space roundtable held at the Space Symposium Conference.

Across Commerce

DOC Hosts Consultative Committee for Space Data Systems Plenary



Delegates of the CCSDS member agencies kick off their Spring Plenary Meetings for 2024 in Washington DC at the Department of Commerce Herbert C. Hoover Building auditorium on April 29, 2024.

From April 29 - May 6, 2024, the NIST Material Measurement Laboratory, in collaboration with the Office of Space Commerce, hosted the Consultative Committee for Space Data Systems (CCSDS) Technical Plenary Spring Meetings at the Department of Commerce headquarters.

This committee is a multi-national forum for the development of communications and data systems standards for spaceflight. Deputy Secretary of Commerce Don Graves and Dr. Diane Howard of the National Space Council welcomed delegations from CCSDS's eleven international space agencies, with about 200 people in person attending and more virtually from around the world.

In addition, the Lunar Interoperability Forum followed on May 7 at the White House Eisenhower Executive Office Building. Dr. Howard and OSC/NIST's Dr. Dianne Poster hosted 90 delegates in the historic Indian Treaty Room for a kickoff event to accelerate the development of international space communication and navigation standards required to ensure multi-national and multi-system interoperability around the Moon.

The opening keynote was provided by Dr. Vint Cerf, widely known as the "father of the Internet."

Industry and academia are welcome to join CCSDS working groups and provide input to space standards development. Visit the CCSDS website or email the secretariat for more information.

Commercial Lunar Rover Visits Commerce Department

On April 30 at Commerce headquarters, NOAA Administrator Richard Spinrad, NOAA Assistant Secretary Michael Morgan, and OSC Director Richard DalBello, along with Department of Commerce and White House National Space Council staff, participated in a demonstration of Astrolab's FLEX rover,

FLEX is one of several commercial vehicles that NASA has contracted to use to explore the Moon and fuel the space economy.

Under the Administration's proposal for novel space mission authorization, the Commerce Department would be responsible for authorizing and supervising uncrewed commercial space activities beyond those licensed by FCC or FAA.

NOAA Administrator Richard Spinrad and Astrolab CEO Jaret Matthews demonstrate the FLEX rover.



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NOAA Solicits New Entrants for Commercial GNSS RO Data Buy

NOAA's Commercial Data Program (CDP) is conducting market research for the on-ramping of additional vendors to the Radio Occultation Data Buy II (RODB-2) multiple award vendor Indefinite Delivery/Indefinite Quantity (IDIQ) pool.

The CDP's RODB-2 requires the continuation of commercially-sourced operational GNSS radio occultation (RO) data to meet NOAA's operational weather needs for neutral atmosphere and ionosphere data. NOAA published an RFI requesting interested vendors to submit a capabilities package for review of possible market capabilities to perform all requirements of the RODB-2 Statement of Work.

View the RFI on SAM.gov, **here**. Responses are due June 5, 2024. Learn more information about the NOAA CDP on the OSC website, **here**.

OSC Is Hiring

Since our last newsletter, OSC added the following staff to our team:

- Ethan Baumann TraCSS Systems Engineering Lead
- Christopher Boone TraCSS IT Specialist Network Services
- Ted Cook CRSRA (contractor)
- Cole Donovan International Affairs Specialist
- Ross Hatley Communications Manager (contractor)
- David Heath CRSRA (contractor)
- Demetrius Jones TraCSS IT Specialist Network Services
- Robert Wolff TraCSS Flight Dynamics Engineer

We are delighted to welcome them to our growing ranks – now totaling 29 Federal employees, 2 detailees, and 14 contractors.

Interested in joining us, or know a qualified candidate? Watch for new vacancies on our **job announcements** page! Current open positions include:

• TraCSS Operations Shift Leads - 2 positions available in Boulder, Colorado. GS-13 equivalent, closes May 17, 2024.

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OSC in the News

- SpaceNews: "Office of Space Commerce selects locations for TraCSS operations centers"
- Payload: "Inside the World's First Civil Space Traffic Coordination System"
- Breaking Defense: "Commerce's 'Global Vision' for tracking on orbit systems emphasizes international coordination"

Looking Ahead

OSC staff will be featured participants in these upcoming events. Interested in meeting with us at one of these events? Submit a meeting request **here**.

May 16: Space Capital Summit (By invite - New York City, NY)

May 22: USPTO Dialogue on Intellectual Property and Space

Commercialization (Alexandria, VA)

June 10: MILSATCOM USA (Crystal City, VA)

June 16-18: Prague Space Security Conference (Prague, Czechia)

June 17 - 22: TechConnect World - Advanced Manufacturing in Space

Symposium (By invite - National Harbor, MD)

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Stay in the loop on the latest OSC news, updates, and opportunities:

• Website: space.commerce.gov

• Contact Us: space.commerce.gov/contact-us

• TraCSS: space.commerce.gov/tracss

• LinkedIn: Office of Space Commerce

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• Past Newsletters: space.commerce.gov/about/osc-newsletters