

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

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

From the Director

Colleagues & friends,

This month, we celebrate the six year anniversary of the signing of "Space Policy Directive-3" – which directs the Office of Space Commerce to stand up the U.S. civil space situational awareness capability, our Traffic Coordination System for Space (TraCSS).

We've made significant strides over the last two years with Congressional support for the program, and the pace of progress is only picking up. As we cover in this month's edition of the newsletter, we've recently announced an extension to our TraCSS Consolidated Pathfinder effort; continue to host our public listening sessions to solicit your valuable inputs and feedback; and are working to scope and develop the technical standards which will underpin our system. Our Policy, Advocacy, and International Division is discussing OSC's "Global SSA Coordination" vision with international colleagues and partners at every opportunity.

To commemorate the anniversary, OSC will be highlighting the importance of these achievements on our public channels. Be on the lookout! To start, we've published an infographic covering the many accomplishments the TraCSS team has made in FY23 and FY24.

As always, I encourage you to stay engaged with me and my team.

With thanks,

2RM.





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

OSC Publishes TraCSS FY23-FY24 Accomplishments Infographic



To highlight the Office of Space Commerce's continuing progress developing the Traffic Coordination System for Space, OSC has published an infographic featuring TraCSS accomplishments made in FY23 through FY24. Visit OSC's website for a full-size .pdf of the infographic and a writeup detailing these accomplishments, **here**.

OSC Extends TraCSS Consolidated Pathfinder

On May 16, the Office of Space Commerce announced a one-month extension of its ongoing TraCSS **Consolidated Pathfinder project**.

Initiated in January 2024, the Consolidated Pathfinder is a limited-term effort that focuses on space situational awareness for the low Earth orbit regime. Lessons learned in the pathfinder are accelerating OSC's ability to procure and integrate sustained commercial SSA data and capabilities for the operational TraCSS system.

In order to further validate the metrics to be leveraged by the operational TraCSS system, the pathfinder's live data collection period is being extended to June 30, 2024. The extension also allows the OSC team and the pathfinder companies to gather additional data, further explore specific technical opportunities to improve performance, and conduct additional analysis for robust metric validation. Metric validation for the operational TraCSS system is the primary objective for the pathfinder.

Through its partner NASA, OSC has placed new orders for commercial SSA data and services on the Global Data Marketplace with all five companies participating in the Consolidated Pathfinder – COMSPOC, Kayhan Space, LeoLabs, Slingshot Aerospace, and SpaceNav. The new orders bring the total amount that OSC is spending over the course of the Consolidated Pathfinder to \$15.5 million.

Read more about the extension on the OSC website, here.

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TraCSS Listening Session on "Orbit Comprehensive Message"

In the latest of its recurring TraCSS listening sessions, on May 9 OSC covered a proposal for TraCSS to use the Orbit Comprehensive Message (OCM) data standard for satellite ephemeris, maneuver data, and other related information to support spaceflight safety and space traffic coordination. A recording of the listening session is available on Youtube, **here**. An accompanying handout with information on the OCM data standard is available on the OSC website, **here**.

The TraCSS listening sessions are open meetings to provide the public and civil/commercial space situational awareness (SSA) community with the most up-to-date information about TraCSS. **Subscribe** to receive outreach on these listening sessions, including notices for upcoming sessions.

Stakeholder Engagements

SSA Global Vision at the UN "Management and Sustainability of Outer Space Activities" Policy Symposium

On May 14, OSC Director Richard DalBello delivered remarks at the "Management and Sustainability of **Outer Space Activities**" policy symposium, organized by the United Nations Office for Outer Space Affairs and the Portuguese Space Agency. Richard's speech highlighted OSC's recently-released vision for Global SSA Coordination - which calls for the development of a global, coordinated system of space situational awareness providers, with a series of national and regional h hi ubs providing SSA information and services to spacecraft operators.



OSC Joins the U.S.-India Commercial Space Cooperation Conference



On May 24th in Bangalore, India, OSC's Rose Croshier and ITA's Carey Arun joined the India Department of Space Director, Dr Subramanyam, for a 'fireside chat' to discuss the ongoing US-India Civil Space Joint Working Group's (CSJWG) Commercial Space Sub-Working Group, and highlighted planned U.S.-India discussions on market access, export control, government procurement, and investment regulation concerning both the U.S. and Indian space industries. OSC Director Richard DalBello provided recorded remarks to open the Conference, and the U.S. Ambassador to India, Eric Garcetti, provided a keynote. This program was the second deliverable of the CSJWG Commercial Space Sub-Working Group.

Topics addressed during the conference included: the CSJWG's activities; prospects for U.S. and Indian startups in our respective markets; learnings and insights from the Commercial Space International Visitors Leadership Program visit to the U.S.; and U.S. export control updates for the commercial space sector. Croshier also participated in a panel on advancing the role of women in space.

The Department of Commerce plans to next hold a webinar for U.S. companies titled "Space: Updates and Opportunities in India's space sector for U.S. Exporters" on June 18th.

NOAA Talks "Payload Review" Process

NOAA attorney Glenn Tallia, Chief for the Weather, Space Services and Research Section which supports the Office of Space Commerce, joined experts from the Federal Communications Commission's Space Bureau, Federal Aviation Administration's Office of Commercial Space Transportation, and the Department of State's Bureau of Oceans and International Environmental and Scientific Affairs for a FCC-hosted public event covering the U.S. government's "payload review" process.

Prior to a U.S. commercial launch, U.S. government agencies review information regarding satellites and other "payloads" onboard the launch vehicle. Together, these regulatory leaders discussed the specifics of that interagency process, used to ensure that U.S. commercial space payloads uphold national security/foreign policy interests, public safety, and the United States' international obligations.



A recording of the event is available on the FCC's website, here.

<u>Across Commerce</u>

OSC Joins USPTO for a Dialogue on IP & Space Commercialization

OSC's Gabriel Swiney, Director of the Policy, Advocacy, & International Division, participated in a panel on U.S. commercial space regulation and policy at last month's "**Dialogue on Intellectual Property and Space Commercialization**," organized by the US Patent and Trademark Office. Speaking to the regulatory environment facing the commercial space community, Gabriel noted that "the government has a responsibility to answer policy, regulatory, and legal questions for the private sector that it has already answered for itself."



OSC Supports International Organization for Standardization (ISO) Work on Space Standards Development

Last month, OSC's Dr. Dianne Poster participated in the ISO Technical Committee 20, Aircraft and Space Vehicles, Subcommittee 14, Space Systems and Operations' (TC20/SC14) Spring Plenary Meetings. The meetings were hosted by the German Institute for Standardization in Berlin, Germany.

The meeting included participants from member and observing countries, as well as various regional and international organizations supporting space standards development. The forum focused on addressing the standardization needs and concerns of organizations and personnel involved with the development and operation of space systems.

As of May 1, TC20/SC14 has published 191 documents, with 22 published in the last year (see table below). Published standards are available on the ISO webpage, as well as the SC14 work programme of drafts and new work items.

Table: Published TC20/SC14 space standards - June 2023 to May 1, 2024.

Number	Date Published	Title (available on the ISO webpage)
ISO 5879	August 2023	Space systems — Launch vehicle/spacecraft separation ground test requirements for combined separation test, horizontal separation test and individual falling separation test
ISO/TS 6434	January 2024	Space systems — Design, testing and operation of a large constellation of spacecraft
ISO/TS 6832	October 2023	Space systems — Development technology of a thermal vacuum chamber
ISO 14300-1, Ed.3	December 2023	Space systems — Programme management — Part 1: Structuring of a project
ISO 14300-2, Ed.3	October 2023	Space systems — Programme management — Part 2: Product assurance
ISO 14624-1, Ed.2	October 2023	Space systems — Safety and compatibility of materials — Part 1: Test method for upward flammability of materials
ISO 14624-2, Ed.2	October 2023	Space systems — Safety and compatibility of materials — Part 2: Test method for electrical wires and accessories
ISO 14624-3, Ed.2	October 2023	Space systems — Safety and compatibility of materials — Part 3: Test method for off-gassed products from materials and assembled articles
ISO 14624-5, Ed.2	June 2023	Space systems — Safety and compatibility of materials — Part 5: Test method for determination of the reactivity of materials with aerospace hypergolic propellants
ISO 14953, Ed.2	March 2024	Structural design — Determination of loading levels for static qualification testing of launch vehicles
ISO 15389, Ed.2	September 2023	Space systems — Flight to ground umbilicals
ISO 16192, Ed.3	January 2024	Space systems — Lessons learned — Principles and guidelines
ISO 16454, Ed.2	February 2024	Space systems —Structural design — Stress analysis requirements
ISO 17520, Ed.2	March 2024	Space environment (natural and artificial) — Cosmic ray and solar energetic particle penetration inward the magnetosphere — Method of determination of the effective vertical cut-off rigidity
ISO 17546, Ed.2	February 2024	Space systems — Lithium ion battery for space vehicles — Design and verification requirements
ISO 17689, Ed.2	August 2023	Space systems — Interface control documents between ground technological equipment, launch site systems and launch vehicle with payload
ISO 23460, Ed.2	June 2023	Space systems — Programme management — Dependability assurance requirements
ISO 24245	June 2023	Space systems — Global Navigation Satellite System (GNSS) receiver class codes
ISO 26900, Ed.2	February 2024	Space data and information transfer systems — Orbit data messages (joint project with CCSDS Navigation Working Group)
ISO 27025, Ed.2	October 2023	Space systems Programme management — Quality assurance requirements
ISO 27026, Ed.2	August 2023	Space systems — Programme management — Breakdown of project management structures
ISO 27852, Ed.3	February 2024	Space systems — Estimation of orbit lifetime

Currently TC20/SC14 has 36 documents under development, including one for space traffic coordination; and is preparing the next edition of ISO 24113 (Ed. 5) "Space systems – Space debris mitigation requirements".

The TC20/SC14 chairperson is Fred Slane, Space Infrastructure Foundation, and the head of the United States Technical Advisory Group is Marlon Sorge, the Aerospace Corporation.

If you are interested in participating in the U.S. Technical Advisory Group for ISO/TC 20/SC 14, please reach out to Nick Tongson, committee manager: **NickT@aiaa.org**.



The participants in TC20/SC14 working group 3 (Operations and support systems) and 7 (Orbital Debris) at DIN, Berlin, Germany, May 14, 2024,

OSC Is Hiring

The Office of Space Commerce is hiring! Current open positions with our office are below. Be sure to visit our **job announcements web page** for future opportunities.

 Communications Specialist (Space Operations Division) Grade: ZA-4 (GS-13/14 equivalent) USAJobs link: UNSEC-OSC-24-12427970-DE (open to the public) USAJobs link: UNSEC OSC-24-12427971-MAP (status candidates) Closing date: June 14, 2024

OSC in the News

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- Breaking Defense: Commerce extends commercial data contracts for space tracking system pilot
- Via Satellite: Office of Space Commerce Places New Orders for TraCSS Program

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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**.

- June 10: MILSATCOM USA Conference (Arlington, VA)
- June 18: PSSI Space Security Conference (Prague, Czech Republic)
- June 18: TechConnect Advanced Manufacturing in Space Symposium (National Harbor, MD)

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- Website: space.commerce.gov
- Contact Us: space.commerce.gov/contact-us
- TraCSS: space.commerce.gov/tracss
- LinkedIn: Office of Space Commerce
- X: @CommerceinSpace
- Past Newsletters: space.commerce.gov/about/osc-newsletters