



Space Commerce Highlights

News from the Office of Space Commerce

Don't hesitate to contact us with your feedback, thoughts, and ideas at:
Space.Commerce@NOAA.Gov.

* * *

From the Director

* * *

Colleagues & friends,

Once again, I am pleased to share our "space commerce highlights" with you - our monthly recap of the Office of Space Commerce's work and initiatives.

In February, my team and I began to articulate our vision for the future of global space situational awareness as well as our views on broader concepts of "space sustainability." These discussions will help shape and inform efforts toward ensuring an operationally safe space environment - a key focus of my office as we develop the United States' civil space situational awareness capability, the Traffic Coordination System for Space (TraCSS).

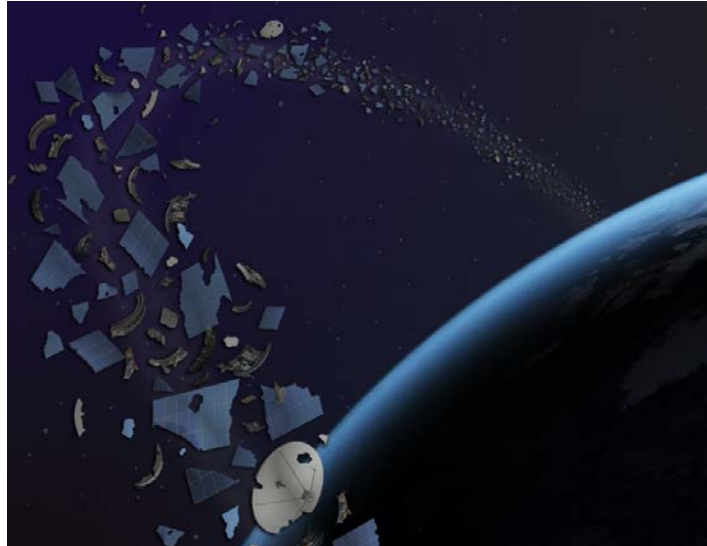
We continue to make strong progress standing up the operational TraCSS capability. Just a few days ago, we placed orders for space situational awareness data quality monitoring services with two commercial companies, as part of our "Consolidated Pathfinder" project. Our pathfinder efforts are helping us evolve the TraCSS architecture in partnership with our industry stakeholders, with multiple inputs and on-ramps for commercial data, services, software, and innovation.

As always, my team welcomes your thoughts and feedback. Don't hesitate to reach out to me and my team. You can easily get a hold of us through my office's "contact us" page on our website.



With thanks,

CRSRA Publishes RFI on Remote Sensing Satellite Disposal Requirements



On March 8, 2024, the Office of Space Commerce's Commercial Remote Sensing Regulatory Affairs division (CRSRA) published a Request for Information (RFI) regarding the condition in every CRSRA license requiring the disposal of on orbit spacecraft in a manner satisfactory to the President.

To avoid duplicative regulation, CRSRA currently defers to FCC license requirements regarding orbital debris and spacecraft disposal. However, in certain cases, CRSRA licensees are not subject to FCC regulation, leaving a gap in the application of disposal requirements. CRSRA seeks to provide guidance on how such licensees may satisfy the disposal condition in their CRSRA license.

This input is necessary to inform CRSRA's approach to providing additional guidance or initiating a narrow rulemaking pertaining to its disposal condition. **Written comments are due on or before Monday, April 8, 2024.**

View RFI at [federalregister.gov](https://www.federalregister.gov)

The public may submit written comments on issues addressed in this Notice by either of the following methods:

- Electronic Submission: Submit all electronic public comments via email to space.commerce@noaa.gov.
- Mail: Submit written comments to Office of Space Commerce, Herbert C. Hoover Building, Room 68015, 1401 Constitution Ave., NW, Washington, D.C. 20230



OSC has a dedicated email address for industry engagement on TraCSS:
TraCSS.Commerce@NOAA.gov

Office of Space Commerce Places Orders for “SSA Data Quality Monitoring Pathfinder”

OSC has placed new orders for space situational awareness (SSA) services with two U.S. commercial companies. The service orders will support OSC’s Consolidated Pathfinder project that will inform the development of its operational Traffic Coordination System for Space (TraCSS).

On February 29, 2024, OSC placed orders with the following companies to provide SSA data quality monitoring services for the Consolidated Pathfinder:

- Kayhan Space of Broomfield, Colorado; and
- SpaceNav of Boulder, Colorado.

OSC partnered with NASA to place the orders through the Global Data Marketplace, an online transaction system established by the Department of Defense in partnership with BlueStaq.

OSC **previously announced** its Global Data Marketplace orders with commercial SSA firms COMSPOC, LeoLabs, and Slingshot Aerospace to initiate the Consolidated Pathfinder. Under the new orders, Kayhan Space and SpaceNav will assess the accuracy, consistency, and quality of the commercial products provided by those three companies.

The Consolidated Pathfinder is a limited-term effort that focuses on SSA for the low Earth orbit (LEO) regime. OSC is spending a combined total of about \$11.5 million in orders to the five commercial companies supporting the Consolidated Pathfinder project. The Consolidated Pathfinder will inform OSC’s buildout of the operational Traffic Coordination System for Space (TraCSS).

OSC is steadily progressing on building out the TraCSS architecture, with multiple inputs and on-ramps for commercial data, services, software, and innovation.

OSC is preparing an order for a future TraCSS pathfinder on Improved Satellite Owner/Operator Ephemeris. That study will soon start an initial set-up phase with satellite operators. OSC plans to seek participation from commercial SSA service providers for funded services on this activity in the spring of 2024, via the Global Data Marketplace.

OSC & SpaceX CRADA for Automated Collision Avoidance R&D

On January 31, the Office of Space Commerce & SpaceX announced that they have entered into a no-exchange-of-funds Cooperative Research and Development Agreement (CRADA) for research and development activities related to automated collision avoidance and satellite conjunction assessment screenings. Under the terms of this CRADA, OSC will perform an astrodynamics evaluation of SpaceX software.

"SpaceX is advancing the state of the art in space operations, using software in support of automated collision avoidance to safely manage thousands of satellites at a time," said Richard DalBello, Director of the Office of Space Commerce. "We are excited to be partnering with them to evaluate their software as a tool for enhancing space safety and sustainability."



This CRADA's research efforts will assist OSC in developing capabilities to deconflict and manage the increasingly crowded orbital environment.

Listening Session on "Space Traffic Coordination Ops Transition"

On February 13, the Office of Space Commerce held a virtual listening session, with a specific focus on the operational transition of certain space situational awareness (SSA) and space traffic coordination (STC) responsibilities from the Department of Defense (DoD) to the Department of Commerce (DOC). Where applicable, the input received will inform operations transition planning and feed into DoD and DOC exchanges.

Topics covered during this listening session included:

- A brief overview of the SDA Partnership and Coalition Engagement (SPACE) Office, Space Delta 2, USSF;
- A brief, high-level overview on the Traffic Coordination System for Space (TraCSS) and TraCSS Phase 1 planning; and
- Attendee feedback.

Missed the listening session? The recording is available on OSC's website, [here](#), along with the accompanying presentation, "[Considerations for DoD-DOC Space Traffic Coordination \(STC\) Operations Transition \(PDF\)](#)."

The TraCSS listening sessions hosted by OSC are open meetings to provide the public and civil/commercial SSA community with the most up-to-date information about TraCSS. These sessions are an opportunity for stakeholders to offer and provide feedback to OSC. Notifications of upcoming sessions are regularly posted on the [OSC TraCSS webpage](#) and sent via email to OSC's TraCSS engagement distro. You can subscribe for this distro on our "contact us" page, [here](#).

* * *

Stakeholder Engagements

* * *

OSC Introduces the "Global SSA Vision"

During recent conferences and events, OSC's leadership has begun articulating its "Global Space Situational Awareness (SSA) Vision" - our perspective on the future evolution of international space situational awareness/space traffic coordination capabilities.



OSC envisions an international system of independent 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 that provides value-added services. This system will lay the foundation for future "space traffic coordination" efforts.

To achieve this vision, OSC will continue to engage with international partners, seek alignment on standards and best practices for SSA data and information sharing, and commit to maintaining an open and transparent system that enables global coordination with other SSA providers and ensures reliable and efficient services.

OSC Discusses a Broader View of Space Sustainability

At the February SmallSat Symposium and during a Washington Space Business Roundtable event, OSC Director Richard DalBello discussed the need for a broader

view of “space sustainability” - and to define a set of “internationally accepted” actions which address issues ranging from orbital debris, to the efficient use of orbits and globally accepted best practices for space operations.

“Usually, when people say ‘sustainability,’ they think space junk, but sustainability is much, much more,” Director DalBello said at the SmallSat Symposium. “As tens of thousands of new satellites are launched, space sustainability is going to be a bigger and bigger issue.”



Ensuring a safe and sustainable space environment will certainly involve space situational awareness, but may eventually extend to efforts addressing orbital traffic coordination, satellite maneuver capabilities, global data sharing, minimizing interference to astronomy caused by satellites, and protecting human heritage on the Moon and elsewhere in space. As OSC lays the foundation for the United States’ civil space situational awareness system, TraCSS, we will continue to identify opportunities to discuss our space sustainability vision.

OSC Organizes a “Space Counselors Roundtable”

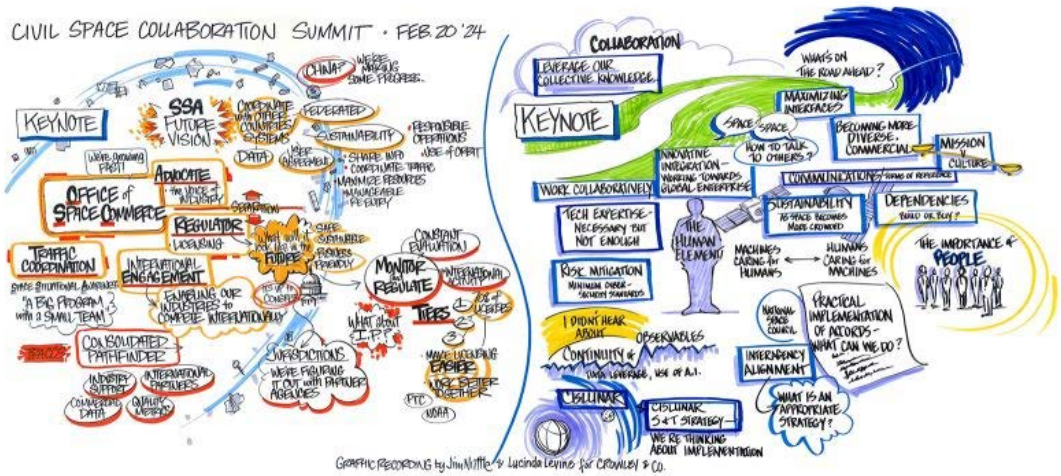
In coordination with our colleagues at the Department of State’s Office of Space Affairs, OSC organized the fourth informal roundtable of DC’s “space counselors” - international embassy staff handling space portfolios. During the meeting, OSC outlined its “Global SSA Vision” and discussed opportunities for SSA collaboration.



OSC "On the Road"

OSC leadership participated in several events and conferences in recent weeks::

- Policy, Advocacy, and International Director Gabriel Swiney discussed space sustainability and space situational awareness at the FCC's "20 Years of Orbital Debris Mitigation" panel.
- Deputy Director Janice Starzyk described the work and mission of the Office of Space Commerce at MITRE's "Civil Space Collaboration Summit" and the U.S. Chamber of Commerce's "Retooling the Space Industry" event.
- TraCSS Chief Engineer Sandy Magnus gave an overview of TraCSS partnerships with the commercial sector at the "26th Annual FAA Commercial Space Transportation Conference."
- Policy Advisor Christine Joseph shared the latest on TraCSS during a fireside chat at the "10th Annual Space Traffic Management Conference."



GRAPHIC RECORDING BY JIM MITCHELL & LUCINDA LEVINS FOR CREWLEY & CO.

OSC Refreshes its “Resources for Space Entrepreneurs” Webpage

To help space entrepreneurs understand the commercial space ecosystem, navigate the United States' commercial space regulatory environment, and discover opportunities to partner with the U.S. government, the Office of Space Commerce has reworked and refreshed its “**Resources for Space Entrepreneurs**” webpage.

The page contains links to direct you to further information, resources, and opportunities across the United States government.

Feedback, inputs, and recommendations for the webpage are always welcome!

Resources for Space Entrepreneurs

This landing page is designed to help space entrepreneurs understand the commercial space ecosystem, navigate the United States' commercial space regulatory environment, and discover opportunities to partner with the U.S. government by selling goods and services, conducting research, participating in technology development and testing, applying for grants, and more.

Click on the links below to be taken to a subpage with further information and links to external resources.

These subpages are a continual work in progress. Please feel free to contact us at space.commerce@noaa.gov to suggest links to other appropriate federal webpages, or to flag broken links.

Please note: the Office of Space Commerce only controls the links on these subpages and cannot guarantee that linked agencies and resources will maintain their content.

Understanding the Commercial Space Ecosystem

Resources providing a broad overview of space operations and space mission security best practices and standards, as well as an overview of statistics on the U.S. commercial space economy.

Navigating U.S. Commercial Space Regulations

Links to FAQs, application checklists, and application portals for the U.S. commercial space regulatory agencies – the FAA (launch and reentry), DOC NOAA (private Earth remote sensing), and FCC (use of space spectrum).

Federal Resources

Resources and information about doing business with the United States government.

Opportunities | Department of Commerce Agencies

Contract, funding, and business opportunities and resources with the U.S. Department of Commerce and Department of Commerce agencies.



* * *

Across Commerce

* * *

EBRC “Space Health Roadmap” Workshops

The **Engineering Biology Research Consortium (EBRC)** is holding a series of workshops to develop the Space Health Roadmap with a focus on engineering biology tools and technologies for human health and well-being in space.

The Engineering Biology program at the National Institute of Standards and Technology, an agency of the U.S. Department of Commerce is participating in these workshops to contribute to this roadmap with a particular emphasis on its efforts to develop metrology for cell-free expression systems and is coordinating with the Office of Space Commerce.

This engagement will support expansion of its stakeholder outreach to include space commerce.

Please reach out to Tara Eskandari, Deputy Chief, Biosystems & Biomaterials Division, NIST for more information on the EBRC and the Space Health Roadmap (email: tara.eskandari@nist.gov)

* * *

OSC Is Hiring

* * *

In February, OSC welcomed two new members to our staff:

- **Amod Pathak**, Acquisition Management Specialist, Resource Management Division
- **Bruce Plott**, Software Engineering Lead, Space Operations Division

In addition, we promoted **Tomeka Evans** to be our Acquisition Management Division Director. Congratulations Tomeka!



The office took this group photo during an in-person all-hands gathering on February 13. Including our onsite contractors, **OSC's staff** now stands at 35 people. It's hard to believe we were operating on a skeleton crew just a year ago!

Interested in joining the Office of Space Commerce, or know a qualified candidate who might be? Be on the lookout for these positions posting soon (and be sure to bookmark OSC's [job announcements](#) page).

- **Commercial Remote Sensing License Compliance Specialist** (ZA-1801-04) | GS13 / GS14 equivalent
- **TraCSS Program Manager** (ZP-801-05) | GS15 equivalent
- **Physical Science Technician** (ZT-1311-05) | GS13 equivalent
- **General Engineer, Data Products Lead** (ZP-801-04) | GS13 / GS14 equivalent

* * *

OSC in the News

* * *

- *SpaceNews*: "**Office of Space Commerce seeks SpaceX's constellation coordination expertise**"
- *SpaceNews*: "**Space industry urged to take a broader view of sustainability**"
- CNBC's *Manifest Space* podcast: "**Public-Private Investment with Office of Space Commerce Director Richard DalBello**"
- Space Foundation's *The Vector* podcast: "**Improving Frameworks for International Business Engagement**" (featuring OSC's Rose Croshier)

* * *

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](#).

- Mar 14:** UN/Portugal Policy Symposium on Management & Sustainability of Outer Space Activities (Virtual)
- Mar 19-20:** SATELLITE 2024 (Washington DC)
- Apr 2:** NewSpace Africa Conference (Angola)
- Apr 3:** TraCSS Listening Session on Conjunction Data Message Fields
- Apr 5:** MIT Sloan New Space Age Conference (Cambridge, MA)
- Apr 8-11:** Space Symposium (Colorado Springs, CO)

* * *

Connect With Us!

* * *

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](#)
- **X:** [@CommerceinSpace](#)