Space Commerce Highlights

News from the Office of Space Commerce

July 2025

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From the Acting Director

Colleagues and friends,

July was as busy a month as any for the Office of Space Commerce. We welcomed SpaceX as a TraCSS user, significantly scaling the system, publicly released our updated TraCSS roadmap and schedule, and published our updated CDM and OCM specifications. On the policy front, we sought (and are still seeking!) stakeholder perspectives and feedback on the European Commission's draft EU Space Act.

We also had the privilege of hosting two remarkable summer fellows - Anna Kelly and Reid Herrera. From leading efforts on a variety of space policy issues, to facilitating our advocacy outreach and public communications, these bright fellows have played a key role in OSC's mission to support and foster the U.S. commercial space sector.

As always, I look forward to hearing from you!

Janice Starzyk
Acting Director (Deputy Director)
NOAA OSC

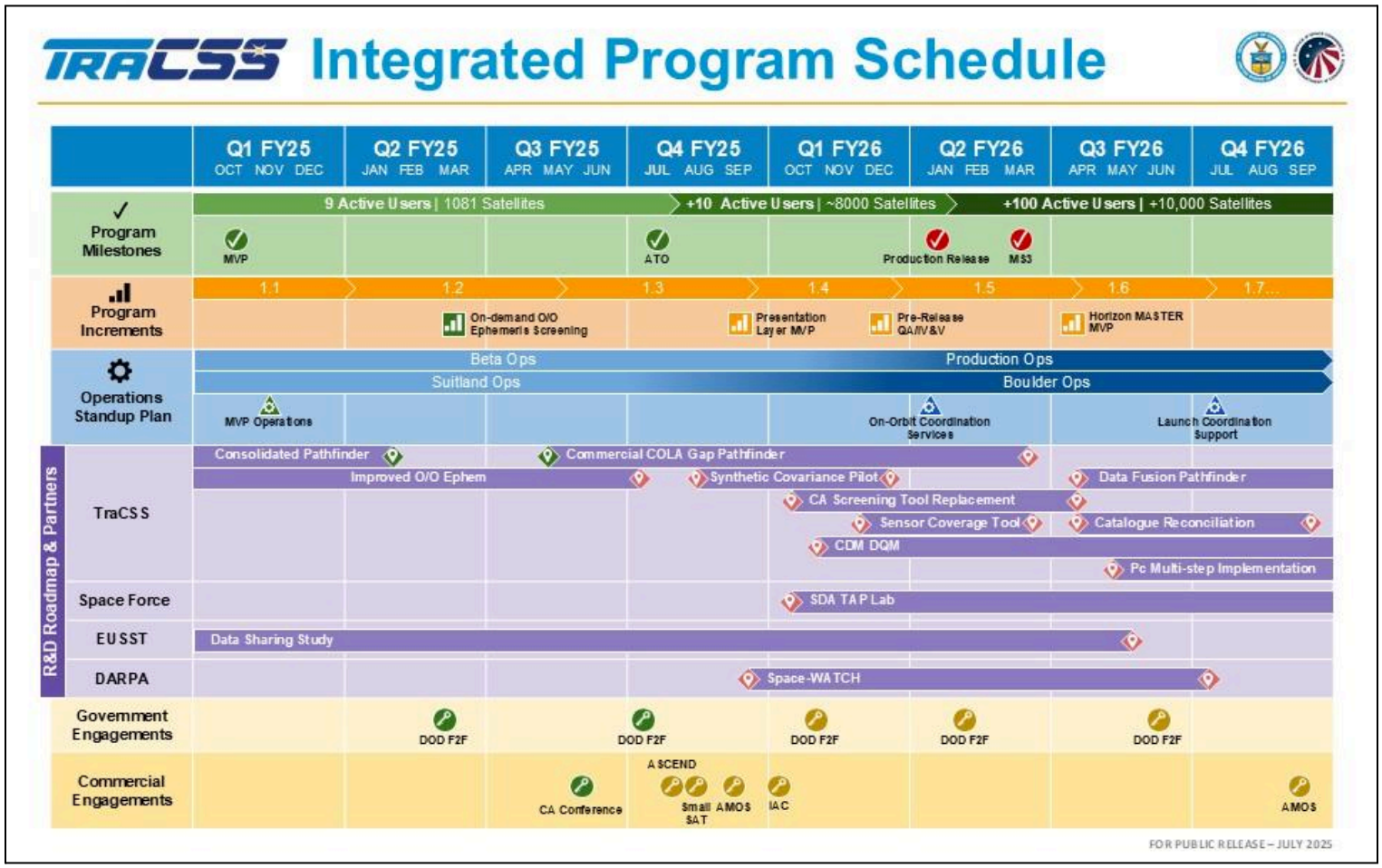
OSC Publishes Latest TraCSS Schedule & Roadmap

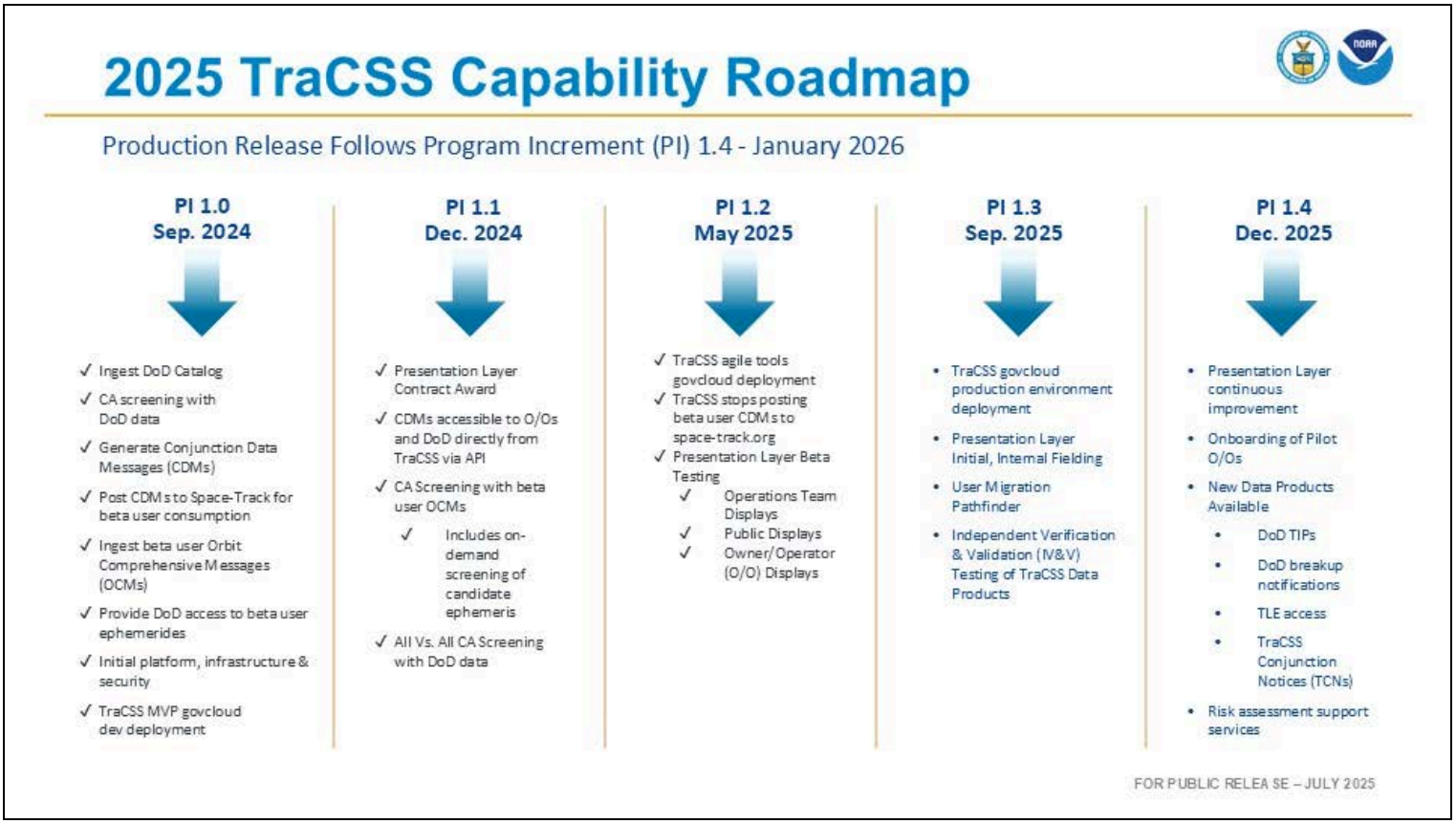
As a public space situational awareness system, the Office of Space Commerce's Traffic Coordination System for Space values transparency and openness. To keep the public and stakeholders appraised of the program's development, OSC has published the program's updated schedule and roadmap. They may be accessed on OSC's **TraCSS webpage**.

Download the TraCSS Schedule & Roadmap:

- ***TraCSS Integrated Program Schedule (.PDF, July 2025)***
- ***2025 TraCSS Capability Roadmap (.PDF, July 2025)***
- ***TraCSS Post-Production Release Architecture (.PDF, July 2025)***

As updates are made to the TraCSS roadmap, the OSC website will be refreshed to reflect them.





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TraCSS Welcomes SpaceX as 10th Beta User

OSC is pleased to announce that SpaceX has joined TraCSS as the system's 10th beta user. With the addition of SpaceX, TraCSS is now able to validate its on-demand conjunction screening and on-demand maneuver screening services at significant scale – a major milestone in OSC's mission to enhance civil and commercial space safety.

SpaceX joins **nine other satellite operator** beta users – NOAA, Maxar, Telesat, Intelsat, the Georgia Institute of Technology, Planet Labs, Eutelsat Oneweb, Iridium, and the Aerospace Corporation – who receive validated safety notifications in the form of conjunction data messages (CDMs, alerts describing potential collisions).

With **TraCSS Program Increment 1.2**, released in May 2025, TraCSS provides on-demand screening of operational ephemerides and enabled bulk submission capabilities – ideal for operators of large satellite constellations. Beta user satellite operators can submit ephemerides to TraCSS at any time and receive conjunction analysis results within two to five minutes. Operators of large constellations can also submit thousands of ephemerides at once via "bulk submissions," greatly enhancing space situational awareness and safety.

The active participation and invaluable feedback of all of TraCSS' beta users have played a key role in OSC's ability to release on-demand screening capacity ahead of schedule. Thanks to industry's collaboration, both as users of and contributors to the system, TraCSS is proceeding steadily toward production release scheduled for January 2026.

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OSC Releases Updated TraCSS CDM & OCM Specifications

On April 30, 2025, the Office of Space Commerce held a listening session to collect stakeholder input and feedback on the draft TraCSS CDM specification, TraCSS Spec-001-2.0. After working with the Consultative Committee for Space Data Systems (CCSDS) and incorporating feedback from beta users, the SSA community, and the public, the TraCSS team has produced new drafts of the CDM and OCM specifications (*available below*).

- **Orbit Comprehensive Message (OCM) Specification for TraCSS 002 Release 2.0** (*.PDF, released June 5, 2025)*
- **Conjunction Data Message (CDM) Specification for TraCSS 001 Release 2.1** (*.PDF, released July 8, 2025)*

The CDM specification has undergone substantial changes since the last listening session. This updated version explicitly shows the KVN, XML, and JSON formats. This version also provides CDMs in adherence to the CCSDS CDM format and user expectations, while still allowing for the growth of capabilities currently envisioned by the TraCSS team.

The OCM specification has been reformatted for easier understanding and reference; several of the previously mandatory fields have been made optional.

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Stakeholder Engagements

EU Space Act - USG Stakeholder Feedback Questionnaire

On Tuesday, June 24, 2025, the European Commission released the draft text of the EU Space Act (**EU Space Act - European Commission**), followed shortly thereafter by the accompanying Vision for a European Space Economy (**Vision for the European Space Economy - European Commission**).

The NOAA Office of Space Commerce and Department of State Office of Space Affairs continue to collect U.S. perspectives and feedback regarding the provisions of the EU Space Act. Over the coming months, OSC will host in-person and virtual industry meetings and "listening sessions" to gather stakeholder opinions.

Access the EU Space Act Feedback Questionnaire (Google Forms).

Responses and submissions to this questionnaire are purely voluntary. This questionnaire does not solicit recommendations or consensus positions for the United States Government. Responses to this questionnaire are strictly for informational purposes for the United States Government.

To schedule a discussion on your perspectives regarding the EU Space Act, and/or to be included in future correspondence regarding the Act, contact us at **Space.Commerce@NOAA.gov**.

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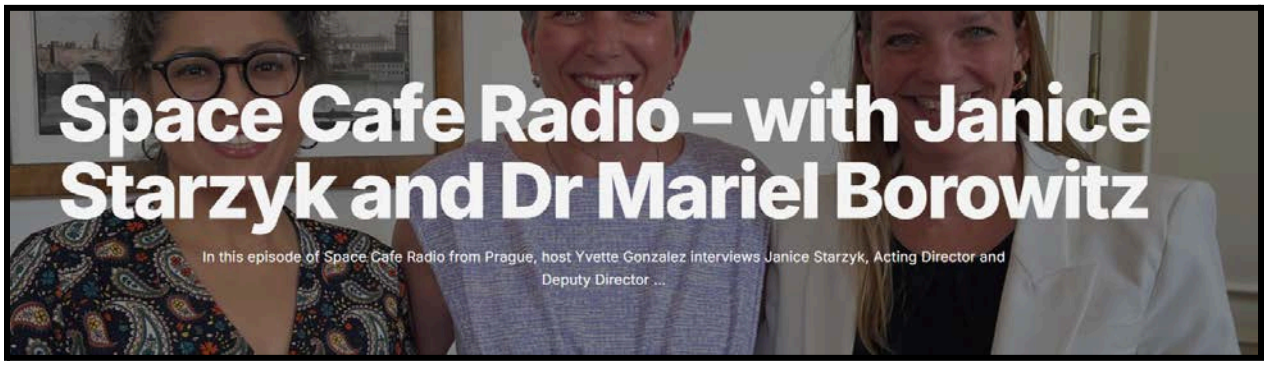
OSC Discusses International SSA Coordination with Space Cafe Radio



The Office of Space Commerce's Acting Director, Janice Starzyk, and Head of International SSA Engagement, Dr Mariel Borowitz, sat down with Yvette Gonzalez of Space Cafe Radio for a discussion on the Traffic Coordination System for Space, the evolution and future of space traffic management, and **OSC's work facilitating coordination between global SSA systems**.

The podcast may be accessed on the **Space Cafe Radio webpage** as well as **on Youtube**.

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OSC's "Standards Corner"

Space Standards

Welcome to OSC's "Standards Corner!" Interested U.S. stakeholders may participate in standards development working groups and be members of the U.S. Technical Advisory Group (US TAG) for the International Organization for Standardization (ISO) Technical Committee 20 (TC20) Subcommittee 14 (SC14) or join working groups in the Consultative Committee for Space Data Systems.

ISO/TC 20/SC 14 Space Systems & Operations Update

ISO/TC20/SC14 seeks to facilitate commerce and to enhance safety, efficiency, and interoperability in all aspects of space activity by developing and achieving international consensus on standards and practices for space stakeholders.

The Subcommittee has published 201 standards, with an additional 47 in development at the time of this publication. These standards are developed through the Subcommittee's work program among three advisory groups and eight working groups, which meet regularly in-person in the spring and fall of each calendar year and virtually throughout the year.

The US TAG welcomes input from stakeholders for its position on documents that are open for comment through the voting process. The table below provides a listing of SC14 documents open for comment 30 days or longer from the date of this publication.

Next month, in addition to listing current ISO documents open for comment to the US TAG, Standards Corner will provide a detailed look at the published standard ISO 24113:2023, Space systems — Space debris mitigation requirements.

Table: ISO documents in TC20/SC14 available for comments to the US TAG.[1]

Document Stage[2]	Document ID	Document Title
New Work Item Proposal	ISO/NP 14620-5	pace systems — Safety requirements — Part 5: Human rated spacecraft
New Work Item Proposal	ISO/NP 25772	Space systems — Fiber optic components — Testing guideline
Committee Draft for Consultation	ISO/CD 23041	Ed.3. Space systems — Unmanned spacecraft operational procedures — Documentation
Committee Draft for Consultation	ISO/CD 24873	Space systems — Design and verification requirements for fault diagnosability and reconfigurability of spacecraft
Committee Draft for Consultation	ISO/CD TS 25309	Space systems — Requirements for space science payloads re-flight
Draft International Standard	ISO/DIS 21886	Ed.2, Space systems — Configuration management

[1] Documents have deadlines for comments 30 days or more from the date of this publication.

[2] A description of the stages for ISO standards development is available at this link: **https://www.iso.org/stages-and-resources-for-standards-development.html**

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Across Commerce

NIST Moonlight Data Will Help Satellites Get a More Accurate Look at Earth

Weather forecasting, mineral prospecting and farming all could improve from a trove of data the National Institute of Standards and Technology (NIST) recently gathered about moonlight, late at night and far above the clouds.

Before a satellite can take reliable visuals of the planet, the satellite's sensors need to be calibrated to make sure they are recording accurate data. NIST's measurements of the Moon's brightness — 10 times more accurate than previously available data — are a valuable commodity for engineers, who can use the data to calibrate the visual sensors aboard Earth-observing satellites. Proper calibration can help ensure that these satellites are accurately recording the actual amounts and colors of light from the ground, water and vegetation far below.

NIST physicist John Woodward and his colleagues arranged to mount a special telescope on a NASA ER-2 aircraft that flies at 70,000 feet, or 21 kilometers, which is higher than 95% of the atmosphere. The mission, called the Airborne Lunar Spectral Irradiance Mission (air-LUSI), flew from NASA's **Armstrong Flight Research Center**. After **several years of engineering and test flights**, the project began gathering data in 2022 and conducted its most recent measurements in early 2025.

The new dataset allows distinct improvements over previous lunar irradiance models, which excelled at providing measurements that could show how a sensor's performance was changing over time but made it difficult to know if and how the Earth itself was changing. The new data not only reduces the uncertainty inherent in ground-based data, but it is also directly tied to the International System of Units (SI), making it easier to apply.

Read more on the NIST news release.

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Connect With OSC!

- **Website**: space.commerce.gov
- **Contact Us**: space.commerce.gov/contact-us
- **TraCSS**: space.commerce.gov/tracss
- **LinkedIn**: Office of Space Commerce
- **X**: @CommerceinSpace