



Join us on February 13 at 3:30 p.m. EST
for the TraCSS listening session on

**Considerations for DoD-DOC Space Traffic Coordination
(STC) Operations Transition**



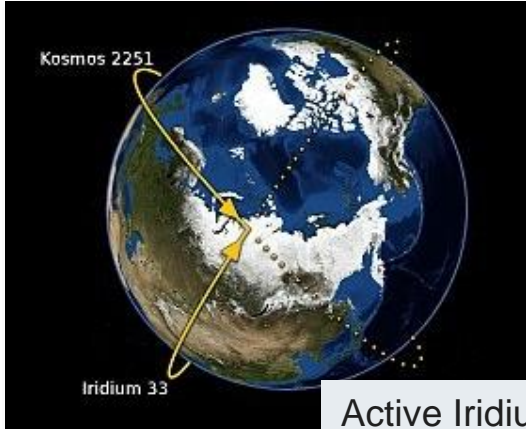


Housekeeping for Listening Session

- The listening session is for 1 hour total time.
- Will be recorded and posted online to the TraCSS website afterwards
- Will be taking feedback but no Q&A in this session
- Agenda:
 - Welcome & Introduction of DoD Representatives - Christine Joseph, OSC
 - TraCSS Overview and Phase 1 Planning - Christine Joseph, OSC
 - Feedback Time
 - Registered Participants - 3 minutes each
 - Closing & Wrap-Up
 - Adjourn
- Next steps:
 - Written comments may be submitted until 5:00 pm ET, February 27, 2024
 - tracss.commerce@noaa.gov
 - Future listening sessions are planned for 2024 - will be announced on TraCSS webpage and via email blasts



Overview and History



The SPACE Office fosters data sharing and collaboration between USSPACECOM, Space Delta 2 and the space community to promote the responsible use of space, advance spaceflight safety, and enhance SDA.

Active Iridium 33 and inactive Kosmos 2251 collided into each other on February 10, 2009.



“Understanding into Opportunity”



Data Sharing

SPACE Office executes USSPACECOM's SSA Data Sharing Program for security cooperation and spaceflight safety.

SPACE-TRACK.ORG

BASIC SERVICES

SATCAT, GP Data, Decay/Reentry

175K+ User Accounts from 200+ Countries

EMERGENCY SERVICES

Conjunction Data Messages, Close Approach Notifications

755 Organizational Accounts

2,369 Conjunction Assessment Users

9,400 Active Spacecraft

ADVANCED SERVICES

Expanded data, accelerated timelines, higher accuracy data

SSA Data Sharing Agreements:

142 commercial companies, 34 countries, and 7 universities

SSA data is shared through Space-Track.org.

Space-Track.org is USSPACECOM's public website for space surveillance data that hosts the most complete satellite catalog of Earth-orbiting artificial objects

- The SPACE Office manages and facilitates user access and data management and publication on Space-Track.org

SPACE-TRACK.ORG

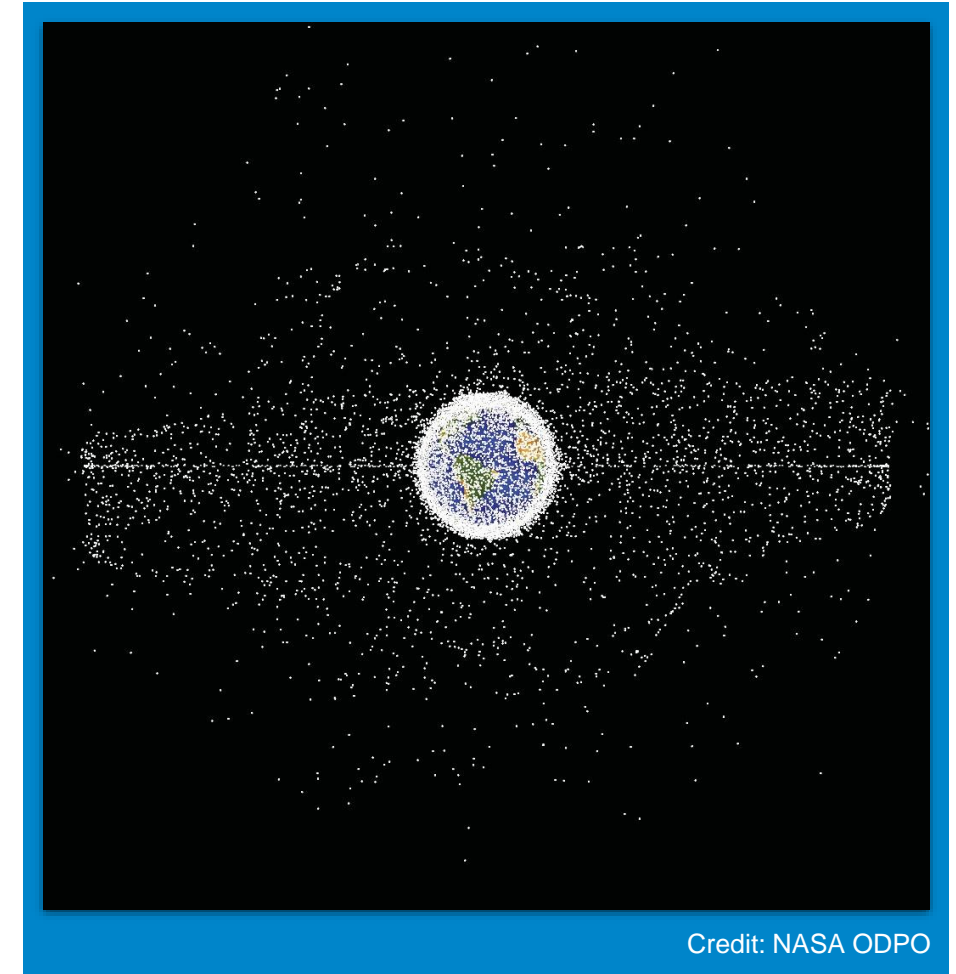
NOVA ID	SATNAME	INTEL ID	TYPE	COUNTRY	LAUNCH	SITE	DECAY	PERIOD	INCL	APOGEE	PERIGEE	BCS	LASTEST
1	ISS (ZARYA)	1997-037A	ISS/STP	ISS	1997-03-28	TIMOTHY	1997-03-28	90.19	69.54	396	274	LANCZ	10.11.2024
2	ISS (DM)	1997-037B	ISS/STP	ISS	1997-03-28	TIMOTHY	1997-03-28	90.19	69.54	396	274	LANCZ	10.11.2024
3	ISS (ZARYA)	1997-037A	ISS/STP	ISS	1997-03-28	TIMOTHY	1997-03-28	90.19	69.54	396	274	LANCZ	10.11.2024
4	ISS (DM)	1997-037B	ISS/STP	ISS	1997-03-28	TIMOTHY	1997-03-28	90.19	69.54	396	274	LANCZ	10.11.2024
5	ISS (ZARYA)	1997-037A	ISS/STP	ISS	1997-03-28	TIMOTHY	1997-03-28	90.19	69.54	396	274	LANCZ	10.11.2024
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7	ISS (ZARYA)	1997-037A	ISS/STP	ISS	1997-03-28	TIMOTHY	1997-03-28	90.19	69.54	396	274	LANCZ	10.11.2024
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“Understanding into Opportunity”

Space Situational Awareness (SSA) and the Office of Space Commerce

- Commercial space companies have launched thousands of new satellites over the past few years and plan to launch tens of thousands more
- There is an urgent need for better SSA as Earth's orbits become increasingly congested, putting commercial, civil, and national security space missions at risk.
- Space Policy Directive-3 transfers responsibility from Department of Defense (DoD) to DOC for providing basic SSA services to commercial and civil operators
 - Recognizes the pressing need for more accurate and timely SSA data
 - Enables DoD to concentrate resources on national security
- NOAA recently reorganized and expanded the Office of Space Commerce (OSC) to address these challenges
- OSC is developing an SSA capability that will blend government and commercial data to provide actionable SSA for civil and commercial space operators



Credit: NASA ODPO

TraCSS Program Objectives

Relieve DoD of responsibility for SSA coordination of burgeoning global commercial space industry

Provide “Basic SSA Services” in a manner that promotes safer space operations

Encourage US Commercial SSA leadership and rely on commercial SSA providers to the greatest extent possible

Establish and maintain a resident space object data repository from which all basic services will be derived and utilized for international coordination purposes

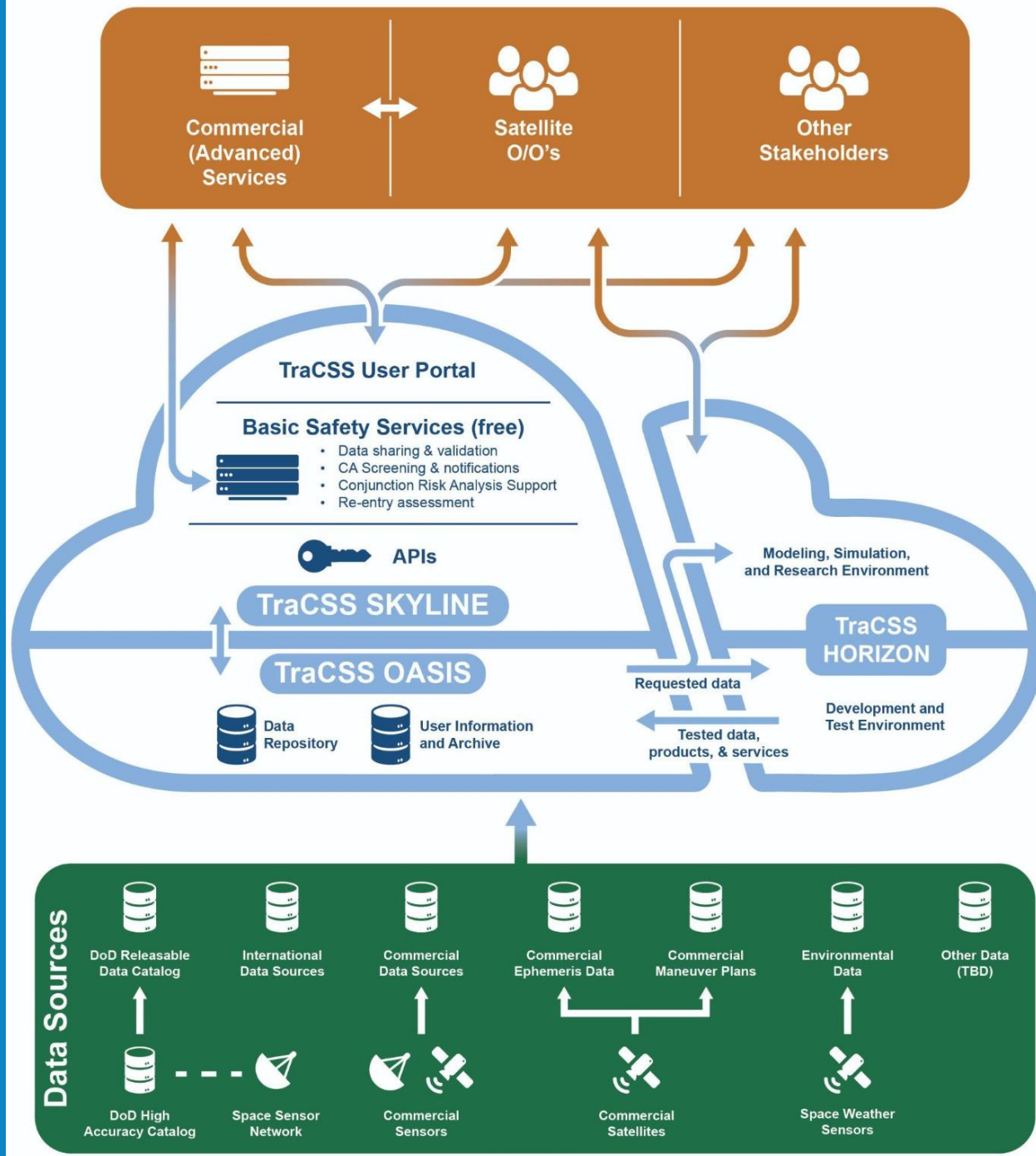
Conduct R&D activities that will advance the science and technology of SSA

Promote global SSA standards and best practices

Driven by spaceflight safety, space sustainability, and international coordination

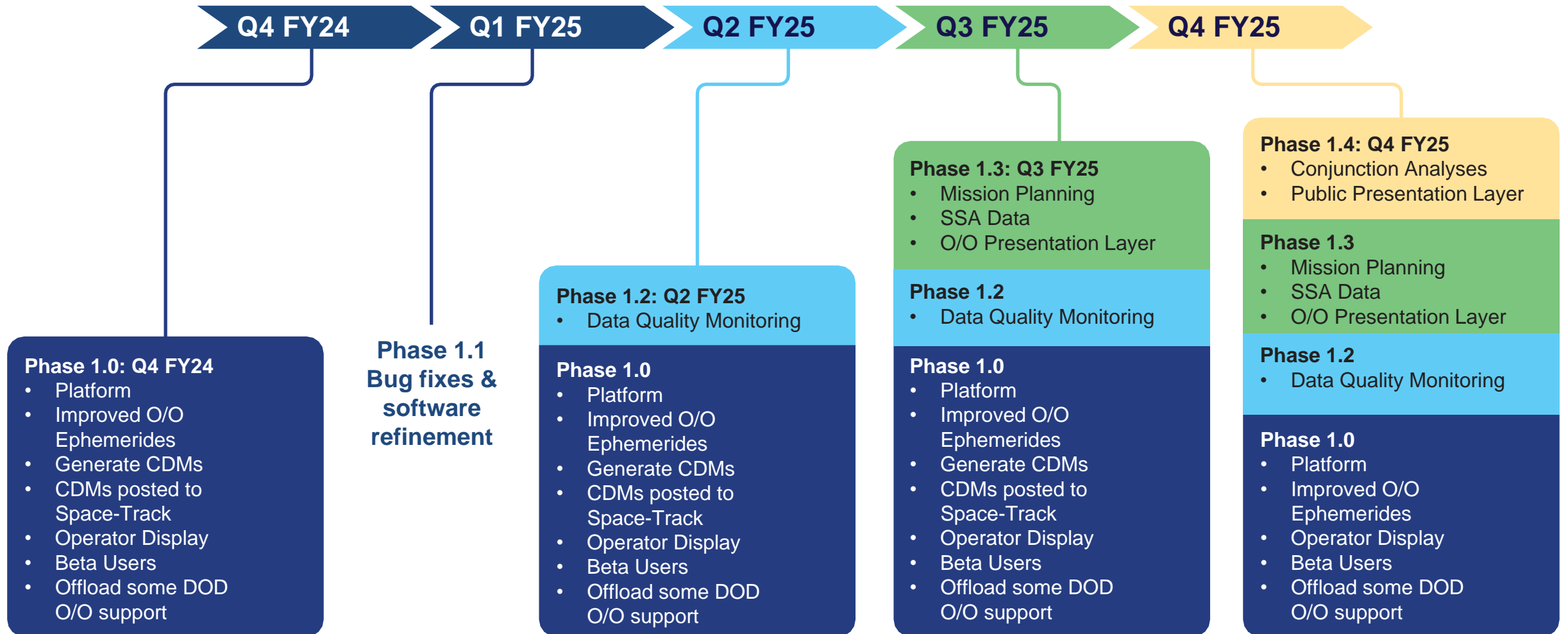
Traffic Coordination System for Space (TraCSS)

- **Formerly known as the Open Architecture Data Repository (OADR)**
- **3 distinct components:**
 - TraCSS-OASIS: Data repository
 - TraCSS-SKYLINE: SSA application services
 - TraCSS-HORIZON: modeling, simulation, & research environment and development & test environment



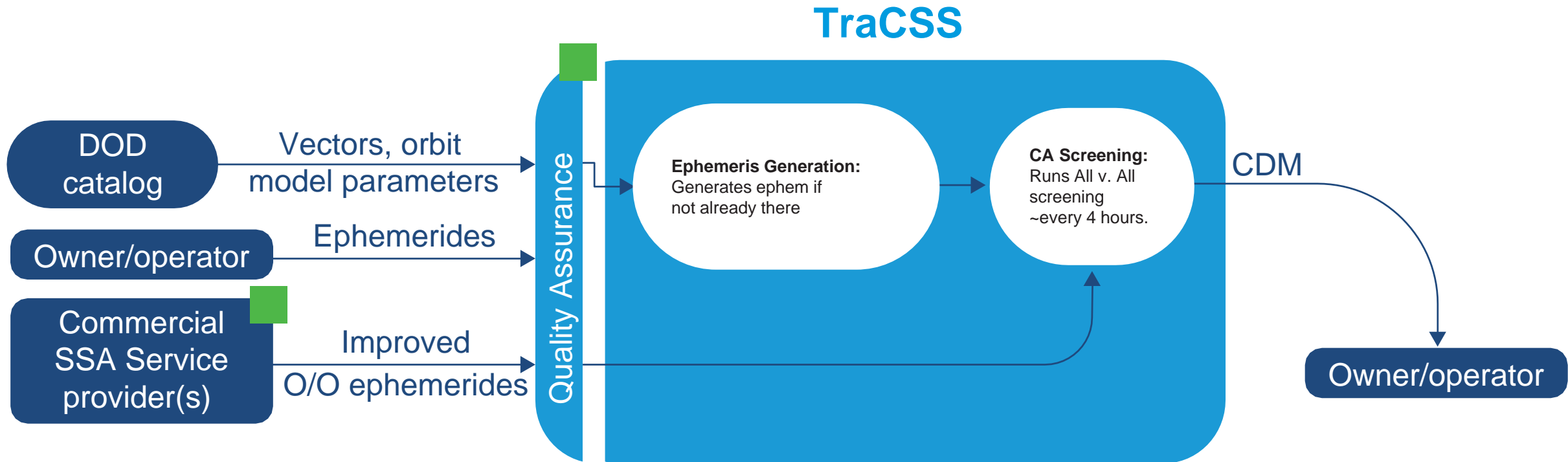
Phase 1 Capability Roll-Out Plan

Phased delivery of commercial functionality



TraCSS SSA Phase 1.0 Initial Capability

A day in the life of a conjunction event



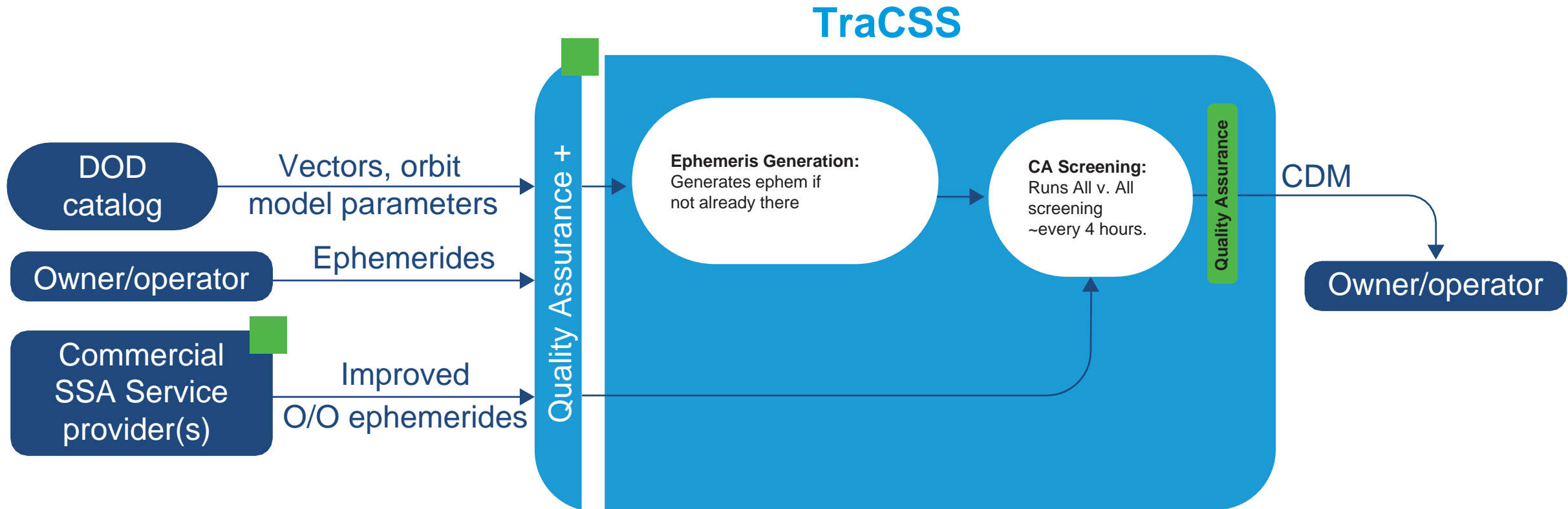
Enhanced Commercial Facing SSA/STC Features

- Increased Cadence to Conjunction Assessment (CA) Screening every 4 hours
- Investment in improved Quality Owner/Operator Ephemerides
- Maintain Space-Track.org interface to minimize disruption during start up

TraCSS SSA Phase 1.2

A day in the life of a conjunction event

Commercial SSA provider

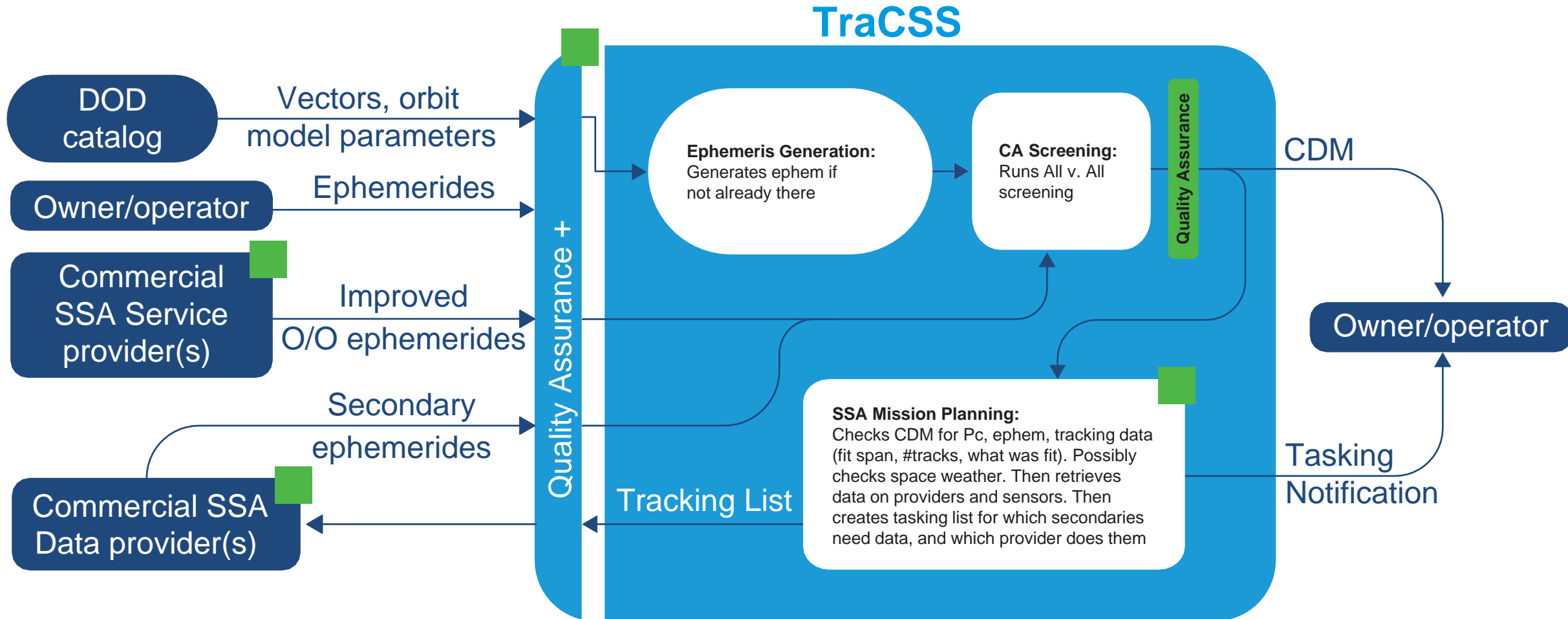


Enhanced Commercial Facing SSA/STC Features

- Addition of data quality monitoring service within QA

TraCSS SSA Phase 1.3

A day in the life of a conjunction event

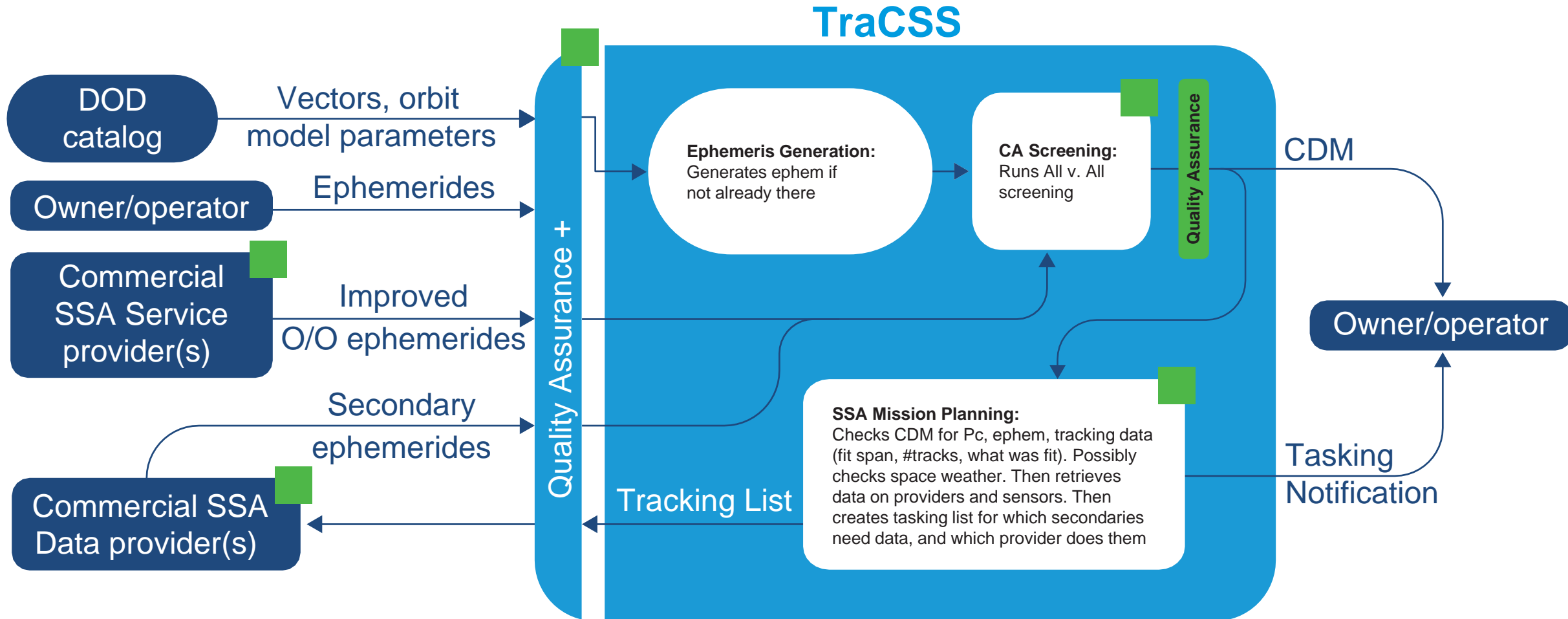


Enhanced Commercial Facing SSA/STC Features

- Mission planning service identifies additional sensor tracking needs
- Procurement of additional SSA data where needed
- Owner/Operators notified of additional sensor tasking status via TraCSS user interface

TraCSS SSA Phase 1.4

A day in the life of a conjunction event



Enhanced Commercial Facing SSA/STC Features

- Commercial CA screening service
- Public user interface for TraCSS

Interagency Coordination – Department of Defense

- DoD and DOC signed a Memorandum of Agreement (MOA) in September 2022, framing the departments' relationship for basic space situational awareness, space traffic management, and coordination for civil and commercial entities.
- MOA began discussions on priorities and coordination. Working groups have been established and are continuing work on defining data transfer needs and roles and responsibilities across the transition.
 - Multiple weekly virtual meetings: Data exchange between DoD and DOC, state management, roles and responsibilities, **STC Ops Transition**, launch collision avoidance, mega-constellations, re-entry assessment and management, etc.
- In Phase 1, TraCSS will lean more on DoD data at first. With each phase, more commercial data and commercial SSA services will be integrated over time.
 - Phased transition will help ensure there is no disruption in basic SSA safety services.
- Beyond data, coordination topics also include sharing of expertise in SSA analysis and spaceflight safety operations

Engage with OSC on TraCSS



TraCSS webpage

<https://www.space.commerce.gov/tracss>

News, videos, and information on engagements, including past and upcoming public listening sessions



Email

tracss.commerce@noaa.gov

Submit TraCSS-related questions, comments, & feedback



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[OSC Engagement Form](#)

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