



Join us on July 9 at 2:00 p.m. EST
for the **TraCSS listening session** on
TraCSS User Agreement & Data Policy





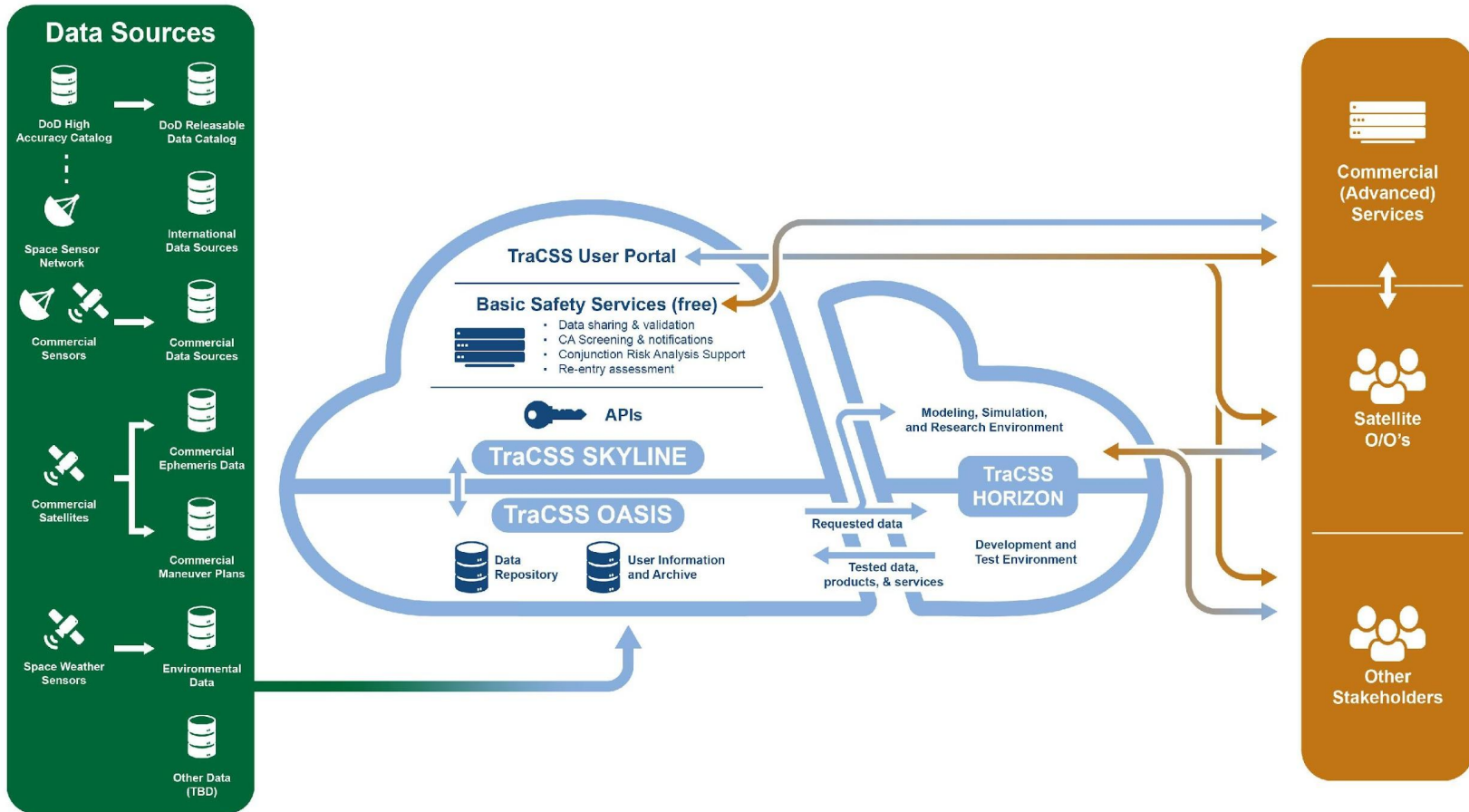
Housekeeping for Listening Session



- 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 & Brief Intro - Christine Joseph, OSC
 - Proposal for Data Sharing Policy (Lead: Dr. Mariel Borowitz, OSC)
 - Proposal for User Agreement
 - Feedback Time: Registered Participants - 3 minutes each
 - Closing, Wrap-Up, & Adjourn
- Next steps:
 - Written comments may be submitted per the guidelines in the posted online on the TraCSS webpage until 5:00 pm ET July 23, 2024
 - tracss.commerce@noaa.gov
 - Future listening sessions are planned for 2024 - will be announced on TraCSS webpage and via email blasts, LinkedIn, and on X (@CommerceinSpace)



Traffic Coordination System for Space - TraCSS





Goals of TraCSS Data Policy



- Contribute to TraCSS ability to provide space situational awareness (SSA) data and services that support global spaceflight safety, sustainability, and international coordination.
- Implement SPD-3 guidance to enable greater SSA data sharing, consistent with national security constraints
- Access to data can also enable:
 - Entrepreneurship and development of value-added services
 - Research and development
 - Transparency and public engagement





Access Levels for TraCSS Data and Products



- TraCSS Open Data

- Publicly available with no restrictions on use
- Creative Commons 0 Public Domain Dedication (CC0 1.0)
- Available via the TraCSS website; OSC is determining implementation options
- No registration or user agreement is required for access



- TraCSS Restricted Data, Open Archive after Delay

- Available only to TraCSS registered users (i.e. satellite owner/ operators and government entities) and USG entities
- Requires registration for TraCSS and signing the TraCSS User Agreement
- [TBD time] after receipt by OSC of Provider's Data, OSC may publicly release [Provider's Data or TBD subset of Provider's data] with no restrictions on use or dissemination, under the Creative Commons Universal Public Domain Dedication (CC0-1.0)



- TraCSS Restricted Data

- Available only to TraCSS registered users (i.e. satellite owner/ operators and government entities) and USG entities
- Requires registration for TraCSS and signing the TraCSS User Agreement





TraCSS Open Data



1. TraCSS Satellite Database (Public version)

- DoD Public SATCAT
- Owner/ operator-provided satellite attributes that owner/ operators have opted to make publicly available
- NASA mass and size catalog
- Other public information, as relevant
- Satellite can be queried to create derived products



2. Owner/ Operator Ephemerides (if o/o opts to make them open)

3. DoD Public Two-line Element (TLE) Catalog

4. Close Approach Notifications (CANs)





TraCSS Restricted Data



- Conjunction Data Messages
 - Available to spacecraft owner/ operators involved in conjunction (and registered in TraCSS)
 - Available to government entities with which satellites are associated
- Owner/ Operator Operational Contact Directory
 - Available to all registered TraCSS users
 - Also shared with other national or regional SSA providers to facilitate international coordination
- TraCSS Satellite Database (Restricted version)
 - Includes information owner/ operators opt to restrict to USG and TraCSS registered users only
- Owner/ operator Predicted Ephemeris (if O/O opts to restrict access)





Data Provided by TraCSS Registered Users



User-Provided Information:

1. Spacecraft Owner/ Operators
 - Organizational information
 - Contact information
 - Spacecraft attributes
 - Predicted ephemeris with maneuver plans and covariance
2. Government Entities
 - Organizational information
 - Contact information
 - Spacecraft affiliated with the nation



Policy Options for Access:

- Contact information
 - Restricted to U.S. government and TraCSS registered users
 - Also shared with national and regional SSA providers
- Satellite attributes
 - O/O can opt to make these open or restrict to USG and TraCSS registered users only
- Ephemerides
 - O/O can opt to make these open or restrict to USG and TraCSS registered users only
- Spacecraft/ country affiliations
 - Public

Contact Information Collected from Owner/ Operators

Organizational Information

Spacecraft Owner Organizational contact information:

Organization name

Headquarters address (including country)

Primary Contact information – position title, email, phone number

Spacecraft Operator Organizational contact information [if different than owner]

Organization name:

Mission control/ operation center address (including country)

Primary contact – position title, email, phone number

Additional organizational users (names, email addresses, phone numbers)

Close approach notifications (email addresses to receive messages and access the data)

Emergency notification contact (name and phone number(s))



Spacecraft Information Collected from Owner/ Operators



Satellite name

Alternate name(s)



Have you checked the satellite catalog to make sure there is not already a satellite with this name in orbit?

NORAD ID (if already assigned)

International designator/ COSPAR ID (if already assigned)



Licensing country

Country of UN Registry

Constellation (if applicable)



Country Affiliation(s)



Object Type [Automatically filled to Payload]

Operational Status

Orbit category

Are you capable of reliably generating an accurate and precise predicted ephemeris with covariance? [yes/no]

How often do you plan to provide predicted ephemerides with covariance to TraCSS ? [once a day; twice a day; more than twice a day]

Wet mass

Hard body radius [and method used for calculation]

Will anything be deployed from it (anything to change its shape)?

Conjunction mitigation capabilities (check all that apply):
chemical propulsion, electric propulsion, differential drag,
object re-orientation, none

Expected mission lifetime?

Launch Provider

Launch Vehicle

Launch Date

Launch Name or Primary Payload

Planned Orbit (initial and final if there will be an orbit change)



Contact Information Collected from Owner/ Operators



- Spacecraft owner organizational contact information:
 - Organization name
 - Headquarters address (including country)
 - Primary contact information (position title, email, phone number)
- Spacecraft operator organizational contact information (if different than spacecraft owner):
 - Organization name
 - Mission control/ operations center address (including country)
 - Primary contact information (position title, email, phone number)
 - Additional organizational users (names, email addresses, phone numbers)
 - Close approach notifications (email addresses to receive messages and access the data)
 - Emergency notification contact (name and phone number(s))





Satellite Attributes Collected from Owner/ Operators



- Satellite name
- Alternate name(s)
- Have you checked the satellite catalog to make sure there is not already a satellite with this name in orbit?
- NORAD ID (if already assigned)
- International designator/ COSPAR ID (if already assigned)
- Licensing country
- Country of UN Registry
- Constellation (if applicable)
- Country Affiliation(s)
- Object Type [Automatically filled to Payload]
- Operational Status
- Orbit category
- Are you capable of reliably generating an accurate and precise predicted ephemeris with covariance? [yes/no]
- How often do you plan to provide predicted ephemerides with covariance to TraCSS ? [once a day; twice a day; more than twice a day]
- Wet mass
- Hard body radius [and method used for calculation]
- Will anything be deployed from it (anything to change its shape)?
- Conjunction mitigation capabilities (check all that apply): chemical propulsion, electric propulsion, differential drag, object re-orientation, none
- Expected mission lifetime?
- Launch Provider
- Launch Vehicle
- Launch Date
- Launch Name or Primary Payload
- Planned Orbit (initial and final if there will be an orbit change)





User Agreement





Questions for Feedback



- Are there ways in which the TraCSS data policy could be improved?
- Do you see any challenges (from an o/o perspective) in implementing this policy?
- Does this policy help spacecraft operators and others achieve their mission, specifically related to spaceflight safety?
- For owner/ operators, are you likely to opt to share your information (e.g. ephemerides, satellite attributes) openly or keep it restricted to TraCSS registered users, and why?
- For owner/ operators, what barriers do you see to sharing information (e.g. ephemerides, satellite attributes) openly, if any?
- How can TraCSS encourage owner/ operators to opt to share information openly?
- The draft user agreement includes an option for a delayed release of O/O submitted data to an open archive.
 - OSC seeks feedback on the TBD fields related to
 - Time delay for release after receipt of data
 - All or subset of O/O submitted data





Acknowledgements



- NOAA Office of Space Commerce Space Operations Division and TraCSS team
- Cody Knipfer, Assistant to the OSC Chief of Staff
- Ross Hatley, NOAA Communications

