



TraCSS Conjunction Data Message Specification
Stakeholder Listening Session
April 30 | 2 – 3 pm EDT (Virtual)



Listening Session “Ground Rules”

General Guidelines:

- **Stay on schedule** – Respect everyone’s time.
- **Be respectful & professional** – Maintain a courteous tone.
- **Keep questions brief & relevant** – Submit via Q&A panel.
- **No marketing pitches** – This is for feedback, not promotion.

Confidentiality & Conduct:

- This session is **recorded** and subject to **FOIA**.
- Do **not** share proprietary or sensitive info.
- Disruptions may result in removal.

Participation Protocol:

- **You will be muted** when not speaking.
- **Videos are turned off.**
- Use chat responsibly.

Q&A Process:

- Submit questions in the **Q&A Panel**.
- Pre-submitted questions will be addressed live.
- Speakers will be called on **by order of hands raised**

TraCSS CDM Spec – New SSA Fields

- MAHALANOBIS_DISTANCE
- COLLISION_MAX_PROBABILITY
- COLLISION_MAX_PROBABILITY_METHOD
- DILUTION_STATUS
- DILUTION_SIGNIFICANCE
- ENVIRONMENTAL_IMPACT_FRAGMENTATION
- FRAGMENTATION_MODEL
- APPROACH_ANGLE

Existing DoD Fields

- APOAPSIS_ALTITUDE
- PERIAPSIS_ALTITUDE
- INCLINATION
- DCP_SENSITIVITY_POSITION_R
- DCP_SENSITIVITY_POSITION_T
- DCP_SENSITIVITY_POSITION_N
- DCP_SENSITIVITY_VELOCITY_R
- DCP_SENSITIVITY_VELOCITY_T
- DCP_SENSITIVITY_VELOCITY_N

TraCSS Transparency Fields

- OPS_STATUS
- SCREENING_DATA_SOURCE
- RUN_ID
- CORRELATION_ID
- MEETS_ALERTABLE_CRITERIA

SAT1_ and SAT2_ Prepends

- Prepending Sat1_ and Sat2_ to object specific fields to make true KVN format

State Vector Reference Frames

- Changing ITRF Reference frame to EME2000.

Symmetrical CDMs

- Instead of having a primary, and a secondary, moving to just having two objects
- Satellites may show up as object 2 in CDMs
- Moving following fields to each object section:
 - RELATIVE_POSITION_R
 - RELATIVE_POSITION_T
 - RELATIVE_POSITION_N
 - RELATIVE_VELOCITY_R
 - RELATIVE_VELOCITY_T
 - RELATIVE_VELOCITY_N
 - APPROACH_ANGLE
 - SCREEN_VOLUME_SHAPE
 - SCREEN_VOLUME_FRAME
 - SCREEN_VOLUME_X
 - SCREEN_VOLUME_Y
 - SCREEN_VOLUME_Z
- Eliminates wasted effort for the TraCSS system, promotes communication, and removes edge case of lost CDMs.

TraCSS Conjunction Notifications

- TraCSS equivalent to space-track “Public CDMs”
- Subset of TraCSS CDMs that meet certain Alertable criteria.
- Initial TraCSS Alertable criteria based on current emergency criteria from 19th space-flight safety handbook.

IRALSS

Feedback Session



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