

Conjunction Data Exchange Requirements

Data Element	ODM Required	ODM Not Required
Time of Conjunction	Necessary and Sufficient	Necessary but not Sufficient
Conjunction Criteria	Necessary	Necessary
Identities of Satellites	Necessary	Necessary
Closest Approach	Desirable (Can be determined from ODM's)	Necessary
Covariances	Not Required Included in ODM's	Necessary
Kinematic State at CPA	Desirable (To assess debris production and consequences)	Desirable
Min Safe Separation Criterion	Desirable (To explain why one operator might perceive a conjunction and the other not)	Desirable
Relative Velocity at CPA	Not Required (Can be determined from ODM)	Desirable (Guides maneuver development)
Collision Probability	Desireable (To judge courses of action)	Desireable

All supporting orbit data and covariances must be in CCSDS ODM Format, preferably OEM since OEM requires no propagation.