

ISO 24330:2022-07 (E)

Space systems - Rendezvous and Proximity Operations (RPO) and On Orbit Servicing (OOS) - Programmatic principles and practices

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Programmatic principles for rendezvous and proximity operations (RPO) and on-orbit servicing (OOS) missions	3
4.1	Responsible design and operations	3
4.1.1	Promote safety and mission success	3
4.1.2	Space debris	3
4.1.3	Effective communications	3
4.1.4	Liability for damage and insurance	3
4.2	Transparent operations	3
4.2.1	General	3
4.2.2	Notification to states	4
4.2.3	Communications with entities	4
4.2.4	Notification protocols	4
4.2.5	Lessons learned	4
4.2.6	Notification of re-entry hazard	4
4.2.7	Registration of orbit	4
5	Programmatic practices for rendezvous and proximity operations and on-orbit servicing missions	4
5.1	Design for mission success	4
5.1.1	General	4
5.1.2	Formal review of hardware design	5
5.1.3	Resilient software design and verification	5
5.1.4	Concepts of operation	5
5.1.5	Approved and proven procedures	5
5.1.6	Trained and qualified operators	5
5.2	Design servicing operations to minimize the risk and consequences of mishaps	6
5.2.1	Contractual relationship with client	6
5.2.2	Communications discipline	6
5.2.3	Trajectory practice	6
5.2.4	Third party notifications	6
5.2.5	Collision avoidance practices in proximity	6
5.2.6	Anomaly resolution	7
5.2.7	On-orbit checkout	7
5.3	Avoidance of interference	7
5.3.1	General	7
5.3.2	Avoiding physical interference	8
5.3.3	Avoiding electromagnetic interference	8
5.4	Information sharing	8
5.4.1	General	8
5.4.2	Development of anomaly resolution standards	8
5.4.3	Sharing of anomaly information	8

Annex A (informative) Information related to programmatic principles and practices	9
Annex B (informative) RPO/OOS mission phases	12
Bibliography	19