		Publication		
		Date / Target		
Developer	Designation / Title of Standard, Specification, Other Publication, or Program	Date	Publication Status	Lifecycle
Aerospace Corporation	Launch-U Standard		(New) In Development	Launch
AIA	NAS412, Foreign Object Damage (FOD) Prevention Guidance Document	30-Apr-18	Published	Risk Management
AIA	NAS9933 Critical Security Controls for Effective Capability in Cyber Defense		Published	
AIAA	AIAA SP 016, ORBITAL DEBRIS MITIGATION - TECHNICAL, LEGAL, AND ECONOMIC ASPECTS	1992	Published	Debris Mitigation
AIAA	AIAA SP 016 2, SPECIAL REPORT: MEO/LEO CONSTELLATIONS: U.S. LAWS, POLICIES, AND REGULATIONS ON ORBITAL DEBRIS MITIGATION	1999	Published	Debris Mitigation
AIAA	AIAA SP 069, SPECIAL REPORT - CONTEMPORARY MODELS OF THE ORBITAL ENVIRONMENT	1994	Published	Debris Mitigation
ASE	ASE Operational Rules	10-Oct-19	Published	Human space safety
ASTM F47, Commercial				
Spaceflight	Formed in 2016 (2 standards published, 4 in development, as listed below)			
ASTM F47.01, Occupant				
Safety of Suborbital				
Vehicles	ASTM WK59508, New Specification for Failure Tolerance for Occupant Safety of Suborbital Vehicles		(New) In Development	
ASTM F47.03, Unoccupied				
Launch and Reentry				
Vehicles	ASTM WK61254, New Classification for Spacecraft vehicle types		(New) In Development	
ASTM F47.03, Unoccupied				
Launch and Reentry				
Vehicles	ASTM WK64814, Flight Controller Training		(New) In Development	
ASTM F47.04, Spaceports	ASTM F3344-19, Standard Guide for Storage, Use, and Handling of Liquid Rocket Propellants	2019	Published	
ASTM F47.05, Cross-				
Cutting	ASTM WK65152, Reportable safety related events		(New) In Development	
ASTM F47.91, Terminology	ASTM F3377-19, Standard Terminology Relating to Commercial Spaceflight	2019	Published	
BSI	18/30377478 DC, SPACE SUSTAINABILITY - SPACE DEBRIS MITIGATION REQUIREMENTS	23-Oct-18	Published	Debris Mitigation
BSI	BS EN 16603-10-04, SPACE ENGINEERING - SPACE ENVIRONMENT	28-Feb-15	Published	Debris Mitigation
BSI	BS EN 16604-10, SPACE SUSTAINABILITY: SPACE SYSTEMS - SPACE DEBRIS MITIGATION REQUIREMENTS	02-Sep-19	Published	Debris Mitigation
CalPoly	CubeSat Design Specification	1 Nov 2009	Published	Space Data Exchange
CCSDS	Has an agreement with ISO/TC 20/SC 13 (see below) to submit its standards for approval there			
CCSDS	502.0-B-2Orbit Data Messages (CDM)	1 Nov 2009	Published	Space Data Exchange
CCSDS	508.0-B-1 Conjunction Data Message (CDM)	1 Jun 2013	Published	Space Data Exchange
CCSDS	503.0-B-1 Tracking Data Message (TDM)	1 Nov 2007	Published	Space Data Exchange
CCSDS	508.1-B-1 Reentry Data Message (RDM)	1 Nov 2019	Published	Space Data Exchange
CCSDS	504.0-B-1 Attitude Data Message (ADM)	1 May 2008	Published	Space Data Exchange
CCSDS	509.0-B-1 Pointing Request Message (PDM)	2 Nov 2009	Published	Space Data Exchange
CCSDS	352.0-B Cryptographic Algorithms	Aug-19	Published	ž
CCSDS	355.0-B Space Data Link Security (SDLS) Protocol	Sep-15	Published	
CCSDS	356.0-B Network Later Security	Jun-18	Published	
CCSDS	357.0-B Authentication Credentials	Jul-19	Published	
CNSS	CNSSI 1200 National Informtion Assurance Instruction for Space Systems Used to Support National Security Missions	7-May-14	Published	
CNSS	CNSSI 1253F Attachment 2 Space Platform Overlay	1-Jun-13	Published	
CONFERS	Guiding Principles for Commercial Rendezvous and Proximity Operations (RPO) and On-Orbit Servicing (OOS)	7-Nov-18	Published	
CONFERS	CONFERS Recommended Design and Operational Practices	1-Feb-19	Published	
COSPAR	International Committee on Space Research	1		Space sustainability
CSF	Trade association that does some work on safety standards and works with ASTM			,
CSpOC	U.S. Strategic Command Fact Sheet, Combined Space Operations Center / 614th Air Operations Center (previously known as JSpOC)	1		
CSSMA	Trade association focused on spectrum, not a standards writing body	1		
DIN	DIN EN 16604-20, Draft Document- SPACE SUSTAINABILITY - PLANETARY PROTECTION	1-Jun-18	Published	End of Mission
DOD	DOD 3100.12, Space Support	22-Jun-05	Published	Debris Mitigation
DOD	DOD Air Force Policy Directive 91-217	11-Apr-14	Published	
ECSS	An initiative established to develop a coherent, single set of user-friendly standards for use in all European space activities	/ .p		

		Dublication	1	
		Publication		
		Date / Target		l.,,
Developer	Designation / Title of Standard, Specification, Other Publication, or Program	Date	Publication Status	Lifecycle
ESA TAA Office of Commercial	Discussion of ESA activities related to mitigation of space debris			
FAA Office of Commercial				
Space Transportation	Little Control			
(AST) FAA Office of Commercial	Includes the Commercial Space Transportation Advisory Committee (COMSTAC)			
Space Transportation				
(AST)	Pagulations and Paguiroments			
FCC	Regulations and Requirements FCC Launches Review of Rules to Mitigate Orbital Space Debris (Nov 19, 2018)	19-Nov-18	Published	Debris Mitigation
FCC	FCC Proposed Rule on Mitigation of Orbital Debris in the New Space (Feb 19, 2019)	19-Nov-18	Published	Debris Mitigation
FCC	Comments on FCC Proposed on Rule Mitigation of Orbital Debris in the New Space (Feb 19, 2019)	19-гер-19	rubiisiieu	Debris Mitigation
IAA	IAA's Space Debris Situation Report	1-Dec-16	Published	Debris situation
IAASS	Safety Standard: Commercial Human-Related Space Systems	1-Dec-16	Published	Human space safety
IADC	Inter-Agency Space Debris Coordination Committee (IADC)	Various	Published	Debris Mitigation
IDA Science & Technology	Landing page for a list of reports, papers, and other government documents that STPI has either developed independently or supported	various	rubiisiieu	Debits Wittgation
Policy Institute	since April 2012	Various	Published	
IEEE	Spaceflight: The Development of Science, Surveillance, and Commerce in Space (White Paper)	13-May-12	Published	
ISO/TC 20/SC 13, Space	Spacelight: The Development of Science, Surveindince, and Commerce in Space (White Faper)	13 Way 12	i ubiisiicu	
data and information	84 published standards, 20 standards in development; U.S. holds secretariat (JPL NASA); ASRC Federal administers U.S. TAG (sample			
transfer systems	standards below)			
ISO/TC 20/SC 13, Space	<u> </u>			
data and information				
transfer systems	ISO 13537:2010 (CCSDS 311.0-M-1), Space data and information transfer systems - Reference architecture for space data systems	2015	Published	
ISO/TC 20/SC 13, Space				
data and information	ISO 15893:2010 (CCSDS 714.0-B-2), Space data and information transfer systems Space communications protocol specification (SCPS)			
transfer systems	Transport protocol (SCPS-TP)	2016	Published	
ISO/TC 20/SC 13, Space				1
data and information				
transfer systems	ISO 20214:2015 (CCSDS 351.0-M-1), Space data and information transfer systems Security architecture for space data systems	Aug-15	Published	
ISO/TC 20/SC14, Space	169 published standards, 39 standards in development; U.S. holds secretariat (AIAA); AIAA administers U.S. TAG (sample standards below),			
systems and operations	Includes an Orbital Debris Co-ordination Working Group			
ISO/TC 20/SC14, Space				
systems and operations	ISO 11227:2012, SPACE SYSTEMS - TEST PROCEDURE TO EVALUATE SPACECRAFT MATERIAL EJECTA UPON HYPERVELOCITY IMPACT	Sep-12	Published	Debris Mitigation
ISO/TC 20/SC14, Space		00P 12		Debris Minigation
systems and operations	ISO 11231:2019, SPACE SYSTEMS PROBABILISTIC RISK ASSESSMENT (PRA)	May-19	Published	Debris Mitigation
ISO/TC 20/SC14, Space	ISO 14200:2012, Space environment (natural and artificial) Guide to process-based implementation of meteoroid and debris	, 25		_ 551.5 11.15.641011
systems and operations	environmental models (orbital altitudes below GEO + 2 000 km)	Nov-12	Published	Debris Mitigation
ISO/TC 20/SC14, Space	CHANGE THOUGH OF DESCRIPTION OF DESC	1.00 12	- abilitica	Debits WithBattoff
•	ISO 14303:2002, SPACE SYSTEMS - LAUNCH-VEHICLE-TO-SPACECRAFT INTERFACES	Oct-02	Published	Launch
systems and operations	100 AR303,2002, 31 MCC 3131EW3 - EMUNCHIVEHICECTIONS ACCEPTED HINTERFACES	OC1-02	rublistieu	Lauricii
ISO/TC 20/SC14, Space	FO AACO 22044 CDACE EVETENC CAFETY DECUMPRATINES DADT 2.1 AUNICH CITE OPPOATIONS	A 11	Dublished	Launah
systems and operations	ISO 14620-2:2011, SPACE SYSTEMS - SAFETY REQUIREMENTS - PART 2: LAUNCH SITE OPERATIONS	Aug-11	Published	Launch
ISO/TC 20/SC14, Space	ISO 14625:2007, SPACE SYSTEMS - GROUND SUPPORT EQUIPMENT FOR USE AT LAUNCH, LANDING OR RETRIEVAL SITES - GENERAL	N 07	Duddiek ed	Lavorata
systems and operations	<u>REQUIREMENTS</u>	Nov-07	Published	Launch
ISO/TC 20/SC14, Space		1	l	
systems and operations	ISO 15863:2003, SPACE SYSTEMS - SPACECRAFT-TO-LAUNCH-VEHICLE INTERFACE CONTROL DOCUMENT	Nov-03	Published	Launch
ISO/TC 20/SC14, Space	ISO 16126:2014, Space systems Assessment of survivability of unmanned spacecraft against space debris and meteoroid impacts to	1	1	
systems and operations	ensure successful post-mission disposal	Apr-14	Published	Debris Mitigation
ISO/TC 20/SC14, Space				
systems and operations	ISO 16127:2014, SPACE SYSTEMS - PREVENTION OF BREAKUP OF UNMANNED SPACECRAFT	Feb-14	Published	Debris Mitigation

		Publication Date / Target		
Developer	Designation / Title of Standard, Specification, Other Publication, or Program	Date	Publication Status	Lifecycle
ISO/TC 20/SC14, Space				
systems and operations	ISO 16159:2012. SPACE SYSTEMS - LAUNCH PAD AND INTEGRATION SITE - FACILITY, SYSTEM AND EQUIPMENT FAILURE ANALYSIS	Aug-12	Published	Launch
ISO/TC 20/SC14, Space		- 0		
systems and operations	ISO 16164:2015, SPACE SYSTEMS - DISPOSAL OF SATELLITES OPERATING IN OR CROSSING LOW EARTH ORBIT	Jul-15	Published	End of Mission
ISO/TC 20/SC14, Space				
systems and operations	ISO 16454:2007, SPACE SYSTEMS - STRUCTURAL DESIGN - STRESS ANALYSIS REQUIREMENTS	Nov-07	Published	Debris Mitigation
ISO/TC 20/SC14, Space				J
systems and operations	ISO 16699:2015, SPACE SYSTEMS - DISPOSAL OF ORBITAL LAUNCH STAGES	Nov-15	Published	End of Mission
ISO/TC 20/SC14, Space				
systems and operations	ISO 17401:2004, SPACE SYSTEMS - SPACECRAFT INTERFACE REQUIREMENTS DOCUMENT FOR LAUNCH VEHICLE SERVICES	Jun-04	Published	Launch
ISO/TC 20/SC14, Space				
systems and operations	ISO 17666:2016, SPACE SYSTEMS - RISK MANAGEMENT	Nov-16	Published	Risk Management
ISO/TC 20/SC14, Space				<u> </u>
systems and operations	ISO 17770:2017, SPACE SYSTEMS - CUBE SATELLITES (CUBESATS)	Jun-17	Published	Launch
ISO/TC 20/SC14, Space				
systems and operations	ISO 19933:2007, SPACE SYSTEMS - FORMAT FOR SPACECRAFT LAUNCH ENVIRONMENT TEST REPORT	Jul-07	Published	Launch
ISO/TC 20/SC14, Space	ISO 19971:2018, SPACE SYSTEMS - SPACECRAFT AND LAUNCH VEHICLE COMBINED OPERATION PLAN (COP) AT LAUNCH SITE - GENERAL			
systems and operations	FORMAT	Jan-18	Published	Launch
ISO/TC 20/SC14, Space				
systems and operations	ISO 21347:2005, SPACE SYSTEMS - FRACTURE AND DAMAGE CONTROL	May-05	Published	Debris Mitigation
ISO/TC 20/SC14, Space		,		
systems and operations	ISO 24113:2019, Space systems Space debris mitigation requirements	Jul-19	Published	Debris Mitigation
ISO/TC 20/SC14, Space				
systems and operations	ISO 26870:2009. SPACE SYSTEMS - LAUNCH PAD AND INTEGRATION SITE OPERATIONAL DOCUMENTS	Dec-09	Published	Launch
ISO/TC 20/SC14, Space				
systems and operations	ISO 26872:2019, SPACE SYSTEMS - DISPOSAL OF SATELLITES OPERATING AT GEOSYNCHRONOUS ALTITUDE	Jul-19	Published	End of Mission
ISO/TC 20/SC14, Space				
systems and operations	ISO 27852:2016, SPACE SYSTEMS - ESTIMATION OF ORBIT LIFETIME	Jul-16	Published	End of Mission
ISO/TC 20/SC14, Space				
systems and operations	ISO 27875:2019, SPACE SYSTEMS - RE-ENTRY RISK MANAGEMENT FOR UNMANNED SPACECRAFT AND LAUNCH VEHICLE ORBITAL STAGES	Feb-19	Published	Risk Management
ISO/TC 20/SC14, Space				-
systems and operations	ISO/AWI 23312, Space systems Detailed space debris mitigation requirements for spacecraft		(New) In Development	Debris Mitigation
ISO/TC 20/SC14, Space				
systems and operations	ISO/CD 20893, Space systems Detailed space debris mitigation requirements for launch vehicle orbital stages		(New) In Development	Debris Mitigation
ISO/TC 20/SC14, Space				
systems and operations	ISO/TR 16158:2013, SPACE SYSTEMS - AVOIDING COLLISIONS WITH ORBITING OBJECTS	Dec-13	Published	Debris Mitigation
ISO/TC 20/SC14, Space	ISO/TR 17400:2003, SPACE SYSTEMS - SPACE LAUNCH COMPLEXES, INTEGRATION SITES AND OTHER FACILITIES - GENERAL TESTING			
systems and operations	GUIDELINES	Feb-03	Published	Launch
ISO/TC 20/SC14, Space				
systems and operations	ISO/TR 18146:2015, Space systems Space debris mitigation design and operation guidelines for spacecraft	Oct-15	Published	Debris Mitigation
ISO/TC 20/SC14, Space				
systems and operations	ISO/TR 20590:2017, Space systems - Debris mitigation design and operation manual for launch vehicle orbital stages	Feb-17	Published	Debris Mitigation
ITU	Space Services Department			RFI and debris mitigation
NASA	Safety and Assurance Requirements Division handles space debris (see below)			Debris Mitigation
NASA	NASA-HDBK-8719.14: Handbook for Limiting Orbital Debris	10-Apr-18	Published	Debris Mitigation
NASA	NASA-STD-8719.14, Process for Limiting Orbital Debris	25-Apr-19	Published	Debris Mitigation
NASA	NASA-PPR 8715.6B, NASA Procedural Requirements for Limiting Orbital Debris and Evaluating the Meteoroid and Orbital Debris Environme	16-Feb-17	Published	Debris Mitigation

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		Publication Date / Target		
Developer	Designation / Title of Standard, Specification, Other Publication, or Program	Date	Publication Status	Lifecycle
NFPA	NFPA 461 Standard for Fire Protection of Spaceport Facilities		(New) In Development	
NIST	NIST SP 800-53, Security and Privacy Controls for Federal Information Systems and Organizations (Revision 4)	April 2019	Published	
NOAA Office of Space				
Commerce	Home page			
NOAA Office of Space				
Commerce	Request for Information on Commercial Capabilities in Space Situational Awareness Data and Space Traffic Management Services	4-Apr-19	Published	
NOAA Office of Space	Comments on Request for Information on Commercial Capabilities in Space Situational Awareness Data and Space Traffic Management			
Commerce	<u>Services</u>			
SAE Technical Committee				
AC-9 Aircraft			(Revision) In	
Environmental Systems	AIR1539C - Environmental Control System Contamination	2018	Development	Flightworthiness
SAE Technical Committee				
AC-9 Aircraft			(Revision) In	
Environmental Systems	ARP1270C - Aircraft Cabin Pressurization Criteria	2017	Development	Flightworthiness
SAE Technical Committee				
AE-2 Lightning	ARP5577 - Aircraft Lightning Direct Effects Certification	2008	Published	Risk Management
SAE Technical Committee				
A-10 Aircraft Oxygen	AIR1392A - Oxygen System Maintenance Guide	2018	Published	Human space safety
SAE Technical Committee				
A-10 Aircraft Oxygen	AIR5742A - Packaging and Transportation of Oxygen Equipment	2017	Published	Human space safety
SAE Technical Committee				
A-10 Aircraft Oxygen	AIR6036 - Passenger Hypoxia Protection Utilizing Oxygen Enriched Gas Mixtures	2018	Published	Human space safety
SAE Technical Committee				
A-10 Aircraft Oxygen				
Equipment	AIR825/12A - Oxygen System Integration and Performance Precautions	2018	Published	Human space safety
SAE Technical Committee				
A-10 Aircraft Oxygen				
Equipment	AIR825/13 - Guide for Evaluating Combustion Hazards in Aircraft Oxygen Systems	2018	Published	Human space safety
SAE Technical Committee				
A-10 Aircraft Oxygen				
Equipment	AIR825/2 - Effects of Acute Altitude Exposure in Humans: Requirements for Physiological Protection	2017	Published	Human space safety
SAE Technical Committee				
A-10 Aircraft Oxygen				
Equipment	AIR825/5A - Liquid Oxygen Systems	2018	Published	Human space safety
SAE Technical Committee				
A-10 Aircraft Oxygen				
Equipment	ARP1109B - Dynamic Testing Systems for Oxygen Breathing Equipment	2017	Published	Human space safety

AIA Aerospace Industries Association

AIAA American Institute of Aeronautics and Astronautics

ASE Association of Space Explorers

ASTM ASTM International

BSI British Standards Institution

CalPoly California Polytechnic State University

CCSDS The Consultative Committee for Space Data Systems

CEN European Committee for Standardization
CNSS Committee on National Security Systems

CONFERS The Consortium for Execution of Rendezvous and Servicing Operations

COSPAR International Science Council Committee on Space Research

CSF Commercial Spaceflight Federation
CSpOC Combined Space Operations Center

CSSMA Commercial Smallsat Spectrum Management Association

DIN German Institute for Standardization

DOD U.S. Department of Defense

ECSS European Cooperation for Space Standardization

ESA European Space Agency

FAA Federal Aviation Administration
FCC Federal Communications Commission
IAA International Academy of Astronautics

IAASS International Association for the Advancement of Space Safety

IADC Inter-Agency Space Debris Coordination Committee

IDA Institute for Defense Analysis

IEEE Institute of Electrical and Electronics Engineers
ISO International Organization for Standardization
ITU International Telecommunication Union

NASA National Aeronautics and Space Administration

NIST National Institute of Standards and Technology, U.S. Dept. of Commerce

NFPA National Fire Protection Association

NOAA National Oceanic and Atmospheric Administration, U.S. Dept. of Commerce

SAE SAE International

SANA Space Assigned Numbers Authority

SDA Space Data Association

SFCG Space Frequency Coordination Group

SIA Satellite Industry Association

SSC Space Safety Coalition

UN United Nations

USG United States Government