Change A-added D-deleted M-modified	Domains	Regulatory activity	Content of the Regulation	Regulatory organisation	Target date for regulatory material publication	EASA UAS categories	Status	Standardisation activity	Short description of the deliverable	spo	Target date for publication	Type of document (standard, supporting materia etc.)	Status	Comments
1					рансион			Genera	I			muy		
	Definition and classification							A52000	This data dictionary provides a mathematically coherent set of definition for quantity types used in data models for unanesed systems. In this data dictionary, a quantity is defined as a property of a phenomenon, substance, or body whose value has magnitude.	SAE in AS-4UCS Ulmanned Systems (UcS) Control Segment Architecture	Jun-18	atsendand	ongoing	
	Definition and classification							ASPS128 Unmanned Systems Terminology Based on the ALFUS Framework	This SAE. Amerapain Recommended Practice (ARP) discribes terminology apport to unreasonal systems (LMES) and definitions for those terms. If focuses only on terms used exclusively for the development, leating, and other activities regarding UMSs. Terms that are used in the commantly but can be understood with common clickness yet also the common section of the common clickness of the terminology are being planner. Further efforts expand the accept of the terminology are being planner.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		recommended practice	published	
	Definition and classification							ASeese UAS Propulsion System Terminology		SAE E-39 Unmanned Aircraft Propulsion Committee	May-19	standard	planned	
	Definition and classification							F3341/F3341M-20 Standard Terminology for Unmanned Alexaft Systems	This terminology covers definition of terms and consopts related to commande data this private (LMC). It is infrinced to encourage the considerat use of terminology throughout all ADTM terminology (India to considerate the constant), a 17th terminology creates a sating of term, althorisation consopts, 12 This terminology creates a sating of term, althorisation, scoregres, and symbols related to consequence (India terminology). 2 This terminology creates a sating of term, althorisation consequence of the consequence of consequence of the consequence of the consequence of consequence of the consequence of the consequence of consequence of consequence of consequence of consequence of consequence of consequence of consequence of consequence consequ	ASTM F38 Unmarried It Aircraft Systems	Mar-18	standard	published	
	Definition and classification							ISO 21885 - Requirements for the categorization and classification of civil UAS	Requirements for the categorization and classification of civil UAS. The standard applies to their industrial regulation, development and production, delivery and usage.	ISO TC20/SC16/WG1		standard	published	At DIS stage and publicly available first week of April 2019.
	Definition and classification							ISO 21384-1 - General requirements for UAS for civil and commercial applications, UAS terminology and classification	Provides the foundation and common terms, definitions and reference relevant to the whole Standard, the purpose of which is to provide a safety quality standard for the safe operation of all UAS through the provision of synergistic standards for resnufschuling and operations.	ISO TC20/SC16WG1	May-21	standard	ongoing	At DIS stage and publicly available first week of April 2019.
								ISO 21384-4 - Unmanned aircraft systems Part 4: Terms and definitions	Provides terms and definitions to support ISO/TC 20/SC 16 standards	ISO TC20/SC16WG1		standard	published	
	Definition and classification							ASTM WW62744 General Operations Manual to Profession Operator of Light Unsurrout North Systems (UAS	This shoulded delives he seguinments to Consent Operations Manual for Printensing Operate of Logic Chemiser Agent (20), and the Printensing Operate of Logic Chemiser Agent (20), and consented and explanation of Logic Agent (20), and consented and explanation of Logic Agent (20), and consented and explanation of Logic Agent (20), and consented and consented and a Printensing Agent of Cognitions, consented and Chemiser Agent and Chemiser Agent (20), and of Cognitions, consented the Logic Agent (20), and consented the Chemiser Agent (20), and consented the Logic Agent (20), and consented the Logic Agent (20), and consented the Logic Agent (20), and consented (20), and consented the Logic Agent (20), and consented (20), and consented (20), and consented (20), and consented (20), and consented (20), and consent (20), and consented (20), and consented (20), and consented (20), and consented (20), and consented (20), and consented (20), and consented (20), and consented (20), and consented (20), and consented (20), a	d ASTM F38 Urenarred Aircraft Systems	Mar-19	standard	onging	
	Marsusis							Standard Specification for General maintenance Manual (GMM) for small Unmanned Alcoraft Systems	This specification provides the minimum requirements for a General Maintenance Manual (GMM) for an unmanned alread system (UAS) designed, manufactured, and operated in the small UAS category as defined by a Chil Aviation Authority (CAA).	ASTM F38 Urmanned Aircraft Systems		standard	published	
	Monusaln	EU 2019/945	Face 16(b). On the law placed on the morbal will be assert interest production of the LAN including but not breaked be seen to the law placed on the law p	EASA	Jun-19	орип	Regulation applicable							characteristics of the UA including but not limited to the UA classe; — UA mass (with a description of the reference configuration) and the monotomer takes of mass — general characteristics — general characteristics — general characteristics of mass, characteristics, — optimized and control mass of mass, characteristics, — optimized and software control the UA mentals; and sucception of the behaviour of the UA in case of a loss of the command and control link UA in and comments.
	Manuals	EU 2019/945	direct remote identification add-on shall be placed on the market with a user's manual providing the reference of the transmission protocol used for the direct remote identification emission and the instruction to: (a) install the module on the UA;	EASA	Jun-19	open	Regulation applicable							
	Marsada		The control of the co	EASA	Jun-19	open	Regulation applicable							
	Monunis		Ped 2019, 2019 and 4212 When a service of the serv	e EASA	Jun-19	open	Regulation applicable							Openion 05-2019 Openio

Version: 6.0 Jun-21

Test method - a definitive procedure that produces a test result.

Guide - information or series of options that does not recommend a specific course of action.

Practice - a definitive set of instructions for performing one or more specific operations that does not produce a test result.

Classification - a systematic arrangement or division of materials, products, systems, or services into groups based on similar characteristics such as origin, composition, properties, or use.

Terminology - a document comprising definitions of terms; explanations of symbols, abbreviations, or acronyms.

requirements of a complete end-to-end system, which may include airborne, on-ground and space segments. It should provide a high-level architecture describing the individual components, and should allocate between those components the performance, safety and interoperability requirements.

Operational Services and Environment Definition (OSED) - a document declosated to the operational concept description: it provides the definition of the considered services and of the environment, in which they have to be provided. It is usually published as an annex to the SPR - annex to the SPR

Safety and Performance Requirements Standard (SPR) - a standalone document dedicated to operational safety and performance issues: it provides an allocation of the requirements between the segments for the different approval types.

Interoperability requirements standard (INTEROP) - a standalone document dedicated to interoperability issues between the different segments: for each of them, it identifies the technical interface and related functional requirements

Process Standard - specifies generic methods, which are not specific to individual components, e.g. software or hardware development, environmental testing

Minimum Operational Performance Standard (MOPS) - specifies the performance of a component (piece of equipment, protocols, exchange formats, ...), which is the minimumneous sary performance to satisfy a regulatory requirement. In particular, it specifies the tests to be made to ensure that the specified performance is achieved.

Technical Standard - specifies performance of a component, which reflects the best industrial practice.

Guidance Document - supplements the information contained in the types of documents described above. Usually illustrative information to another EUROCAE document.

Internal Report - represents the opinion of a WG on a certain technical topic. It is identified with a WG reference number and date only.

	1								1					
	Manuals	Opinion 05-2019	Part 16(7) UAS class CS shall in addition to the information indicated in point (15(8) of Part 4, include in the user's manual a description of the means to terminate the flight	EASA	Jun-20	Specific	Opinion published							
	Marunis	Opinion 05-2019	Part 17(8) UAS class CS shall in addition in the information indicated in part (17(9)) of Part 4, exclude in the same in manual. The part (17(9)) of Part 4, exclude in the same in manual. (1) is a description of the function that limits the account of the function that limits the account of the function that limits the account of the function areas or volumes, and (1) the distinction most liably to be invariated by the date of the same in the same in the same in the date in the date of the dat	EASA	Jun-20	Specific	Opinion published							
	Marunis	Opinion 65-2019	Part 16 UAS class C6 accessories kit shall be accompanied by a sear's example providing: (a) he let of all cancer C1445 to which the kit can be applied (b) instant of all cancers on how to install and operate the accessory let instance con how to install and operate the accessory let	EASA L	Jun-20	Specific	Opinion published							
	Definition and classification	EU 2019/945	Part 2(11), 2(13), 4(8) and 6(2) UAS in class C1, C2, C3 and the direct remote identification add-on-shall have a unique physical serial number compilars with standard AMCLITA-2005 Small Uhmanned Aerial Systems Serial Numbers;	EASA	Jun-19	open	Regulation applicable							Opinion 05-2019: have a unique serial numb of the UA compilant with standard ANSICTA-2063- Small Unmanned Aerial Systems Serial Numbers
	Definition and classification							ANSUCTA - 2003 Small Unmanned Astal Systems Seris Numbers	This standard outlines the elements and characteristics of a serial number to be used by small unmanned serial systems.	CTA RS Portable Handled and in- Vehicle Electronics Committee WG 23 Unmanned Aerial Systems		standard	published	
	Definition and classification	EASA Decision 2019/02 NR	CSS#23 Environmental conditions for sale operations defined, measurable and adhered to <u>Criterion #1 Deliantes</u> 1	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision 2019/02 NR	OSO#1 Ensure the operator is competent and/or proven	EASA	Oct-19	Specific	published							
	manufacturer organization	EASA Decision 2019/021/R	OSOW2 UAS ensentractured by competent and/or preven entry	EASA	Oct-19	Specific	published							
	Maintenance organisation	EASA Decision 2019/02 NR	CSOW3 UAS maintained by competent and/or proven enthy (e.g. industry standards). <u>Erborion #1 Procedural</u>	EASA	Oct-19	Specific	published							
	Maintenance organisation	EASA Decision 2019/02/NR	OSDWI UAS maletained by competent and/or preven entity (e.g. industry standards). <u>Criterion #2 Training</u>)	EASA	Oct-19	Specific	published							
	service provider	EASA Decision	QSD #12 - External services supporting UAS operations are adequate to the operation	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	OSO 807 - Inspection of the UAS (product inspection) to ensure consistency to the ConOps	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	OSC 805 - Operational procedures are defined, validated and athered to (to address technical issues with the UAS): Orient 1, 2,3	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	OSO #11 - Procedures are in-place to handle the deterioratio of esternal systems supporting UAS operation: Criteria 1, 2,3	D EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	OSO #14 - Operational procedures are defined, validated and achered to (to address Human Errors): Criteria 1, 2,3	EASA	Oct-19	Specific	published							
	Operator organizations	DASA Decision	OSO 821 - Operational procedures are defined, validated and adhered to (to address Adverse Operating Conditions): Criteria 1, 2,3	EASA	Oct-19	Specific	published							
	Operator organisations	BASA Decision	050#19 Sale recovery from Human Error (<u>Criterion #1</u> Procedures and checklists)	EASA	Oct-19	Specific	published							
	Operator organizations	DASA Decision	050#16 Nuki crew coordination. <u>Eriterion #1 Procedures</u>)	EASA	Oct-19	Specific	published							
	Operator organisations	BASA Decision	050922 Environmental conditions for rafe operations defined, measurable and adhered to (Cristian #1 Procedures)	EASA	Oct-19	Specific	published							
	Operator organizations	EASA Decision	M#1 An Emergency Response Plan (ERP) is in place, operator validated and effective (Criterion #1 Operational)	EASA	Oct-19	Specific	published							
								ISOWD 24356	General requirements for tethered unmanned aircraft system	ISO TC20 SC16	May-21	standard	ongoing	
2							UAS	Traffic Ma	nagement					

EUROCONTROL Specifications - Define technical and/or operational procedures that advance ATM

Guidelines - Provide more general implementation support to stakeholders.

NOTE: Standards are developed and maintained as both harmonising standards and as means of compliance. Standards are used as reference material by ICAO and EASA, and continue to provide the basis of Community Specifications for the extant EU ESS regulations in accordance with regulation EC SS2040 (Interopratible) Regulation.

International Bandard -provides rules, guidelines or characteristics for activities or for their results, armed at activiting the optimen degree of order in a given context. It can take many forms, Apart from product standards, other examples include: text nations, collect of princise, profession standards are demangement vigories standards.

Technical Specification - addresses work will under technical development, or when it is believed that there will be a future, but not immediate, possibility of agreement on an international Stander. A Technical Specification is platished for misetals use, but it also provides a means to obtain feedback. The aim is that it will eventually be transformed and republished as an international Stander.

Technical Report - contains information of a different kind from that of the previous two publications. It may include data obtained from a survey, for example, or from an informative report, or information of the perceived " state of the art ".

ublicly Available Specification is published to respond to an urgent market meet, representing either the consensus of the special within a working group, or a consensus in an origination auternal to 150, at with Technical Specifications, Publicly available Specifications are published for immediate use and also serve as a means to obtain feedback for an eventual anterioration rise in International Standard - Publicky Available Specifications have a maximum file of all years, after which they are a maximum file of the public of the public

International Workshop Agreement: is a document developed outside the normal ISO committee system to enable market players to negotiate in an "open enotating" environment. International Workshop Agreements are typically administratively apported by a member body. The published agreement includes an indication of the participating organizations involved in to development. An International Workshop Agreement has an amaziman Beginn of six years, after which it can be either treatment and the control EO deliverable or a committed by without an activities of the properties of the proper

Quides - help readers understand more about the main areas where standards add value. Some Quides talk about how, and why, ISO standards can make it work better, safer, and more efficiently.

Saciates - these Technical Reports are a documentation of broadly accepted single-processor operationals for a material, product, process, procedure of text method.

SAE

Recommended Practices these Technical Reports are documentations of practice, procedures and technology that are intended as guides to standard engineering practice. Their content may be of a more general nature, or they may propound data that have not yet gained broad acceptance.

Information Reports -these Technical Reports are compilations of engineering reference data or educational material useful to the technical community.

Aerospace Material Specifications - these Technical Reports Identify material and process specifications conforming to sound, established engineering and metallungical practices in sercopace sciences and practices.

		UAS in class C1, C2, C3, if equipped with a network remote											
U-space	Opinion 65-2019	And control was the control of the c	EASA	Jun-20	Open calegory and Specific	Opinion published							
							UAS Traffic Management (UTM) - Part 1: General requirements for UTM - Survey results on UTM	This project inlends to start is survey on UTMs in each country, which is especial to invest hundreds of commercial applications already in pla- as well as acciuil systems as their background conditions. Based on those sesults, we set imaying benefits and upper for possible future standardization lopics in consultation with authorities such as ICAC.	ISO/TC 20/SC 15/WG 4	Sep-22	Technical Report	published	
							ISO 23629-7 - UAS Traffic Management (UTM) - Part 7: UTM data and information transfer at interface of traffic management integration system and UAS service suppliers - Oats model related to apartial data for UAS and UTM	This standard specifies the data model that is misted to versious spatial enformation for common use between the operator for down light jurioring (IML Universite Alexed Therefore (IML Universite Alexed Therefore) and the system for operationaries (UTAL UAS Traffic Management).	ISO/TC 20/SC 16/WG 4	Jan-22	Standard	ongoing	Will be published before 2022; currently showing limi date
Electronic Identification							MOPS for UAS e- identification	"Minimum Operational Performance Standard for UAS e-identification" defining minimum requirements for the e-identification function at the level of individual components.	EUROCAE WG-105	Dec-19	standard	planned	
U -ерхов							WW63416 Standard for UAS Traffic Management (UTM) Service for Mand Use Airspace Technical Interoperability AProlocols	and an distribution components of the control of th	ASTM F38 Urmanned Aircraft Systems	тво	standard	ongoing	Draftiong of standard has begun.
U-space							F3411-19 Standard Specification for Remote ID and Tracking	Technical Interoperability &Protocols	ASTM F38 Unmanned Aircraft Systems		standard	published	
U-space							AIRCIBS Remote Identification and International Of Unsurrous Aurisi Systems	The observation presented in this AM is intended by provide information about current immediate for methods or profession and superioration methods and proclaration consideration for methods updated consideration for memory designations, for a memory designations, for a memory designations, for a memory designation and proclarations of proclarations and professions and proclarations and proclarations and proclarations and proclarations and proclarations and proclarations and memory and memory designation and memory designations and proclarations and memory and memory designation instruments, and a foreign instruments and memory instruments. Am A toloration completely in the uniform instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments and memory instruments. Am A toloration completely instruments and memory instruments and memory instruments and memory instruments. A toloration completely instruments and memory instruments and memory instruments and memory instruments. A toloration completely instruments and memory instruments and memory instruments and memory instruments. A toloration completely instruments and	ASAE AS-BUCS Ulmanned Systems (UsS) Control Segment Architecture	Dec-18	information report	angoing	
U-space								Defines a message structure allowing transmitting the identification of UAS as well as its the alread's current position. This data is required to order to establish the basic principles of UTM QAS Traffic Management which shall enable the safe integration of UAS into non-segregated airspace.	(EUROCONTROL	Apr-18	standard	published	Orange 052019 IMS in
Local E-Identification	EU 2019/45	Part 11-13, 16/14 and 40°. The control of the cont	, , , , , , , , , , , , , , , , , , ,	Jun-19	open callegory and specific	Regulation applicable							Opionio (15-2010 LUC) in the way of the common of the comm
Local E-dentification	EU 2019/945	Part 5(1, 2 and 6) A direct standard selection and on what comply with the A direct standard selection for the other selection contribution of the selection of the contribution of the co	; I) II EASA	Jun-19	open callegory and apsorbs	Regulation applicable							Common Control As Assists and Control Assists
Marking and Registration	EU 2019/947	Art 14(8) The UAG operators shall display their registention number on every sensored aircraft meeting the conditions described in paragraph 5	EASA	Jun-19	Open calegory and Specific	Regulation applicable from 1 July 2020							
Marking and Registration							ASTM F2851-18 Standard Practice for UAS Registration and Marking (Excluding Small Unmanned Alexalt Systems)	This practice follows ICAO Annes 7 SARPS except in areas where the funding a sepects of UKS may not allow compliance. In these cases, this document will address the issue and recommend the need for an alternatic compliance method.	ASTM F38 Unmarried Aircraft Systems		standard	published	Renewed 2018

	Сво-вишченава	EU 2019/945	Pack 37(5), 57(5), and 47(5). While the last Col. Col. Col. Col. Col. Col. Col. Col.	EASA	Jun-19	Open calegory and Specific	Regulation applicable							equinos 20:2015 Ele visigio del composito de
	Definition of zones	EU 2019/947	Andreit E. Goodward and officiary the USE geographical amone Conference and officiary the USE geographical amone Conference and Conference	EASA	Jun-19	Open calegory and Specific	Regulation applicable from 1 July 2020							
	U-space							MOPS for UAS Geo- Fencing	ED-209 "Minimum Operational Performance Standard for UAS geo- fencing" defining minimum requirements for the geo-fencing function at the level of individual components.	EUROCAE WG-105		standard	published	
	U-Space							MOPS for UAS geo- caging	ED-270 "Minimum Operational Performance Standard for UAS geo- caging" defining minimum requirements for the geo-caging function at	EUROCAE WG-105		standard	published	
	U -прасе							prEN4709-3 Aerospace series - Umranned Aircraft Systems (U/S) - Security File qui sensoria	No secular de Medical attemporaries. The European marked de grande marces of complance to cover get than specifically, the standard off profession and secular than specifically, the standard off profession speciments nation to be the controlled of the speciments of the standard off profession of the standard off profession of the standard off	ASD-STAN DSWG8	5sp-21	preEN / European standard	ongoing	
								WXX9890 Surveillance UTM Supplemental Data Service Provider (SDSP) Performance	55.33. The objective is to define minimum performance standards for Sorvalinación Supplemental Clast Servicia Providera (CISSP) ejupinació Sorvalinación Supplemental Clast Servicia Providera (CISSP) ejupinació Traffe Management (UTM) ecomplem. Providera (CISSP) ejupinación provide alercitá tack information to Delect and Anoid (CIAA) systema posense lest INCSD USA operations. Sorvalinación servicion any significant control del CISSP (CISSP) establisha such as constele-UAC. This attacked vidi support control USA compatibles such as constele-UAC. This attacked vidi support control USA. Sorvalinación popular del minima septima (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as constele-UAC. This attacked vidi support control (CISSP). Sorvalinación such as control (CISSP). Sorvalinación such control (CISSP). So	ASTM F38		Standard	ongoing	Internal review prior to ballot
								ISO/WD 23629-8	UTM — Part S: Remote identification	ISO TC20 SC16	Nov-21 May-21	Standard Standard	ongoing	
								ISO/CD 23629-7 ISO/23629-12	UTM - Part 7: Data model for spatial data	ISO TC20 SC17	Jan-22 Nov-22	Standard Standard	ongoing	
								ISO(23629-12	UTM — Part 12: Requirements for UTM services and service providers	ISO TC20 SC18	Nov-22	Standard	ongoing	
3						Con	nmand,	Control and	Communication					
	C3 datalink and communication C3 datalink and communication							MOPS (SATCOM) ASTM F3002-14a Standard Specification for Design of the Command and Cockol System for Small Unmanned Alricraft Systems (sUAS)	Molinian Operational Performance Standard for the saleditis Communication Control Clinia Link. This aspectification is provided as a consernus standard in support of an application to a ration's governing eviation substituty (CAA) for a permit application to a ration's governing eviation substituty (CAA) for a permit application and provided operations. This standard coffices he general, specificant and do a requirements for CAA.	EUROCAE WG-105 ASTM F38 Unmanned Aircraft Systems	Dec-20	standard standard	ongoing published	Comment reachtion Under revision
	C3 datalink and communication C3 datalink and communication							ARES14 UxS Contro Segment (UCS) Architecture: Interface Control Document (ICD) ARES14A UxS Control Segment	This interface control document (ICD) specifies all software services in the Unexansed Systems (U.S.) Control Segment Architecture, including interfaces, messages, and data model. This interface control document (ICD) specifies all software services in	SAE AS-4UCS Unmanead Systems (UrS) Control Segment Architecture SAE AS-4UCS Unmanead Systems (UrS) Control Segment	Nov-18	information report	published	
	C3 datalink and							(UCS) Architecture: Interface Control Document (ICD) ASES22A Unmanned Systems (UsS) Control Segment (UCS) Architecture: Architecture Technical Governance	This interface control document (ECD) prooffice all influences services in the University of Special (Section Conference), and the University of Special (Section Conference), and date models. The Influence of Section Conference of Section 2 and of public processes. The Influence of Section 2 is not officed as a set of public processes. The Influence of Section 2 is not officed of Section 2 in the Influence of Section 2 is not officed of Section 2 in the Influence 2 in the Influence of Section 2 in the Influence	SAE AS-4UCS Unmanned a Sortema (UrS)	Nov-18	information report	angoing	
	C3 datalink and communication							ACRESTS Unmanced Systems (US) Control Segment (UCS) Architecture: EA Version of UCS ICD Model	This bear Could described the content of the Enterprise Architect EAS of the Could described the content of the Enterprise Architect EAS of Architect of the EA visition of the CA visit	Control Segment Architecture SAE AS-4UCS Systems (IuS) Control Segment Architecture		information report	published	
	C3 datalink and communication							AIRES16 Unmanned Systems (UIS) Costrol Segment (UIS) Architecture: RSA Version of UIS ICD Model	This User Casial Assembles the current of the Relative Schwere Assemble May a second for May Confident and Main and the second to the Second Assemble May Confident and Main and the Second May Confident and Main Assemble May Confident Assemble May Confi	SAE SAE AS-BUCS Unmanned Systems (UKS) Control Segment Architecture		Information Report	published	
									checked with version 6.1.1, "supersions with the Unified Modeling Language (MM_2)" an understanding of the UCS Architectural Model as originally created in the EA model ASSES MODEL. This User Golds describes the content of the Phapsody version of the UCS Architectural Model and how to use this model within the Phapsod modeling bod environment. The purpose of the Rhapsody version of the UCS Architectural Interface Control Decument (CCI) model is to provide UCS Architectural Interface Control Decument (CCI) model is to provide the Control of the Con					

G33	3 datalink and eneronication			ARES19 Und Control Segment (UCS) Architecture: UCTRAGE	The late Community (CTPACCE) in the glastical and ARST of the Arganization of Carlos and Carlos (CT), and indicated Carlos disagraphical (CTPACCE) in the community in the SAE publication of the Output and CTPACCE (CTPACCE) in the Carlos (CTPACCE)	20-Dec-16		information report	published	
C3	3 datalink and execusication			ARESCO Unmanned Systems (USS) Control Segment (UCS) Architecture: Version Description Document	Coverance of the Unmanded Aircrit System (UAS) Coded Segment (UCS) Architectus was transferred from the United States Office of the Consequency, a submit of the UCS Architecture Library States (AAS) That the confidence of the Consequency, a submit of the UCS Architecture Library States (LAS) Corona Segment (UCS) Architecture ADS12. The Version Consequence (UCS) Architecture ADS12. The Version Consequence and officers can be able to the Consequence and officers can be able to the UCS Aircritical States (UCS) Architecture States (UCS)	SAE AS-4UCIS Uhmanned Systems (UcS) Control Segment Architecture		Information Report	published	
C3	3 datalink and mmunication			ARES21 Unmanned Systems (UrS) Control Segment (UCS) Architecture: Data Distribution Service (DDS)	This patient is qualific table for Control Document (CD) provious an example in suppose in the Opice Management (Concept (CMICE)) and Control	SAE AS-4UCS Unmanned Systems (UKS) Control Segment Architecture		information report	published	
C3	3 datalink and menunication			ASSS12 Unmanued Systems (UsS) Control Segment (USS) Architecture: Architecture Description	This document is the Archhecture Description (AD) for the SAE Unmanned Systems (JUS) Corted Segment (JUS) Cortilecture. The second as the Coffice designation of the U.S. Archhecture. SAE Cortilecture. SAE CORTI	SAE AS-BUCS Unmanned Systems (UxS) Control Segment Architecture		standard	published	
C3	3 datalink and mmunication			ASSS13 Unmarried Systems (UsS) Costed Segment (USS) Architecture: Conformaco Specification	This document is the subtraction searchealten within the SAL Unmoned Systems (IJSE) Control Segment (IJCE) Architecture for enablishing conformance requirements for IJCE) Architecture for products shadowed by this specification are UCS software component execution, and UCS systems that employ one or more UCS services, control and UCS product is seption for owns UCS services, control and UCS product shadowed by assessing the control and UCS product shadowed the SAUCS Architecture. The UCS product description insulates that artifaces.	SAE AS-40CS Unmanned Systems (UxS) Control Segment Architecture		standard	published	
C3	3 datalisk and enerazication			ASSS18 Unmonted Systems (UAS) of (UAS) Architecture (UAS) Architecture (UAS) Architecture (UAS) Architecture	This land Link Guids wapps the content of the ASSIST LCS Antidental band downless in death of ASSIST LCS Antidental band downless in death of ASSIST LCS Antidental band and the Assist and the Assist and population with a proposed to all authorists and in other socials and population with a proposed to all authorists and in other social and population with a proposed to a propos	SAE AS-RUCS Unrearned Systems (UKS) Control Segment Architecture		standard	published	
C3	3 datalink and ensuratudion			ASSECT University of Systems (UHS) Clerk's Engrees Architecture Architecture Technical Governance	The control of the co	SAE AS-BUCS Systems (IMS) Confederation Architecture		altendand	published	
No	avigation			WK58931 Evaluating AertalResponse RobotManeuvering: Maintain Position and Orientation	A suite of standard test methods has been developed to measure manuserability, endurance communications, durability, logistics, automy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
Na	avigation			WK58932 Evaluating AsstalResponse RobotManeuvering Orbit a Point	A suite of standard test methods has been developed to measure manuserability, endurance,communications, durability, logistics,automyr, and safely to guide purchasing decisions,support operator training and measure proficiency.	ASTM ES4 Horneland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
No	avigation			WK58933 Evaluating AsrialResponse RobotManeuvering: Avoid Static Obstacles	A suite of standard test methods has been developed to measure manuserability, endurance communications, durability, logistics, automy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM ES4 Homeland Security Applications	Jun-18	atandard	ongoing	
No	avigation			WK58934 Evaluating AsstalResponse RobotManeuvering: Pass Through Openings	A sube of standard test methods has been developed to measure ensurementality, endurance, communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
Na	avigation			WK58935 Evaluating Aeria/Response Robe/Maneuvering Land Accurately (Vertical)	A sule of standards test methods has been developed to measure manuverability, endurance communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM ES4 Homeland Security Applications	Apr-18	atandard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
63	3 datalink and mesunication			WK58942 Evaluating AstialResponse RobolRadio Communication Range: Line of Sight	A suite of standards test methods has been developed to measure manuscrability, endurance communications, durability, logistics, subconomy, and safety to gaide purchasing decisions, support operator framing and measure proficiency.	ASTM ES4 Homeland Security Applications	Apr-18	atandard	ongoing	Publication Delayed -Full Committee Meting Feb 25- Mar 2 2018 for adudication of comments
C3	3 datalink and mmunication			Range : Line of Sight WKS8941 Evaluating AsrtaResponse RoboRadio Communications Range: Non Line of Sight	A suite of standards test methods has been developed to measure manuserability, endurance,communications, durability, logistics,automyr, and safely to guide purchasing decisions, support operator training and measure proficiency.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 26- Mar 2 2018 for adudication of comments
C3	3 datalink and mmunication			STANAG 4650 - Interoperable Command and Control Datalink for Unmanned Systems	Common standard Line-CR-Sight command and control data link for the safe and reliable operation of unmanned systems within a joint, coalitic and controlled aimpace operating environment.	NATO NNAGUCGLAS		standard	published	
Nen	avigation			SAISBSS Improving Navigation Solutions Using Raw Measurements from Gobal Navigation Satellite System (GNSS) Receivers	This recommended practice provides users with the technical requirements and methods for accessing, viewing, and processing true CMSES receiver measurements for Improved unmanned vehicle navigal solutions.	SMCPNT Position, Navigation, and Timing Committee	Mar-19	standard	ongoing	
No	avigation			SADSST Requirements for a Terrestrial Based Position, Navigation, and Timing (PNT) System to Improve Navigation Soutions and Ensure Critical Infrastructure Security	This recommended practice defines the technical regularized for a terrestrict dead DNT system to bropove within it as uncommond, sets produced the produced dead of the set of the set of the produced dead of the set of the order of the set of the set of the set of the set of set of the set of set	SMCPNT Position, Navigation, and Timing Committee	Mar-19	standard	ongoing	

	C3 datalink and communication							MASPS on C3 Spectrum Management for the 5030/5091 MHz bare	Minimun Aviation Systems Performance Standard defining requirement for the management of the 5030/5091 MHz band fir use by C2 Link Services	EUROCAE WG-105	Dec-20	standard	ongoing	
	C3 datalink and communication							Guidance on Spectrum Arress		EUROCAE WG-105	Mar-19	guidance	publised	
	communication							Use and Managemen	IIAS purposes	WG-105	889-19	gudance	publised	ориотозиота . иняка
	Cyber security	EU 2019/945	Part 3(8) and 4(12) UAS in class C2 and C3 shall be equipped with a data link protected against unauthorised access to the command and control functions;	EASA	Jun-19	open	Regulation applicable							tethered, be equipped with a command and control link protected against unauthorised access to the
	Cyber security							MASPS on RPAS CI	Minimun Aviation Systems Performance Standard defining system leve requirements for the application of Security measures to the UAS C3 Link	EUROCAE WG-105	Jun-19	standard	on hold	
	C3 datalink and communication							Guidance on RPAS C3 security	Guidance material for the application of the MASPS lated above	EUROCAE WG-105	Dec-19	guidance	on hold	
	C3 datalink and communication	EASA Decision	050#6 Cl link performance is appropriate for the operation	EASA	Oct-19	Specific	published							
	C3 datalink and communication	EASA Decision	050#16 Nuki crew coordination. <u>Criterion #3.</u> Communication devices)	EASA	Oct-19	Specific	published							
								MOPS	Minimum Operational Performance Specification for UAS Communications by 4GLTE	EUROCAE WG-105	Jun-22	standard	ongoing	
4					l .			etect and	Avoid					
	Detect and avoid				l .	<u> </u>		MASPS	Minimum Aviation System Performance Standard for DAA [Traffic] in class A-C singaces under IFR	EUROCAE WG-105	Jun-20	standard	ongoing	
									dass AC singaces under IFR	WG-105			-4-4	
	Detect and avoid							OSED	Operational Services and Environment Description for DAA for DAA in Class D-G airspaces under VFR/IFR	EUROCAE WG-105	Jan-19	standard	published	
	Detect and avoid							MASPS	Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for DAA against coefficing traffic for RPAS operating under ER and VER in all airspace classes	EUROGAE WG-105	Dec-21	standard	ongoing	
	Detect and avoid							MOPS	RPAS operating under FR and VFR in all aimpace classes Minimum Operational Performance Standard (Requirements at equipment level) for DAA against conflicting traffic for RPAS operating under FFR and VFR in all aimpace classes	WG-105 EUROGAE WG-105	Jun-23	standard	planned	
								1000				name.	parec	
	Detect and avoid							0600	ED-267 Operations/Services and Environmental Description for DAA in very Low Level Operations	EUROCAE WG-105	Jun-20	standard	published	
	Detect and avoid							MOPS	Minimum Operational Performance Standard (Requirements at equipment level) for DAA at Very Low Level (VLL)	EUROCAE WG-105	Dec-23	standard	planned	
	Detect and avoid							STANREC 4011 Ed. 1/AEP- 101 Ed. A Ver.1 "UAS sense and avoid"	To detail comprehensive guidance and recommended practice for the	NATO	Feb-18		published	
	svetect and avoid							Ver.1 "UAS sense and avoid"	To detail comprehensive guidance and recommended practice for the development of Sense and Audid systems, referencing and providing guidance regarding application of existing standards and best practice.	NATO FINAS	Feb-18	guide	published	
	Detect and avoid							F3442-20 Specification for Detect and Avoid	Defines minimum performance standards Comprehensive DAA Standard under annex to define test methods AND minimum performance standards for DAA systems and sensors applicable to smaller UAS BLVDS operations for the protection of manned altraffit in lower stifful entraptice.	ASTM F38 Unmanned Aircraft Systems		standard	published	Publication expected
								Requirements		Aircraft Systems				
	Detect and avoid							WKS2559 Test Method for DAA	Covering systems and sensors Covering systems and sensors Standard under annex to define test methods AND minimum performance standards for DAA systems and sensors applicable to smaller UAS BLVDS operations for the protection of standard alreads in lower attlibute simpson.	ASTM F38 Unmanned Aircraft Systems	Jun-19	standard	ongoing	Working Group formed under terms of reference. Number changed to WWE2669 instead of WWE2568
									applicable to smaller UAS BLVOS operations for the protection of tranned aircraft in lower altitude airspace.	Aircraft Systems				of wes2668
5							R	PAS Autor	nation					
								ASTM F3269	The absolute continue delivery devices and lead hard considery that if					
	Development assurance (Software							Methods to Safely Bound Flight Behavior of Unmanned Aircraft	This standard practice defines design and feet best practices that if followed, would provide guidence to an splicent for providing sidence to be subjected to providing sidence to be the clied stated authority (CAA) that the flight behavior of an unmanned aircraft system (UAA) containing complex function(s) is constrained frompie, a nur-line searance (RTA) architecture to mainta an acceptable level of flight safety.	ASTM F38 Unmanned Aircraft Systems		standard	published	FAA Notice Of Availability (NOA) Pending approval of ASTM WKS7659 as foundational document
								Systems Containing Complex Functions						foundational document
									Such as the country to A marked all a law of a speaking that of all marked as a marked as a final part of the part of the country of the coun					
								ASTM VINCESCSS revision to ASTM F3269 Standard Practice for Methods to Safely Bound Flight Behavior of Unsanned Aincraft Systems Containing Complex Functions	that monitors developed to this standard are surricent to allow the UAC evolve the complex function with its associated avionics equipment as sensors without requiring vehicle recertification as the CONOPS evolve after initial certification. a Provide additional quidance on Safety Monits	10				
	Automatic modes, takeoff, Landing, taking							Standard Practice for Methods to Safely Bound Flight	design best practices, to explicitly include guidance on partitioning, dissimilarity, and the option for multiple individual safety monitors comprising the Safety Monitor function, as well as defining safety	ASTM F38 Unmanned Aircraft Systems	Spetember 2019	standard	angoing	Draft Under Develment
								Unmanned Aircraft Systems Containing Complex Functions	monitor classes and key attributes. b. Provide additional use cases as Appendices. c. Provide additional information contrasting the F3259 approach with other architectumi approaches (e.g., SAE ARP 4754A, BTCA DCL478C), d. Modify requirements to sentermanna hassed in allo					
									multiple implementation and implementation architectures e. Make additional updates as required.					
	Automatic modes, takeoff, Landing, taxing							ED-252 OSED	Operational Services and Enfronment Description for Automatic Take- and Landing.	WG-105		standard	published	
	Automatic modes, takeoff, Landing, taking							MASPS	ED-203 Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for Automatic Take-Off and Landing	EUROCAE WG-105	Jun-20	standard	published	
	taxing Automatic modes, takeoff, Landing, taxing Automatic modes.							ED-251 OSED	Operational Services and Enfronment Description for Automatic Taxing	EUROCAE WG-105		standard	published	
	Automatic modes, takeoff, Landing, taking		Parts 2(7), 3(7) and 4(5)					MASPS	Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for Automatic Taxing	EUROCAE WG-105	Jun-20	standard	ongoing	Opinion 05-2019: in case of
	Emergency		Parts 2(7), 3(7) and 4(5) A UAS Class C1, C2 and G3 in case of a loss of data link, have a reliable and predictable method for the UA to recover the data link or terminate the tight in a way that reduces the effect on third parties in the all or on the ground.											Opinion 05-2019: in case of a loss of the command and control link, have a reliable and predictable method for
	Emergency recoveryfermination systems	EU 2019/945	or on the ground	EASA	Jun-19	open category and specific	Regulation applicable							a loss of the command and control link, have a reliable and predictable method for the UA to recover the command and control link or terminate the flight in a way that reduces the effect on third parties in the air or on
	Emersony													third parties in the air or on the ground;
	Ernergency recovery/termination systems							ED-253 OSED	Operational Services and Enfronment Description for Automation and Emergency Recovery	EUROCAE WG-105	Dec-18	standard	published	
	Emergency recovery/termination systems							MASPS	ED-201 Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for automation and Emergency Recover	EUROCAE y WG-105	Jun-20	standard	published	
6							Desi	ign & Airwe	orthiness					
								ASTM ENIST	This specification provides a process by which the					This will be reference in AC
	Development assurance (Software							Standard Specification for Verification of Avionics Systems 1	section systems may be verified by system-level testing. Software and hardware development assurance are not in the scope of this specification and this specification should	ASTM F39 Aircraft Systems		standard	published	This will be reference in AC for Special Class §21.17(b) To be uses where appropriate in lieu of DO 178. NEW DELIVERABLE
									tot be used if a development assurance process is required. This document defines a set of standard application layer interfaces called JAUS Mobilty Services, JAVS Services namids the					NEW CHLEVERABLE
	UA Design and Ainvorthiness							ASSOCIA JAUS Mobility Service Set	software entities in an unmanned system or system of unmanned systems to communicate and coordinate their activities. The Mobility Services represent the vehicle platform-independent capabilities	SAE AS-41AUS Joint Architecture for Unmanned Systems Committee		standard	published	
									commonly found across all domains and types of unmanned systems (referred to as UKVs). At present, over 15 services are defined in this document many of which were updated in this revision to support (Interespend Undergraphy Vehicles (FVP)).	Systems Committee				
									The SAE Aerospace Information Report AIRS315 - Generic Open Architecture (GOA) defines "a framework to identify interface classes to	SAF				
	UA Design and Ainvorthiness							ASSERIB JAUS Service Interface Definition Languages	applying open systems to the design of a specific hardware/software system." [see] JAUS Service (Interface) Definition Language defines an XML schema for the interface definition of services at the Class 4L, or Application I wave and Class 3L.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	
									Seneric Open Architecture stack (see Figure 1). The specification of JAUS services shall be defined according to the JAUS Service (Interface) Definition Language document.	Systems Committee				
									This document defines a set of standard application layer interfaces called JAUS Mission Specifing Services. JAUS Services provide the					
	L.,							A56062 J4115	our content an treat in an untrastrated system or system of unmanned systems to communicate and coordinate their activities. The Massion Spooling Services represent the platform-independent casebilities commonly found across all developments and farms.	SAE AS-41AUS Joine				
	UA Design and Ainvorthiness							ASEOS2 JAUS Mission Speeling Service Set	systems. At present, 1 service is defined in this document (more services are planned for future versions of this document) • Maxion Spooler. Stores mission plans, coordinates mission plans, and parcels.	SAE AS-41AUS Joint Architecture for Unmanned Systems Committee		standard	published	
									our elements or Milmitation plan for execution The Mission Spooler service is described by a JAUS Service Definition (JSD) which specifie the message set and protocol required for compliance. The JSD is fully compliant with the JAUS Service Interface Definition.					
		1	I .	1			L		way was the 1400 period interface Definition Larguage (JSIDL)					

UA Design and Answerbitness				ASSOCO JAUS Environment Sensing Service Set	The discuss of allows in our of materials of application by the collection of all MLD Environment of the discussion of a section of the discussion of the di	SAE AS-JAMS Joint Architecture for Urmanned Systems Committee		standard	published	
PRANE				ASEONO JAUS HIM Service Set	This document defines a set of standed application layer stefances caused AUX7 Beller course. AUX5 Services grained the memory to enabless a residue in an unreassed appliant or system of unstanded aux5 miles and aux5	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	
IJA Design and Afracothiseas				ASSTYGA JAUS Core Service Set	The document of delivers and of student of special to the section for the control of the control	AS-42AUS Joint AS-42AUS Joint Architecture for Christians Committee Systems Committee		standard	published	
UA Design and Ainsorthiness				ARPEO12A JAUS Compliance and Interoperability Policy	This document, the JAUS Compilance and intersperability Policy (APP0012), recommends an approach to documenting the compiles interface of or uncernanced system or component in segan for the application of the standard set. While non-SAE AS-4 JAUS documents are referenced in this APD they are not within scope of this document and sold be viewed as extension only.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		recommended practice	published	
UA Design and Ainvorthiness				AIRS645A JAUS Transport Considerations	This SAE Aeropace information Report (AIR) discusses characteristic of data communications for the Joint Architecture for Unmanned Systems (AIRS). This document provides guidance on the aspects of transport media, unmanned systems and the characteristics of ANJS fault that are relevant to the definition of a JAUS transport specification.	SAE AS-41AUS Joint Architecture for Unmanned Systems Committee		information report	published	
IJA Design and Almorthiness				ASSESSIA JAUSISSEP Transport Specification	This SLE Ameriques Standard (AS) specifies a data communications type for the transport changing defined by a lair Architectural type for the transport change of the specified of the specified of the Architectural Architectural Communications Leaves complete efficies for all apported byle-liped protects and results. Afficiently Alfacot (ASIC) to the SDD leaves to the communications belowed complete efficies for all apported below-protects and media. Afficiently size for the second communication of media. Afficiently size for second communication and communications are second communications and second communications are second communications and second communications are second communications and second communications are second communications. According on the second communications are second communications and second communications are second communications and second communications are second communications and second communications are second communications asserted as a submitted as an accordance and communications are second communications.	SAE AS-LIAUS Joint Architecture for Unmarried Systems Committee		standard	published	
UA Design and Almorthiness				ASECO1 JAUS Unmanned Ground Vehicle Service Set	This document defines a set of standard application layer interfaces called AUIX Unmanued Gound Vehicle Services. JAUIS Services system of unmanued yellows to communicate and consolidate has called a layer of the service of systems of unmanued and consolidate has socially as the service of the services are present the politices specific capabilities commonly lead in USIX as of pages 195. In page 195. The services are specific and bloomly politicated in the Sciences (1) parvices are defined in the Sciences (1) parvices are defined in the Sciences).	SAE AS-4JAUS Joint Architecture for Universities Systems Committee		standard	published	
UA Design and Ainsorbiness				ASEOSTA JAUS Manipulator Service Set	This document defines a set of standard application layer inferfaces called JAI/S Manpulator Services. JAI/S Services provide the means it obtaines entitles in an unmande digation or system of numaneed systems to communicate and coordinate field activities. The Manpulation Services represent platform-dispendent capabilities correctly found account domains and types of unserviced systems. A present, beenly-fit 2023 entroles are deterted in the document.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	
UA Design and Ainsorthness				ARP6227 JAUS Messaging over the OMG Data Distribution Service (DDS)	This document defines a standard representation of JAUS ASSSAA message data in DDS IDL defined by the Object Management Group (DMS) CDRSA 2.2 specification. This document does NOT address he JAUS transport considerations or JAUS service protocols are inclemented on OMS DDS obstherms.	AS-41AUS Joint Architecture for Unmanned Systems		recommended practice	published	
UA Design and Almoritimess				ARSSESSI Architecture Framework for Unmarried Systems	This SAM, Anneques Information Report (ART) describes to Architecture Famework for Unexmode Systems (AVUS), AVUS comprises a Conceptual View, a Capabilities View, and an interceptually View The Conceptual View (a provides definitions and set of the Conceptual View (a provides definitions and set of the Conceptual View (a describe capabilities of contrained systems and Conceptual View (a describe capabilities of unexmode systems and of other entities in the unexmode systems domain. The Interopensibility was provides galactice on how to Geologica and develop systems in a ver-	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		information report	published	
UA Design and Ainvorthness				AIRSEE4A JAUS History and Domain Model	This autocome interconnectivity. The purpose of this SAE, Amerapace information Report (AIR) is her-hole inform the reader of the advantage of the Joint Acceleration for the Joint Acceleration for Commenced Systems (JAUSE); and to captum for posterity the domain analysis that provides the underprinnings for the active that ALE Commention (Jause and ALE).	SAE AS-41AUS Joint Architecture for Unmanned Systems Committee		information report	published	
UA Design and Alexerthrees				ASE002A JAUS Mission Spooling Service Set	The document defines a set of desided application type triefload to the control of the control	SAE AS-LIAUS Joint Architecture for Urmanned Systems Committee		standard	published	
UA Design and Ainsorthness				ASS111 JAUS Unmanned Maritime Vehicle Service Set	This document defines a message-passing interface for services representing the platform-specific capabilities common across unmanned maritime vehicles.	AS-41AUS Joint Architecture for Unmanned Systems	Jun-19	standard	ongoing	
14A Design and Anscribiness				ASSOTT Test Protoco for ULS Redproceding (intermitted) Engines as Primary Thust Michariam	This shoulded as inhelied by provides a method for methods (a state) and the provides and the provides are former or an advantage of scalarity. It solvents the desired and should are provided to the provides of scalarity and the provided and a	SAE 5.39 Ummaroed Ricord Propulsion Committee	May-12	standard	ongoing	
NA Design and Ansorthiness				ASPRING Ground support equipment (probusiers, stanters, but pumps, but couplings, shall mixing, faul filters, perflight weight balance, boresighting of payload, sibrage containers, salgement harboris flight term, electronic and antware links.		SAE E-39 Umanned Aircraft Propulsion Committee	Jan-19	standard	planned	
UA Design and Ainvorthiness				AS#### Propoler hubs		SAE E-39 Unmanned Aircraft Propulsion Committee	Jul-19	standard	planned	
UA Design and Ainsorthiness				APPwww Propular Information Report		SAE E-39 Unmanned Aircraft Propulsion Committee	Aug-19	information report	ongoing	
UA Design and Ainvorthiness				AIRESEZ los Protection for Unmanned Aerial Vehicles	A review of icing materials that would be educational to a designer of a UAV los prefection system is provided. Additionally, the differences between summend and manned to profection registers are eighted along with a discussion on how these differences can be addressed.	SAE AC-90 Aircraft long Technology Committee	Dec-18	information report	ongoing	

UA Design and Almorthiness			ASPS4910 Asrospace - Vehicle Management Systems - Flight Control Design, Installation and Test of, Miltery Unmanne Alcosti, Specification Guide For	This document establishes is commended practices for the specification of general performance, design, lest, development, and quality of general performance, design, lest, development, and quality of the second performance of	SAE A-5 Aerospace Actuation, Control and Fluid Power Systems		recommended practice	published	
UA Chalge and Amenthics			ARPSTA Averspace Testing of Discinomechanical Actuation, General Guidelines For	The second control of	A-6 Aerospace Actuation, Control and Fluid Power Systems E		recontranded practice	published	
UA Dasign and Almorthiness			AR744 ^{-w} Aerospace Auditory Power Sources	This SAEA Amerispace information Report (ART) is a newless of the general conductations of open sources that may be used to provide the conductation of the conductation of the conductation of the activities. In the conductation of the conductation of the conductation of the wholese activities of the conductation of the conductation of the seadown of the conductation of the conductation of the conductation of the power conductation of power sources specifications. Considerations for use in marriage a state shade yet and evaluation of the sweet power consume a resident of the power source specification. Considerations for use in marriage a state shade and evaluation of the sweet power consume a resident filter debated information solding to specific power sources is shaded. When debated ordereadors solding to specific power sources is flavoremented by Province and Internation Reposits or or Amountain Recommended Province across the formation reference and the province of the power conductation.	A-5 Aerospace Actuation, Control and Fluid Power Systems		information report	published	
UA Design and Ainsorthiness			ASSOBBIF Wring Aerospace Vehicle	This specification covers all aspects in electrical wire interconnection systems (EWE) from the selection through installation of wiring and whing devices and optical cabing and termstant outlooks used in surrogator whicks. Aurospace whicks include manned and unreserve adultions, beloopters, lighter-than-air whicks, missiles and external pods.	SAE AE-6A Elec Wring and Fiber Optic Interconnect Sys Install Committee		standard	published	
UA Design and Ainvorthiness			ASS0881G Wring Aerospace Vehicle	This specification covers all supects in electrical whe interconnection systems (CMVS) from the selection through installation of wining and whing devices and optical cabling and termination devices used in sercogace vehicles. Aerospace vehicles include manned and unmanne septames, helicopters, lighter-than-air vehicles, missiles and external pode.	SAE AE-6A Elec Wiring and Fiber Optic Interconnect Sys Install Committee	Dec-18	standard	ongoing	
UA Design and Ainvorbiness			ASeeee Artificial simulant standards for drose or FOO impactinguation	pterned This specification covers the design and manufacture requirements for	SAE G-28 Simulants for Impact and Ingestion Testing	Dec-19	standard	planned	
Emergency recoveryferminations systems			F3322-18 Standard Specification for Small Unmanned Aircraft System (sUAS) Parachules	This approximation could not example and maintenant indigitations as despityable parametrizes of small viersement abouth (MAX). The third of maintains, deployable parametrizes exceep y systems (PHS) that are designed to be integrated into a still. On easen the impact on empty of the system should the still, fall to austian mornal stable safe flight. Complanes with his specification is intended to support an applicate if a stabling permission from a civil avisation surfacely (CAA) to fly a stIA our people.	ASTM F38 Unmanned Alteralt Systems	Sept-18	specification	Published	
UA Design and Ainvorbiness			F2400-05(2013) Standard Guide for Aircraft Electrical Load and Power Source Capacity Analysis	This guide covers how to prepare an electrical load analysis (ELA) to most Federal Aviation Administration (FAA) requirements.	ASTM F39 Aircraft Systems		standard	published	Light Sport Aircraft guidance will be revised to apply to UAS.
maintenance			F2799-14 Standard Practice for Maintenance of Altorati Electrical Wring Systems	Exmaped wiring or equipment in an aircraft, regardless of how minor it may appear to be, cannot be blanked in it, therefore, important that maintiferance be accomplished using the best lechniques and practices to minimize the possibility of failure. To devention an ASTM desiral and construction standard for twoer mass	ASTM F30 Aircraft Systems		standard	published	
UA Design and Amorthiness			ASTM WKS2670 New Specification for Large UAS Design and Construction	To describe on ASTM designs and construction standards for larger means are greatly assessed and surplustmens and Annual Sparkers (IAS). Design and Construct Standards are currently in statisticns for Part 22 Clement Mannes Afront as well as for Part ON Year and YEA. See such Man (IAS) and IAS of IAS o	y ASTM F38 Unmanned Aircraft Systems	Jun-19	standard	under development	
UA Design and Ansorbiness			ASTM F2910-14 Standard Specification for Design and Construction of a Small Unramned Aircraft System (MAAS)	bol). This specification establishes the design, construction, and lest requirement for a small unmanned aircraft system (LMS). It is intended to all LMS that are permitted to openior over a defined area and it and substantially an associate opening privation substanty (CAA). Unless enhances appending by a master AQA, this specification for the CAA is specification of the control of the c	ASTM F38 Unmanned Aircraft Systems		standard	published	This will be reference in AC for Special Class §21.17(b)
M UA Design and Amorthiness			F3298-19 Standard Specification for Design, Construction and Verification of Lightweight Unmanned Aircraft Systems (UAS)	This specification covers the alreachiness requirements for the design of bed-wing unmanned sizerall systems. This specification defines the best-less design, construction, and verification requirements for an unmanned arceall system (UAS)	ASTM F38 Unmanned Aircraft Systems		standard	published	Title change
UA Design and Amsorbiness			ASTM WKKSIGTB/ WKS4619 Revision of F3296 - 18 Standard Specification for Design, Construction and Verification of Fixed-Wing Unmanned Aircraft Systems (UAS)	The initial shandard only addressed Flass Wing UAS. Response from FRA regioned both vertical if and fasel-wing in order to be accepted as a restlood of compliance for UAS severalizes confrictions in the forthcoming substance for UAS are several as confrictions in the forthcoming substance for 27-17(b). This required a region and the shandard, inclusion of VFISS, epochs lesses and a title change.	ASTM F38 Unmanned Aircraft Systems	19-Nov	standard	in progress	Ballot pending Sub- Committee approval
Manufacturer organisation			ASTM F2911-14e1 Standard Practice for Production Acceptance of Small Unmanned Aircraft System (sUAS) ASTM F3003-14 Standard	This standard delines the production acceptance requirements for a small unmanned alroatifi system (UARS). This standard is applicable to 4LMS that comply with design, construction, and test requirements identified in Specification (F239). No sUARS may enter production until such compliance is demonstrated.	ASTM F38 Unmanned Aircraft Systems		standard	published	
Manufacturer organisation			Specification for Quality Assurance of a Small Unmanned Aircraft System (sUAS)	This standard definesthe quality assurance requirements for the designanufacture, and production of a small unmarrised alternat system (sUAS).	s, ASTM F38 Unmanned Aircraft Systems		standard	published	
Softeries/fuel cell power generating system			Standard Specification for design of Fuel Cells for Use in Unmanned Aircraft Systems (UAS)	This standard will outline specification for the use of fael cell power generating systems for application in UAS.	ASTM F38 Unmanned Aircraft Systems	TEO	standard	ongoing	
Development assurance (Software)			ASTM F3201-16 Standard Practice for Ensuring Dependiability of Software Used in Unexamed Alecraft Systems (UAS)	This standard practice intends to ensure the dependability of US. Senders. Dependability includes both the order and security appacet a senders and senders of the senders of the senders and security appacet or Organizational controls (for example, management, sample) in place ordering software development. (p) Use of the software in the system, including this sectional senders of the software in the system safely and security (c) Metrics and design analysis and sender to senseming the code security (c) Metrics and design analysis and sender to senseming the code security (c) Metrics and design and sense sender to senseming the code of the second security of the second security of the second (f) Testing of the software.	ASTM F38 Unexamed Aircraft Systems		standard	published	
UA Dasign and Almorthiness			ASTM WK16285 Nev Specification for Design and Performance of an Unmanned Aircraft System-Class Weight to 1320# Gross Weight to 1320# Gross Weight)	The specification covers alresofteness requirements for an acceptable powered fitted wing alresoft UAG.	ASTM F38 Unmanned Aircraft Systems	TEO	standard	ongoing	This work item will be continued using guidelines from ASTM F37 Light Sport Aircraft Constitline
maintenance			ASTM F2909-14 Standard Practice for Maintenance and Continued Airworthiness of Small Unexanned Aircraft Systems (sUAS)	off gross weight of 25 kg (55 b) or less. The sUAS shall be maintained for continued airworthiness to meet sUAS limitations and performance capabilities required by the nation's GAA.	ASTM ***F38 Unmanned **Arcraft Systems		standard	published	Updated revision underway under VIX WV53991
UA Design and Ainvorthiness			prENATOO-1 Aerospace series - Unmanned Aircraft Systems (UAS) - Product and Verification Requirements	This European standard will provide nazers of compliance to cover Part to 5 of the delegated and serves. In 5 of the delegated serves of the delegated serves of the delegated of the delegated serves of the delegated serves of the serves of the delegated serves of the serves of the serves of the delegated se	ASD-STAN D9WG8	Dec-21	preEN / European standard	ongoing	

							Guidelines	ED-200 Guidelines for UAS safety analysis for the Specific calegory (law and medium levels of robustness)	EUROCAE WG-105	Jun 20	Guidance	published	
Ground control station							MASPS	ED-272 Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for the Remote Pilot Station Interface to Air Traffic Control (ATC).	EUROCAE WG-105	Jan-20	standard	published	
							Guidelines	Guidelines on the use of multi-GNSS for UAS low robustness	EUROCAE WG-105	Mar-20	standard	ongoing	
							Guidelines	Guidelines on the Automatic protection of the flight envelope from hum errors for UAS	en EUROCAE WG-105	Dec-20	standard	ongoing	
Emergency recoverytermination systems	a Opinion 05-2019	Part Yugi and Yugi is UAS in class CS and CS shall provide the remote pilot with means to continuously monitor the quality of the command as control link and receive an alert when it is likely that the link is going to be lead or degraded to the existent of comprensing the safe conduct of the operation, and another afert when the link is lost.	d EASA	Jun-20	Specific	Opinon published							
UA Design and Ainvorthiness	EU 2019/945	PMR 132 PMR 132 UAS in Class CO shall have a reastmen attainable height ab the take-off point limited to 120 m;	EASA	Jun-19	open	Regulation applicable							
UA Design and Ainsorthiness	EU 2019/945	Parts 2(3), 3(2) and 4(2) UAS in Class C1, C2 and C3 shall have a maximum attainab angle above the table-off point limited in 120 m or be equipp to the table-off point to 100 m or tay value satisfiable by the remote pilot! If the value is asticulated, claer information above the height of the UA above the surface or table-off point durin flight shall be provided to the remote pilot.	d EASA	Jun-19	open	Regulation applicable							
UA Design and Ainvorthiness	EU 2019/945	Parts 1(7) and 2(17) UAS in Class CO and C1 shall, if equipped with a follow-me mode and when this function is on, be in a range not exceeding 50 on from the remote plot, and make it possible the remote plot to regain control of the UA;	EASA	Jun-19	open	Regulation applicable							
Manufacturer organisation							ISO 21384-2 - Requirements for ensuring the safety and quality of the design and manufacture of UAS	Requirements for ensuring the quality and safety of the design and manufacture UAS. It includes information regarding the UA, any associated remote control shallon(s), the C2 links, any other required data links and any other system elements as may be required.	ISO TC20/SC16WG2	Nov-20	standard	ongoing	
UA Design and Ainvorthiness							STANAG 4571 "LIAN" System Airworthiness Requirements (USAR)", (Fix wing LIAV, MTOW+1 SCKg). STANAG 4702	Set of suchnical abworthness requirements intended primarily for the abworthness continuation of basis-ving military UAS with a maximum take-off weight between 150 and 20,000 kg that intend to regularly operate in mor	NATO FINAS			published	
UA Design and Ainvorthiness							Rotary Wing Unmanned Aerial Systems Anworthiness Requirements' (Rotercraft UAV, 150Kg-MTOW+ 3125Kg	set of such ical air sorthwess requirements intended for the structhiness certification of noisy-vering military LMV Systems with a maximum take of weight between 150 and 1975 kg that intend to regularly operate in non-segregated airspace.	NATO FINAS			published	
UA Design and Ainvorthiness							STANAG 4703 'Light Unmarroad Alexant Systems Alexanthiness Requirements', (Fix Ming UAV, 150Kg-MTOW).	Minimum set of technical almorphinese requirements intended for the almorphinese certification of fload-wing Light UAS with a maximum take off weight not greater than 150 kg and an impact energy? greater than 50.3 (49.8-b) that intend to regulately operate in non-segregated airspa	- NATO FINAS			published	
UA Design and Ainvorthness							STANAG 4746 'Unmanned Aerial Vahicle System Airworthiness Requirements for Light Vertical Take Off and Landing Aircraft'	Set of sechnical aireorithness requirements intended for the aireorithness certification	NATO FINAS	2018		ongoing	
UA Design and Ainvorthiness	EU 2019/945	MAIN TOPE, THE MINE TO A THAT THE MINE	EASA	Jun-19	open	Regulation applicable							
LIA Design and Ainworthiness	EU 2019/945	secondare fidules. Parts 2(15), 2(17) and 4(13). A UMS Class C1, C2 and C3 shall provide the remote plot with claer verning when the battery of the UA or its coetion station reaches a low level so that the remote pilot has sufficient time to safely land the UA;	EASA	Jun-19	open	Regulation applicable							
UA Design and Ainvorthiness	EU 2019/945	Paris 2(5) and 3(4) UAS in class C1 and C2 shall have the requisite mechanical tenergit, including any necessary safety factor, and, where appropriate, stability to withstand any stress to which it is subjected to during use without any threaksage or deformation that might interfere with its safe fight;	EASA	Jun-19	open	Regulation applicable							
UA Design and Ainvorthiness	EU 2019/945	Parts 2(16), 2(13) and 4(14) UMS in Class C1. C2 and C3 shall be equipped with lights in (a) the controllable of the UM. (b) the conspiculty of the UM, at night, the design of the light shall allow a person on the ground, to distinguish the UM from a manned accord;	EASA	Jun-19	open	Regulation applicable							requirement also to specific category when operated in VLL: be equipped: (a) with lights for the purpose of controllability of the UA; and (b) with at least one green
UA Design and Airworthiness							ARP6335 Lighting Applications for Unmarried Alecraft Systems (UAS)	This SAII Aerospace Recommended Practice (ARP) provides technica recommendations for the application, design and development of light for Unnarread Aircraft (UAI). The accommendations set forth in this document are to aid in the design of UA lighting for the type or size of secretal and the operation in the National Aerospace System for which the aircraft is intended.	g SAE A-20 Aircraft Lighting Committee	Dec-18	Recommended Practice	angoing	ongoing
LIA Design and Ainvorthness	EU 2019/945	Part 2(1) UAS in class C1 shall be made of malerials and have performance and physical characteristics such as to ensure mand, the energy transmissed to the human hand in less than 50 d, or, are an alternative, shall have an MTCM of less than 500 g, including payload;	n EASA	Jun-19	open	Regulation applicable							
UA Design and Ainvorthness	EU 2019/945	Paris 1(6) and 2(16) UAS in clear CD and C1 shall be powered by electricity and have a normal voltage not exceeding 24 V direct current [Di or the equivalent alternating current (ACI) voltage; the accessible paris have accessible paris have accessible paris have accessible paris have accessible. ACI or the equivalent ACI voltage, reternat voltages which not exceed 24 V DC or the country commission prevented does not lead to any risk or harmful electric shock even when the UAS is demaged;	DASA	Jun-19	open	Regulation applicable							
UA Design and Ainvorthiness							WK58939 Evaluating Aeria/Response RobolEnergy/Power Endurance Range and Duration	A suite of standards test methods has been developed to measure maneuverstability, endurance, communications, durability, logistics, suitonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	TBD	standard	ongoing	E54 Full Committee adjudication February 26 to March 2, 2018
UA Design and Ainsorthiness	EU 2019/945	Paris 3(12) and 4(7) UAS in class C2 and C3 shall be powered by electricity and those a consist of large and exceeding 48 V DC or the experient AC voltage, its accessible paris shall not exceed experient AC voltage, its accessible paris shall not exceed experient AC voltage, its accessible paris shall not exceed experient AC voltage, its accessible paris shall not exceed experient AC voltage, and experient shall be experient and experient AC voltage and experient accessible shall be experient that the voltage and carried combination generated that UAS is demaged,	EASA	Jun-19	open	Regulation applicable							
UA Design and Ainvorthiness							WK58940 Evaluating Aeria/Response RobolEnergy/Power Endurance Dwell Time WK58943 Evaluating	manusversoley, enourance, communications, durations, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM ES4 Homeland Security Applications	TBD	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018 ongoing, Delayed III Apr -15
LIA Design and Ainvorthiness							WK58943 Evaluating Aerial Response RobotSafety: Lights and Sounds F2029-15 Standard Practice for Design,	A suite of standards test methods has been developed to measure manuverability, endurance,communications, durability, logistics,sudonomy, and safely to guide purchasing decisions,support operator training and measure proficiency.	ASTM ES4 Homeland Security Applications	TBD	standard	ongoing	ESA Full Committee adjudication February 26 to March 2, 2016 ongoing. Delayed III Apr -10
UA Design and Ainworthiness							Alteration, and Certification of Aircraft Electrical Wring Systems	This practice covers design configuration procedures for aircraft electrical wiring systems.	ASTM F39 Aircraft Systems		standard	published	
LIA Design and Ainworthiness							F2695-14 Standard Practice for Inspection of Aircraft Electrical Wiring Systems	This practice covers basic inspection procedures for electrical wiring interconnect systems for aboralt electrical wiring systems.	ASTM F39 Aircraft Systems		standard	published	

								1						
	Softeries/fuel cell power generating system							ASTM F3005-14a Standard Specification for Batteries for Use in Small Unmanned Aircraft Systems (sUAS)	This standard defines the requirements for batteries used in small Unmanned Ancost Systems (ALAS Small Unmanned Ancost System	ASTM F38 Unmanned Aircraft Systems		standard	published	Luminary being neversed for updates FAA Notice Of Availability (NOA) Pending approval of ASTM WKS7659 as foundational document
	UA Design and Ainsorthiness							F2400-05(2013) Standard Guide for Ahoraft Electrical Load and Power Source Capacity Analysis	This guide covers how to prepare an electrical load analysis (ELA) to meet Federal Avistion Administration (FAA) requirements.	ASTM F39 Aircraft Systems		standard	published	
	UA Design and Ainvorthiness	EU 2019/945	Part 5(3) UAS in class C4 shall not be capable of automatic control modes except for flight stabilisation assistance with no direct effect on the trajectory and lost firk assistance provided that, pre-determined fixed position of the flight controls in case of lost link is available.	EASA	Jun-19	open	Regulation applicable							
	UA Design and Ainvorthiness	Opinion 05-2019	Part 17(6) UAS in class C4 shall provide means to programme the UA trajectory;	EASA	Jun-20	Specific	Opinon published							
	UA Design and Ainsorthiness	EU 2019/945	Part 3(5) UAS in class C2 shall unless it is a fixed-wing UA, be equipp with a low-speed mode selectable by the remole plot and limiting the maximum cruising speed to no more than 3 m/s.	EASA	Jun-19	open	Regulation applicable							
	UA Design and Ainvorthiness	Opinion 05-2019	Part 15(4) UAS in class CS shall be equipped with a low-speed mode selectable by the remote pilot and limiting the ground speed tot more than 5 m/s	EASA	Jun-20	Specific	Opinon published							
	UA Design and Ainvorthiness	Opinion 05-2019	Part 14(5) and 17(6) UAS in class CS and CS shall be provide means for the remo- plot to terminate the fight of the UA, which shall: (a) be reliable, predictable and independent from the sadomatic fight corried and guidance system; this applies also to the activation of this means; All thorse the deserted of the UA and servered the powers.	EASA	Jun-20	Specific	Opinon published							
	UA Design and Ainsorthiness	EU 2019/945	Parts 1(5) and 4(4). UAS in class C2 and C3 shall in the case of a lathered UA, have a larealle length of the lether that is less than 30 on and, necdowiced strength that a loss than 100 in set. A latter of the control of the contr	EASA Ic	Jun-19	open	Regulation applicable							
	UA Design and Ainvorthiness	EU 2019/945	Parts 2(14), 2(16) and 4(11) UAS in class C1, C2 and C3 shall, if the UA has a function that limit his access to craftin a trapsoc areas or volumes, by function shall operate in such a manner that it interacts succeibly with the flight control system of the UA without solveresh affecting flight safely: in addition, claim information statish provided for the remote plot hashes his function prevent in the UA from reflecting these airrigators areas or whitness;	EASA	Jun-19	open	Regulation applicable							
	UA Design and Ainvorthiness	EU 2019/945	Parts 1(2) and 2(2) UAS in class C0 and C1 shall have a maximum speed in less flight of 19 mix;	I EASA	Jun-19	open	Regulation applicable							
	UA Design and Ainvorthiness	Opinion 05-2019	Part 17(1) UAS in class CS shall have a maximum ground speed in level tight of not more than SO mile;	EASA	Jun-20	Specific	Opinon published							
	UA Design and Ainvorthiness	EASA Decision	(ISO#4 UAS developed to authority recognized design standards (e.g. industry standards)	EASA	Oct-19	Specific	published							
	UA Design and Ainvorthiness	EASA Decision	CISOPS UAS is designed considering system safety and reliability	EASA	Oct-19	Specific	published							
	UA Design and Ainvorthiness	EASA Decision	OSO#10 Safe recovery from technical issue /	EASA	Oct-19	Specific	published							
	UA Design and Ainvorthiness	EASA Decision	050#12 The UAS is designed to manage the deterioration of external systems supporting UAS operation	EASA	Oct-19	Specific	published							
	UA Design and Ainvorthiness	EASA Decision	OSO#18 Automatic protection of the flight envelope from bussian errors	EASA	Oct-19	Specific	published							
	UA Design and Ainvorthiness	EASA Decision	050#19 Sale recovery from Human Error <u>Criterion #3 HAS</u> design	EASA	Oct-19	Specific	published							
	HAVE	EASA Decision	0:50 #20 - A Human Factors evaluation has been performed and the BMI found appropriate for the mission	EASA	Oct-19	Specific	published							
	HMS	Opinion 05-2019	Part 16(3) and 17(3) UAS Class CS and CG during flight shall provide the remote pilot with clear and coacter information on the height of the UA above the surface or take-off point;	EASA	Jun-20	Specific	Opinon published							
	HOVE	EU 2019/945	IA above the currace or case-ort point; Part 1(4) in class CD and CI that be assety controllable with UAS in class CD and CI that be assety controllable with regards to shallify, remose unability and data link performanc by a remote plot following the manufacturer's instructions, as recessively under all mitigated operand; conditions include allowing the fall and core on if accordance more system.	EASA	Jun-19	open	Regulation applicable							controllable with regard to stability, manoeurrability and the command and control link performance, by a remote pilot following the
	нм	EU 2019/945	indexes y under all settingued generality conditions recluidly followed by the last of a first section from the settingued general followed by the settingued general settingued general followed general settingued general settingued general transcriptor of the settingued general general settingued properties of the settingued general general settingued properties general settingued general general settingued USG in class CD and CD shall be subject combined settingued properties general settingued general general settingued USG in class CD and CD shall be subject combined settingued USG in class CD and CD shall be subject combined as USG and part of the subject combined as USG and part of the pa	EASA	Jun-19	open	Regulation applicable							LEASON US-QUINZ DIS PROSES
	нм	EU 2019/945	UAS in class C2 and C3 shall be safely controllable with regards to stability, manoecumbility and data link performanc by a remain pilot with adequate competency as defined in traplementing Regulation (ULI) 20190517-12(3) and following has reparately been industriance and profile of the department 100 9 241-10(3) depland and operating the resource.	EASA	Jun-19	open	Regulation applicable							controllable with regard to stability, manoeurrability and the command and control link performance, by a seconda rolet with adequate
L	UA Design and Ainvorthiness	EASA Decision	environmental conditions (e.g. adequate sensors, DO-160 condition)	EASA	Oct-19	Specific	published							
ļ	UA Design and Ainvorthiness	EASA Decision	conditions (e.g. adequate sensors, DO-160 qualification)	EAGA	Oct-19	Specific	published							
	UA Design and Ainvorthiness	EASA Decision	M#2 Effects of ground impact are reduced. A category. Measures reducing the effect of the UAS impact dynamics (e.g. engagency parachute)	EASA	Oct-19	Specific	published							
	UA Design and Ainvorthness	Opinion 05-2019	Internetive consolidate? Feet 16 A class C UMS may consist in a class C UMS fitted with an accessaries list that ensures the convertion of the UMS may accessaries list that ensures the class of the UMS may accessaries list. An accessaries list. An accessaries list. An accessaries list may only ensure convertion of a class C UMS that complete with (1) and provident the accessary interfaces to the accessaries. The accessaries list duth on a land provident the accessary interfaces to the accessaries.	EASA	Jun-20	Specific	Opinon published							
	UA Design and Ainvorthiness	EASA Decision	The scorneries to shall be declined and each accusacy shall M#3Technical containment in place and effective (e.g. tether)	EASA	Oct-19	Specific	published							
								ASTM WWX57357 New Specification to Light Unmanned Aircraft System Manufacturers Quality Assurance System	The specification establishes the minimum requirements for a guilty in the specification establishes the minimum requirements for a guilty System for Light Dimensional Aircraft System lists, or both.	ASTM F38 Unesanned Alectaft Systems	Mac-19	specification	ongoing	
								ASTM WK 63407 Standard Specification for Required Product Information to be Provided with a Sena Unmanned Alexant System	This specification covers the entire requirements for information the what he provided by the ALG OSIDY or selled a new small commendation and was provided by the ALG OSIDY or selled a new small commendation of the degrees, propeller, or accessorie fluid in the control of the	5. ASTM F38 Unexamed Aircraft Systems	Oct-19	standard	ongoing	currently under ballot

	,	 									
					F3476-20 Standard Practice for Development of a Durability and Reliability Flight Demonstration Program for Low-Risi Unexamed Alexant Systems (UAS) under FAA Oversight	Cemonitration plans developed in accordance with this practice will include all accessary context and sky considerations to support an extenditude give accessoration program sense of approval or certificate of LAC by the FAA through C&R demonstration.	ASTM F38 Unexamond Aircraft Systems		standard	published	
					ED-279 Generic Functional Hazard Assessment (FHA) for UAS and RPAS	This document aims all generating a IAASEPAX FIFA, to come the will possible number of configurations with the aim of providing USE significant possible number of configurations with the partners gits FIF provides in the configuration of build have been provided to the page of the configuration of a USE have the configuration of the SIATE possible to the configuration of the SIATE possible to the configuration of the SIATE possible to the configuration of the configu	EUROCAE WG-105		standard	published	
					ED-280A Generic Functional Hazard Assessment (FHA) for UAS and RPAS	Cuidelines for UAS safety analysis for the Specific calegory (low and medium levels of robustness)	EUROCAE WG-105	Q2/2021	standard	ongoing	
					ISOWD 24352	Tech Requirements for small UAS Electric Energy System	ISO TC20 SC16		standard	ongoing	
7					Operatio	ns					
	Operations				ASCOS2 - Maxion Speeling Service Set	This is described the said of disclosed application to get Prindings and AUS States to your Querous AUS States to Consequently the makes the otherwise the solid period of the consequently applied to disclose a consequently applied to Querous Register of superiod of the consequently applied to the consequently applied the consequently applied to the consequently ap	SAE AS-41AUS Joint Architecture for Unmanned Systems Committee		standard	published	
	Qualified entities				ASTM F3364-19 Standard Practice for Independent Audit Program for Unmanned Alecraft Operators	Minimum requirements, responsibilities, qualifications for entities conducting internal social against ASTM sharderds on Unmanued Auroral Systems	ASTM F38 Unersensed Aircraft Systems		standard	published	
	Qualified entities				F3365-19 Standard Practice for Compliance Audits to ASTM Standards on Unexamed Alexant Systems	-the to conduct a third party audit program for those who execute sealth in ment the consuments and of nonlinean implementate and qualifications.	ASTM F36 Unmanned Aircraft Systems		standard	published	
	Qualified entities				ASTM WINSEZ744 General Operations Marsail for Professional Operato of Light Unmanned Aincraft Systems (UAS)	Beef gradies to support professional entities receiving operator coefficialists by a CAA, and provide practice for self- or third-party audi of operators of UAA.	ASTM F36 Unmarined Aircraft Systems	TBD	Beef practice	ongoing	Dest
	Marsuals				ASTM F2908-16 Standard Specification for Aircraft Flight Manual (AFM) for a Small Unmanned Aircraft System (sUAS)	This specification provides the minimum requirements for an Aircraft Right Manual (AMI) for an unremented sinceth system (1M5) designed manufactured, and operated in the small UAS (sLIAS) category as defined by a CoVA Astation Authority (CAA). Depending on the size and complexity of the size size, and the size of the	ASTM F38 Unmanned Aircraft Systems		standard	published	published
	Automatic modes, taksoff, Landing, taxing				WK58231 Evaluating AerialPerponse Robotilaneuvering: Maintain Position and Orientation	Submitted instruments. The purpose of this kill will relieved as to specify the appearations. The purpose of the kill will relieve the submitted transfer of the submitted tr	ASTM ES4 Hornsland Security Applications and and	TBD	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2016. Delayed till Apr-15
	Automatic modes, takeoff, Landing, taking				WK58932 Evaluating AerialResponse RobotManeuvering Orbit a Point	test methods in the Manesuvering suttle when comprehensively evaluate cooled system could be considered to the control of the	ASTM ES4 Homeland Security Applications	TBD	standard	ongoing	
	Detect and avoid				WK58933 Evaluating Assis/Response Robot/faneuvering: Avoid Static Obstacles	The purpose of this lest method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the system capability to avoid static obstacles.	ASTM ES4 Hornsland Security Applications	TBD	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 58 Apr-15
	Detect and avoid				WK58934 Evaluating Auria/Response RoboManeuvering: Pass Through Openings	The purpose of this test realrod is to specify the apparatume, procedures, and performance melrics recessary to quantitatively resolute the system capability to pass through openings of vertous size and orientations.	ASTM ES4 Homeland as Security Applications	TBD	standard	ongoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Automatic modes, takeoff, Landing, taxing				WK58235 Evaluating AertsResponse Robotifaneuvering: Land Accurately (Vertical)	The purpose of this leaf method is to specify the apparatument, procedure, and printmension matrics receivage to specificatively controlled the specific coupling to according to the vertically within a softened area.	ASTM ES4 Hornland Security Applications	TEO	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed III Apr-18
	UAS-ATM				Specifications for the Use of Military Unmarroad Aestal Valnician (UAV) as Operational Air Traffic (OAT) outlined Air segregated airspace specification, v 1.0, 2007	This specification adherens expects of million (AVLATE, double) saidly seek incident millioners that impact upon the LMV specification of the respective of the Verspecification of the respective of the Verspecification of the respective of the Verspecification of the Verspecific that is a substitute for substitute in the EUROCONTROL specifications of the EUROCONTROL specifications.	EUROCONTROL		specification	published	
	UAS-ATM				Air Traffic Management Guidelines for Global Heavit in European Airspace, v 1.0, 2010	These Guidelines establish a set of minimum ATM requirements for Global feats (CR) (Euro Teach (CR) (Spit in European strapean, with privary propose of enabling CRTF operation to use them in the basis mentage the solution of CRTF from the harmonized the solution of CRTF from the harmonized strategies are solved or CRTF from the harmonized service in the proposed surpages search by registration to climin-and and monover in suproposed surpages and to find the cruise in non-inequipled surpages and they distinguish the cruise in the companied an expose of the proposed surpages and the course from the companied and proposed surpages and the course from the course for the companied and proposed surpages and the course for the course of the course for the course of the	EUROCONTROL		guidance material	published	

Local E-Identification				pdENATIOS-2 Aurospace series - Linearead Aircraft Systems (UAS) - Security Requirements	That European indicated will probate seas of correspond to boose Po- Diffect (FERDITE (DIMPRICATE) and Policy of Policy of Diffect (FERDITE (DIMPRICATE)) and comply with the Molescape CHIESCAPE (DIMPRICATE) and the Molescape of Diffect (FERDITE (DIMPRICATE)) and the Molescape of Different (DIMPRICATE) and the Molescape of Different (DIMPRICATE) and the Molescape of Different (DIMPRICATE) and DIMPRICATE (DIMPRICATE) and DIFFERENT (DIMPRICATE) and DI	ASD-STAN DSWG8	Sep-21	preEN / European standard	ongoing	
Standard scenarios				ASTM F3196-18 Standard Phachta Standard System (stAAS) Operations	Completion with this protice is recommended at one remark of sealing approximation and extended and one remark of sealing approximation and extended protection and extended a	9 ASTM F30 Unmanned Aircraft Systems		standard	published	Body of standard revised and published incorporating calchinder results, appared is pending calchinder results, appared is pending. To be revised and summercided to letted uses case sometices; package delivery, inhastructure irrapection, linear inspection, serior and search and results, as exempticy suspones, exemptical sus
Standard scenarios				ASTM WK 62344 BVLOS Package Delivery as an Appendix to F3195-	Appendix to to ASTM F3195-17. The main purpose of this revision is to add an Appendix that can be used in developing proposed risk mitigatio strategies for package delivery sLIAS SVLDS operationary	ASTM on F38 Unmanned Aircraft Systems	Jun-19	standard	ongoing	Working group formed and continues
Operations				ASTM F2840-10 Standard Practice for Handling of Unmanned Alexaft Systems at Divert Airfields		ASTM F38 Unmanned Aircraft Systems		practice	published	
Operations				ISO 21384-3 - Requirements for safe civil RPAS/LIAS operations and applies to all types, categories, classes, sizes and modes of operation of UAS	Requirements for safe conveneral UAS operations and applies to all types, categories, classes, sizes and modes of operation of UAS.	50	Dec-18	standard	published	
UAS-ATM				ASPIRER Access to controlled airspace		SAE G-30 UAS Operator Qualifications Committee SAE	May-19	recommended practice	planned	
Standard scenarios				APPeeee Fight beyond visual line of sight		G-30 UAS Operator	May-12	recommended practice	planned	
Standard scenarios				ASPesse Night operations		Committee SAE G-30 UAS Operator Qualifications Committee SAE	May-19	recommended practice	planned	
Standard scenarios				ASD Week Aurial photography		G-30 UAS Operator	Jun-19	recommended practice	planned	
Standard scenarios				APPREEN Power line inspection		Committee SAE G-30 UAS Operator Qualifications Committee SAE G-30 UAS Operator Qualifications Committee	Jul-19	recommended practice	planned	
Standard scenarios				ASPesse Precision agriculture		G-30 UAS Operator Qualifications	Aug-19	recommended practice	planned	
Standard scenarios				APPweee Bridge Inspection		SAE G-30 UAS Operator Qualifications Committee	Sep-19	recommended practice	planned	
Standard scenarios				APP#### Train right- of-way's		SAE G-30 LIAS Operator Qualifications Committee	Od-19	recommended practice	planned	
Standard scenarios				APPWWW Flare stack		SAE G-30 UAS Operator Qualifications Committee	Nov-19	recommended practice	planned	
Standard scenarios				WK58243 New Guide for Visual Inspection of Building Facade using Drone	This standard consists of guidelines for utilizing droses with careass to document facade conditions with video and still photography. The purpose of this standard is to establish procedures and methodologies for conducting youtural inspections of building facades via drose, and documenting such inspections.	ASTM B06 Performance of Buildings	Jan-16	guide	ongoing	
Navigation				WKS8677 Evaluating AssistResponse RobotSensing Visua Image Acuby	The propose of this task method is to prody the approximation, recordinate, and partnerson method sendancy to quantitativity, resultant the visual felicities-optically immage actify of the system as view though a cortical station. This task method pages to searlier systems though a cortical station. This task method species to searlier systems emission. The system recludes as received operator in cortical of all conditionally and any analysis between on control control of a propose to which we will be a share the control operator. This text emission. The system recludes as received operator in cortical of a propose to which we will be a proposed to the special system. This text emission is shared to be a proposed to the effect of the control of the proposed of the proposed operator of the proposed of a described. Results should be considered within the control of reliable test methods in the compellities.	ASTM E54 Normaland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 68 Apr-15
Ground control station				WK58225 Evaluating AerialResponse RobotSensing: Visua Color Acuity	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics recessary to quantitatively exclusive the visual (electro-optical) color acutly of the system as viewe through a control station.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 68 Apr-18
Ground control station				WKS8925 Evaluating Aeria/Response RobotSensing: Visua Dynamic Range	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the visual (electro-optical) dynamic range of the system as viewed through a control station.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 88 Apr-18
C3 datalink and communication				WK58927 Evaluating AerialResponse RobotSensing: Audio Speech Acuty	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively exalusts the audio speech soully of the system as hased bi-directionally between a control station and setal robot in flight.	ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 68 Apr-16
Ground control station				WK58228 Evaluating AerialResponse RobotSensing: Thermal Image Acult	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively esclusiate the thermal image castly of the system as viewed through a control station. This test method applies to sental systems operated temorally from a standoff datance appropriate for the Intended mission.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	ES4 Full Committee adjudication February 25 to March 2, 2018. Delayed 18 Apr-16
Ground control station				WK58229 Evaluating Aeria/Response RobotSensing Thermal Dynamic Range	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the thermal dynamic range of the system as viewed through a control station.	ASTM E54 Horseland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 98 Apr-16
Ground control station				WK58930 Evaluating AerialResponse RobotSensing: Latency of Video, Audio, and Control	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively established the latency of video, audio, and control sub-systems as viewe through a control station.	ASTM ES4 Homeland d Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 88 Apr-18
Detect and avoid				AntaResponse RobotSituational Awareness: Identify Objects (Point and Zoom Carrenss	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively ensistant the system capability to identify objects of interest in the envisionment using cameras (electro-optical and thermal) from defined altitudes in open space.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed till Apr-18
Standard scenarios				WKS8937 Evaluating Aeria/Response RobotSituational Awareness: Inspect Static Objects	The purpose of this test method is to specify the apparatuses, proodures, and performance metrics recessary to quantitatively evaluate the system capability to inspect objects of interest in close proximity.	ASTM ES4 Homeland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 25 to March 2, 2018. Delayed 18 Apr-18
Standard scenarios				WK58938 Evaluating Asria/Response Robot/Sinnal Awareness: Map Wide Areas (Stiched Images)	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively exclusite the system capability to accurately map wide areas with object of interest in the environment.	ASTM ES4 Homeland a Security Applications	Apr-18	standard	ongoing	ES4 Full Committee adjudication February 25 to March 2, 2018. Delayed 88 Apr-18

	Standard scenarios							ASTIM WKS2858 Small Unmanned Aircraft Systems (sUASs) for Land Search and Rescue	This classification defines small unmanned alteral system (LIAAs) lan- earch and rescue resources in terms of their capabilities. If provides masses by which resource managers and LIAAS plotsoperation conveys to emergency management the tasks for which their systems a capable of performing.	ASTM F32 Search and e Rescue	TED	standard	ongoing	
	Standard scenarios							ASTM WKS4225 sUAS Operations in Search and Rescue Operations	This guide extabilishes a Yamesook within which sIAMS search and rescues (EAM) operations shall be conducted as part of the National Indident Management System (NMMS) incident Command System (ICS 1.2 This requirements of this guide shall apply to individuals, agencies, and organizations that respond to EAM operations, including those not regulated by government mandates.	ASTM F32 Search and Rescue	TBID	standard	ongoing	
	Standard scenarios							ASTM WKZSO42 Nei Specification for Operation over People	Recent research conducted on risk, safety, design, operations and impact to inform development of standard with supporting documentally time Pathfords reliable. Using results of the Pathfords Program, Impa- testing and rilligations such as deployable sUAS parachates to be incorporated into standard.	n ASTM F38 Unmanned Aircraft Systems	Mar-19	specification	ongoing	Final draft for ballot in October 2018, adjudicating comments
	UA Design and Ainvorbiness							ASTM F3389-20 Tex Methods for Assessing the Safety of Texas and Unranned alroaft System Impacts	Generally a drief standard for project meeting of LSR weighing 200 games or less. Developed and standard for Casingary 2, 3, and 4 LMS state (1) (Satisfiabless a leaf method) to measure spicate or help impact the control of the con	ASTM AF38 Urenanned Aircraft Systems		standard	putäshed	
	Risk Assessment							ASTM F3175-16 Standard Practice for Operational Plak Assessment of Small Unmanned Alteralt Systems (sUAS)	Physication of an CIPA in accordance with this practice is intended to reduce, the risk of an operation in which system complexity is minimal the operation is conducted in a lower risk environment, and the likeliho for harm to people or properly, though present, is reduced to an acceptable level. As mission complexity increases, the operational environment may become less risk lostmant. A.	ASTM F38 Unmarrood Aircraft Systems		standard	published	This will be reference in AC for Special Class §21.17(b)
	Maruals							ASTM WKG0938 New Practice for General Operations Manual for Professional Operator of Light Unmanned Altoralt Systems (1945)	This standard defines the requirements for General Operations Maxum for Professional Operator of Light Unmarried Aircraft Systems (UAS). The standard addresses the requirements and/or best practices for documentation and organization of a professional operator (i.e., for compensation and hire).	ASTM F38 Unmanned Aircraft Systems	Sep-18	specification	ongoing	Draft Complete -will be balloted Jun 2016
	Take off Landing zones							ASTM WKS9317 Vertiport Design	To support the design of civil veriports and vertisiops for the landing stakeoff of VTCL sixcraft boarding and discharging passenges or cargo the profileration of electric-powers VTCL should be carefully considered in the development of this document. The standard must be accasible to address accords marging in six and strictic energy, including sensented and optionally pittled strong.	ASTM F36 Unmanned Aircraft Systems	TBD	specification	ongoing	New draft in work
	UAS-ATM							STANAG 7234 Barcolaly Piloted Arcraft Systems (RPAS) Arepace Integration (Al) - AATMP-S1		NATO FINAS	2019	standard	ongoing	Under development
	C3 datalink and communication							STANAG 7232 Unsurred Aerial Systems Tactics Techniques and Procedures - ATP- 3.3.8.2 Edition A	Provide standardized tackor, submisques, and procedures 217 for the planning, command and control (CC), and employment of unmanned elected systems 218 (IAS) in IAVTO operations	NATO MCASBUGGUAS OS	2018	standard		
								WY022744 General Operations Manual for Professional Operator of Light Unsuremed Advanta Systems (UALS)	This standard addown the requirements for General Quantitates Manufact to standard addown the requirements and/or the reportation for the standard addowns the requirements and/or the reportation for incrementation and regulationar of a profit sound price of the incrementation and regulationar of a profit sound price of the incrementation and regulations of any profit sound price of the incrementation and regulation of the price of the incrementation for any profit standards of price price for extending sound or any profit standards of the greater to any of the right greater and comments and the price of the incrementation of the price of the incrementation of price of the incrementation of the incrementation of price of the incrementation of the incrementation of price of the incrementation of the incre	ASTM F38 Unesaned Aircraft Systems	Mar-19	standard	ongoing	Under development
								WK69335 Framework for Using ASTM Standards for UAS	recovery indicates (Cyclini agreement received in the recovering or contenting and the contenting agreement and the contenting and the contenting agreement and contenting agreement agree	ASTM F38 Unmanned Alexalt Systems	Mar-19	guide	ongoing	
								prENATOS-4 Aerospace series - Unmarred Aircraft Systems (UAS) - Security requirements	The European structure of all provide in easier of complicate is brown through resident department to part 20 is of the disappeal cell. The purpose is to be able to winly that call this expapped with lights and controllability of the LLK expansion of the controllability of the LLK expansion of the light shall were controllability for the LLK expansion of the light shall were controllability of the shortest first place design of the light call were controllability of the shortest first place and the controllability of the light of the light of the light of the light is controllable to different LLK expansion, trimmity for the Calculation of purpose, but procedures, requirements and compliance controllability of purposes, the procedures, requirements and compliance controllability of purposes. Also procedures, requirements and compliance controllability of purposes, the procedures, requirements and compliance controllability of purposes. Also procedures, requirements and compliance controllability of the controllability of the controllability of the controllability of the controllability.	ASD-STAN DSWG8	5ep-21	preEN / European standard	ongoing	
	-							ISONP 5015-1 ISONP 5015-2	Operational procedures for passenger-carrying UAS Operation of vertiports for unmanned aircraft (UA)	16/WG 3 15/WG 3 15/WG 3	Nov-21 Nov-20	standard standard	ongoing	
								ISOWD 24354, ISOWD 24355,	Payload interface for Small, Civil UAS	ISOTO 20ISC 16	TBD TBD	standard standard	ongoing	
								WK75923 UAS Standard for Positioning, Navigati on, and Time Synchronization (PNT)	Figit control younger for stall Multiples ULSS manuring Presions, Neglecture, and Time Sprintwosters are among a said all dead 20 control functions identified through the work president of the stall	ASTM F30 Unmanned Aircraft Systems	TED	standard	ongoing	
8								FCL						
	Remore plot competence	EU 2019/947	precion except) be performed by a remote plot: (a) familiarised with the user's manual provided by the manufacture of the UAS; (b) in the case of an unmanned altoraft class C1, as defined in Part 2 of the Amer, to Delegated Regulation (EU) [20160]	EASA	Jun-19	open and specific	Regulation applicable from 1 July 2020							
								ISO 23565 - Unmanned aircraft systems — Training for personnel involve in UAS operations	The payment of the transmissions inhibited in that the paradox who work for USC openition receive appropriate education and obtain required innovidings and skill. Persons or educational organizations qualified according to the sendered will be internationally regarded. It will enhant internationally operated the unit of the paradox of the payment of	ISO/TC 20/SC is 16/WG 3	Od-20	Standard	published	

Part														
The column	Remore pilot competence							ARPSTOT - Pilot Training Recommendations fi Unsurvied Alerati Systems (UAS) Civil Operations	This discounter provides an approach to the development of harm provides an appropriate provides an approach of the provides and appropriate provides and appropriate provides and appropriate provides and approach of the provides and appropriate provides and approach of the provides and appropriate provides and approach of the provides and appropriate provides an approximate provides approximate provid	SAE G-30 UAS Operator Qualifications Committee Grand Committee		reconstranded practice	published	
The column	Remore pilot competence							APPREEN Common operator qualifications	COSSTANT.	G-30 UAS Operator Qualifications	May-19	recommended practice	planned	
Second Company	Remore plot compréence	EU 3019/947	MAGNORISMO THE STATE OF THE ST	EASA	Jun-10	open and specific	Regulation applicable from 1 July 2000			Correlles				
The companies The companie	maintenance							ASTM WIKTGOS1 Ne Guide for Lightweigh UAS Maintenance Technician Qualification	The purpose of this guide is to address the basic fundamental subject leaveledge, task performance, and task knowledge achities and functions for UAS maintaneous professionals to be stilled UAS Maintaneous *Robinitions	ASTM F38 Unmanned Aircraft Systems and F46 Aerospace Personnel	Jun-18	standard	ongoing	Undergoing revisions prior to ballot
August	Remore plict competence							F3379-20 Guide for training Public Safety Remote of Unmanne Arcraft Systems Endomement	To convey it is accorded that defined the requirements for instance for public Safety Remode Port of Unional Associal Systems (UAS). Endowsment. The guide describes the knowledge, skills, and abilities equivaled to openite unmanned accord Systems for public safety purposes. A CAA may, at their discretion, use this guide to go to the development of CAA may, at their discretion, use this guide to all the development of the openitions. An approved ASTM guide that discretions required educate training, and continuing pointed school development for those performing as preferencing public safety removed parts.	ASTM F36 Unmanied Aircraft Systems		standard	published	
The second of th	Remore pilot competence							ASTM F3265 Sandard Guide for Training for Remote Piot in Command of Unranned Alexaft Systems (UAS) Endorsement	Contains, other for Testing and Confliction of aUSE White Instrudence, and School because. The previous defense the is revealed, the state of the state of the plant in the testing and the state of t	ASTM F38 Uteranned Aircraft Systems	Apr-18	standard	published	
Formation of the control of the cont								ASTIM WKG17G3 Training for Remote Plict Instructor (RPI) of Unmanued Alectal Systems (UAS) Endomement	To develop an ASTM standard that defines the requirements for Trains for Rennic Pilot Instructor (PRI) of Unreasoned Arcraft Dysteria (Librations) and Libration (Librations) and Librations and Librations) and Librations (Librations) and Past discretions (Librations) and Past development of regulations	ASTM F38 Unmanned Arcreft Systems	Jul-19	standard	ongoing	
Formation of the control of the cont									conditionated of basings measured to the surrescent allocated systems (USA) Spension. 2 13 his specification address the explanement or head practices or both the documentation and organization of a their practices or both the documentation and organization of all their procession of the specification support of produces of the specification specification specification specification specification by a cold an inform submyling (USA) and provide standards certification by a cold an inform submyling (USA) and provide standards certification by a cold an information specification read or cold and c	ASTM F36 Unmanned Aircraft Systems	Sep-19	standard	ongoing	
Former plate Fo	Remore plict competence							ASTM F3330-18 Standard Specification for Training and the Development of Training Manuals for the UAS Operator	This specification defines the requirements for basining and the missingurant of basining manuals for the unmanued alread systems (UAS) operator.		Nov-19	standard	publihed	
Personal Process palled Conference of Confer	Remore plict competence							ASPSJOJ Pilot Training Recommendations fi Unmanned Alexaft Systems (UAS) Civil Operations	1.2 The specification addresses the requirements or best practices, or both, for documentation and organization of a professional operator, (it is, for comparession and this) for the purposes of reternal training programs and for programs offered to the general public.	G-30 UAS Operator Qualifications had Committee & G- 10 U Unmanned Aerospace Vehicle Committee		recommended practice	published	
Review plate SAA Decision SIGNA Deci	Remore pilot competence							Principles Underpinning Medic Standards for Operators of Unmanned Aestal Systems (UAS) - AMMedP-1.25, Edition A	Highlight the medical factors involved in the medical aspects of Fight Orea Licensing to enable individual nations to further their ow steedard standards for safe UAS operation.	NATO		standard	published	
Person plate continued and another continued as design model and properties and another continued as design model as design model and another continued as design model as d	Remore plict competence	EASA Decision	059 890 - Stanoto crew trained and current and able to control the abnormal and emergency situations (i.e. Technical issue with the UAG)	EASA	Oct-19	Specific	published							
Person plate DAA Decision DOS Decision DO	Remore pliot competence	EASA Decision	059 #15 - Remote crew trained and current and able to control the abnocural and emergency disastens (i.e. Human firms)	EASA	Oct-19	Specific	published							
Parties glid conjunion 2004 Distance Constant for the desperation 2004 Tolkins Constant for the desperation 2004 Distance Constant for the desperation 2004 Distance Constant	Remore pilot competence	EASA Decision	050 #22 - The remote crew is trained to identify critical environmental conditions and to avoid them	EASA	Oct-19	Specific	published							
Person plate DOAD Document DOAD Do	Remore pilot competence	EASA Decision	GSO#16 Mabi crew coendination. <u>(Criterion F2 Training)</u>	EASA	Oct-19	Specific	published							
Person pile SAA Draine SECCE Consequence duration for any operation of the SAA On 19 Speeds published Manage of the SAA Draine SECCE SECURITY SECU	Remore pilot competence	BASA Decision	GSD#17 Remote crew is fit for the operation.	EASA	Oct-19	Specific	published							
Merces plot SOAA Decision Statistical and deficient Colorador Statistical Advanced Colorador Statistical Colorador Colorador Statistical Colorador Co		EASA Decision		EASA	Oct-19	Specific	published							
Competence)		EASA Decision		EASA	Oct-19	Specific	published							
1007314 Blade III. Dispersation of the Conference of the Conferen	Remore plot competence	EASA Decision	M6 1 An Emergency Response Plan (ERP) is in place, operator talkstand and effective Scitarion 42 Bennose Cross Competenced	EASA	Oct-19	Specific	published							
								WK73142 Weather Supplemental Data Service Provider (SDSP) Performance	The objective is to define minimum purpormance-based standards for Weather Supplemental Data Senior Provider (SOSP) data area for to UAS Service Supplemil/Providers (USS/USP) and Operators in a UF Traffic Management (UTM) ecosystem.	ASTM F38 Unmanned Aircraft Systems		standard	ongoing	

								WK62741 Training UAS Visual Observers	The purpose of this guide is to address the basic fundamental subject knowledge, task performance, and task knowledge activities and functions for visual observers of unmanned sincraft systems operations	ASTM F36 Unmanned Aircraft Systems	Mar-19	guidance material	ongoing	
								ISO/WD 4358	Test methods for civil multi-refor unmarreed aircraft system			standard	ongoing	
								ISOWD TR 4595	Suggestion for improvement in the guideline for UA testing classification			standard	ongoing	
								ISOWD TR 4594	UA wind gust test			standard	ongoing	
								ISOWD TR 4584	Improvement in the guideline for UA testing/design			standard	ongoing	
								ISOWD 5109	Evaluation method for the resonance frequency of multi-copter UA			standard	ongoing	
								ISOWD 5110	Sest method for Flight stability of multi-rotor UA			standard	ongoing	
								ISOWD TR 5337	Environmental Engineering Program Guideline for UA			standard	ongoing	
9	Environment													
	Noise&Environment	EU 2019/945	Parts 2(8) and 3(10) UAS in class C1 and C2 shall have, unless it is a food-wing UA, a guaranteed A-weighted sound power level LWA determined as per Part 13 not exceeding the levels establish in Part 15	EASA ed	Jun-19	open	Regulation applicable							
10							Auto	onomous o	perations					
	Autonomous operations							ASS386 JAUS Autonomous Behaviors Senice Set	This document, the JAUS Automated Behaviors and Diagnostics Servi Set, defines a message-passing inferince for services commonly found in mobile umment systems. These services sepresent the platform- independent capabilities common across all domains. Additional capabilities are specified in the JAUS Core Service Set (ASS710) and are frequently referenced herein.	AS-4JAUS Joint Architecture for Unmanned Systems Committee	May-12	standard	ongoing	
	Autonomous operations							ASTM Aviation Autonomy Roadmap	Task group to mails autonomy technologies and standards between manned and unammned sincreft.	ASTM	TBD	standards and practices	ongoing	Task Group Formed
	Development assurance (Software)							ASTM F3269 Standard Practice to Methods to Safely Bound Flight Behavior of Unmanned Alecraft Systems Containing Complex Functions	This standard practice defines design and lest test practices that if tallowed, would provide patients to an applicant for providing exidence to the cult avaisation subdrays (CAA) that the flight behavior of an semanance across system (LAS) containing complex function(s) is constrained through a run-time search (CAA) exchitecture to maintain an acceptable level of flight safety.	ASTM F36 Unmanned Aircraft Systems		standard	published	
	Autonomous operations							ASE024 JAUS Autonomous Behaviors Service Set	This document, the JAUS Automated Behaviors and Diagnostics Servi Set, defines a message-passing inferince for services commonly found in mobile summend systems. These services seprement the platform- independent capabilities common across all domains. Additional capabilities are specified in the JAUS Core Service Set (ASS710) and are frequently referenced hereits.	a SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee	May-12	standard	ongoing	The title will change to "IALIS Autonomous Capabilities Service Set"
	Noise&Environment	EU 2019/945	Parts 2(9) and 3(11) UAS in class C1 and C2 shall have, unless it is a fixed-wing UA, the inclusion of the guaranteed A-weighted sound pow- level affilised on the UA and/or its packaging as per Part 14: Part 4(6)	EASA	Jun-19	open	Regulation applicable							
	Noise&Environment	EU 2019/945	Pain 4(6) UAS in class C3 shall have, unless it is a fixed-wing UA, the indication of the guaranteed A-weighted sound power level UWA determined as per Part 13 affixed on the UA and/or its seckeding as per Part 14.	EASA	Jun-19	open	Regulation applicable							