



Data of authorised UAS and operation

Manufacturer or Type Certificate holde	er	Model name				
Type of UAS configuration	on					
☐ Conventional airplane	☐ Helicopter	☐ Multirotor	☐ Hybrid / VTOL			
☐ Lighter than air	☐ Other, please specify:					
Is the UAS tethered duri	ng the operation?					
☐ Yes ☐ No						
Maximum characteristic dimensions (in	ncluding propellers)	Maximum take-off mass	Maximum operational speed			
Type of propulsion syste	em					
□ Electric		☐ Combustion				
☐ Hybrid, specify type:		☐ Other, please specify:				
Number of type certificate or design ve	erification report (if available)	Certificate of airworthiness (if available	a)			
Number of noise certificate (if available	e)					
Short description of prop	posed operations					
Diagon provide the CDC	accordinates for the average	tional values (flight goog	ranky and continuously			
		ational volume (flight geog ffer (if available) as a sepa				
Give reference to the file name:						
Signature						
Date						
Printed name	L					
Signature						

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PDRA characterisation and conditions

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Topic	Method of proof	Condition	Reference to documentation			Proof
		Operational characteris	ation, scope and limitations			
			Document name	Page number	Chapter number	"I declare compliance."
Level of human intervention		1.1 No autonomous operations: the remote pilot should have the ability to maintain control of the UA, except in case of a loss of the command and control (C2) link.				
	Self-declaration	1.2 The remote pilot should operate only one UA at a time.				
		1.3 The remote pilot should not operate the UA from a moving vehicle.				
		1.4 The remote pilot should not hand the control of the UA over another command unit.				
UA range limit	Self-declaration	1.5 Launch/recovery: at VLOS distance from the remote pilot, if not operating from a safe prepared area. Note: 'safe prepared area' means a controlled ground area that is suitable for the safe launch/recovery of the UA.				

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Topic	Method of proof	Condition	Reference to documentation			Proof
Торіо	Wietilog of proof	1.6 In flight:	Document name	Page number	Chapter number	"I declare compliance."
UA range limit	Self-declaration	1.6.1 If no AOs are employed: the UA is not operated further than 1 km (or other distance defined by the competent authority) from the remote pilot Note: The remote pilot's workload should allow the remote pilot to continuously visually scan the airspace				
		1.6.2 If AOs are employed: the range is not limited as long as the UA is not operated further than 1 km (unless a different distance is defined by the competent authority) from the AO who is nearest to the UA.				
Overflown areas	Declaration supported by data	1.7 UAS operations should be conducted over sparsely populated areas.				
UA limitations	Self-declaration	1.8 Maximum characteristic dimension (e.g. wingspan, rotor diameter/area or maximum distance between rotors in case of a multirotor): 3 m				
		1.9 Typical kinetic energy (as defined in paragraph 2.3.1(k) of AMC1 to Article 11 of the UAS Regulation: up to 34 kJ				



Topic	Method of proof	Condition	Reference to documenta	tion		Proof
			Document name	Page number	Chapter number	"I declare compliance."
Flight height limit		1.10 The maximum height of the				
limit		operational volume should not be greater				
		than 150 m (500ft) above the overflown				
		area (or any other altitude reference				
		defined by the Member State). Note: In				
		addition to the vertical limit of the				
		operational volume, an air risk buffer is to				
		be considered (see 'Air risk' under point 3				
Airspace		of this table). 1.11 The UA should be operated:				
Allapace		1.11 The OA should be operated.				
		1.11.1 in uncontrolled airspace				
		(corresponding to an air risk that can be				
		classified as ARC-b); or				
	Self-declaration	1.11.2 in a segregated area				
	Sell-declaration	(corresponding to an air risk that can be				
		classified as ARC-a); or				
		1.11.3 as otherwise established by the				
		Member States in accordance with Article				
		15 (with an associated air risk that can be				
Visibility		classified as not higher than ARC-b).				
VISIDIIILY		1.12 The UA should be operated in an				
	Self-declaration	area where flight visibility is greater than 5				
		km. Note: Please refer to GM1 UAS.STS-02.020(3).				
		1.13 The UA should not be used to drop				
		material or to carry dangerous goods,				
		except for dropping items in connection				
Others	Self-declaration	with agricultural, horticultural or forestry				
	2011 200121211011	activities where the carriage of such items				
		does not contravene any other applicable				
		regulations.				



Topic	Method of proof	Condition	Reference to documentation			Proof
		Operational m	nitigations			
Operational volume		3.1 To determine the operational volume, the applicant should consider the position-keeping capabilities of the UAS in 4D space (latitude, longitude, height, and time).	Document name	Page number	Chapter number	"I declare compliance."
	Self-declaration	3.2 In particular, the accuracy of the navigation solution, the flight technical error of the UAS, as well as the flight path definition error (e.g. map error) and latencies should be considered and addressed when determining the operational volume.				
		3.3 The remote pilot should apply emergency procedures as soon as there is an indication that the UA may exceed the limits of the operational volume.				
Ground risk		3.4 The UAS operator should establish a ground risk buffer to protect third parties on the ground outside the operational volume. 3.4.1 The minimum criterion should be the				
	Self-declaration	use of the '1:1 rule' (e.g. if the UA is planned to operate at a height of 150 m, the ground risk buffer should at least be 150 m).				
		3.5 The operational volume and the ground risk buffer should be all contained in a sparsely populated area.				
		3.6 The applicant should evaluate the area of operations typically by means of an onsite inspection or appraisal, and should be able to justify a lower density of people at risk in the operational area and the ground risk buffer.				



Topic	Method of proof	Condition	Reference to documentation			Proof
			Document name	Page number	Chapter	"I declare
Air risk		3.7 The UAS operator should establish an			number	compliance."
All Hak		air risk buffer to protect third parties in the				
		1				
		air outside the operational volume. 3.8 This air risk buffer should be contained				
		in an airspace that meets the conditions				
		defined in 1.11 and over sparsely				
		populated areas. If the operation is limited				
		at a height below 120 m, no additional				
	Self-declaration	vertical air risk buffer is required.				
		3.9 The operational volume should be				
		outside any geographical zone				
		corresponding to a flight restriction zone,				
		as defined by the responsible authority,				
		unless the UAS operator has been granted				
		an appropriate permission.				
		3.10 Prior to the flight, the remote pilot				
		should assess the proximity of the planned				
		operation to manned aircraft activity.				
	Declaration	3.11 If the UAS operation is performed				
	supported by	above 120 m and up to 150 m, the UAS				
	data	operator should develop appropriate				
		procedures to not jeopardize other				
		airspace users.				
Observers		3.12 If the UAS operator decides to				
		employ one or more airspace observers				
		(AOs), the remote pilot may operate the				
		UA up to the distance that is specified in				
	Self-declaration	point 1.6.2.				
	25 300.0101011	3.13 The UAS operator should ensure the				
		correct placement and the appropriate				
		number of AOs along the intended flight				
		path. Prior to each flight, the UAS operator				
		should verify that:				



Topic	Method of proof	Condition	Reference to documentation			Proof
•			Document name	Page number	Chapter number	"I declare compliance."
Observers		3.13.1 The visibility and the planned distance of the AOs are within the acceptable limits that are defined in the operations manual (OM);				
		3.13.2 there are no potential terrain obstructions for each AO;				
		3.13.3 that there are no gaps between the zones that are covered by each of the AOs;				
	Self-declaration	3.13.4 communication with each AO is established and effective; and				
		3.13.5 if means are used by the AOs to determine the position of the UA, those means are functioning and effective.				
		Note: Instead of an AO, the remote pilot may perform the visual scan of the airspace, provided that the workload allows the remote pilot to perform his duties.				



Topic	Method of proof	Condition	Reference to documentation			Proof
		UAS Operator and UAS of	pperations conditions			
			Document name	Page number	Chapter number	"I declare compliance."
UAS operator and UAS		4.1 The UAS operator should:			Hamber	остірнанов.
operations		4.1.1 develop an operations manual (OM) (for the template, refer to AMC1 UAS.SPEC.030(3)(e) and to the complementary information in GM1 UAS.SPEC.030(3)(e));				
	4.1.2 develop procedures to ensure that the security requirements applicable to the area of operations are complied with during in the intended operation;					
		4.1.3 develop measures to protect the UAS against unlawful interference and unauthorised access;				
	Declaration supported by data	4.1.4 develop procedures to ensure that all operations comply with Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data; in particular, the UAS operator should carry out a data protection impact assessment, when this is required by the data protection national authority of the Member State with regard to the application of Article 35 of that Regulation;				
		4.1.5 develop guidelines for its remote pilots to plan UAS operations in a manner that minimises nuisance, including noise and other emissions-related nuisance, to people and animals				



Topic	Method of proof	Condition	Reference to documentation			Proof
UAS operator and UAS	Mountage of preen	4.1.6 develop an emergency response	Document name	Page number	Chapter number	"I declare compliance."
operations	s	plan (ERP) (see point 7 of in accordance with the conditions for a 'medium' level of robustness (please refer to AMC3 UAS.SPEC.030(3)(e);				
		4.1.7 validate the operational procedures in accordance with the conditions for a 'medium' level of robustness, which are included in AMC2 UAS.SPEC.030(3)(e);				
	Declaration supported by data	4.1.8 ensure the adequacy of the contingency and emergency procedures, and prove it through any of the following: (a) dedicated flight tests; or simulations, provided that the representativeness of the (b) simulation means is proven for the intended purpose with positive results; or (c) any other means acceptable to the competent authority;				
		4.1.9 have a policy that defines how the remote pilot and any other personnel in charge of duties essential to the UAS operation can declare themselves fit to operate before conducting any operation;				
		4.1.10 designate for each flight a remote pilot with adequate competency and other personnel in charge of duties essential to the UAS operation if needed;				



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Topic	Method of proof	Condition	Reference to documentation			Proof
UAS operator and UAS operations	Declaration supported by data	4.1.11 ensure that the UAS operation effectively uses and supports the efficient use of the radio spectrum in order to avoid harmful interference; 4.1.12 keep for a minimum of 3 years and maintain up to date a record of the information on UAS operations, including any unusual technical or operational occurrences and other data as required by the declaration or by the operational authorisation.	Document name	Page number	Chapter number	"I declare compliance."
UAS maintenance		4.2. The UAS operator should: 4.2.1 ensure that the UAS maintenance instructions that are defined by the UAS operator are included in the OM and cover at least the UAS manufacturer's instructions and requirements when applicable; and				
	Self-declaration	4.2.2 ensure that the maintenance staff follow the UAS maintenance instructions when performing maintenance;				
		4.2.3 keep for a minimum of 3 years and maintain up to date a record of the maintenance activities conducted on the UAS;				



	1	PDRA characterisation	The conditions			1
Topic	Method of proof	Condition	Reference to documentation			Proof
			Document name	Page number	Chapter number	"I declare compliance."
UAS maintenance		4.2.4 establish and keep up to date a list of the maintenance staff employed by the			Hamber	
	Self-declaration	UAS operator to carry out maintenance activities;				
		4.2.5 comply with point UAS.SPEC.100, if the UAS uses certified equipment;				
External services	Self-declaration	4.3 The UAS operator should ensure that the level of performance for any externally provided service that is necessary for the safety of the flight is adequate for the intended operation. The UAS operator should declare that this level of performance is adequately achieved.				
		4.4 The UAS operator should define and allocate the roles and responsibilities between the UAS operator and the external service provider(s), if applicable.				
		Conditions for the personnel in charge	of duties essential to the operation			
General	Declaration supported by data	5.1 The UAS operator should ensure that all personnel in charge of duties essential to the UAS operation are provided with competencybased, theoretical and practical training specific to their duties, which consists of the applicable theoretical elements derived from AMC1 UAS.SPEC.050(1)(d), and practical elements from AMC2 UAS.SPEC.050(1)(d) and UAS.SPEC.050(1)(e). In addition, for non-remote pilots, also from AMC3 UAS.SPEC.050(1)(d).				



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Topic	Method of proof	Condition	Reference to documentation			Proof
General			Document name	Page number	Chapter number	"I declare compliance."
	Self-declaration	5.2 The UAS operator should keep and maintain up to date a record of all the relevant qualifications and training courses completed by the remote pilot and the other personnel in charge of duties essential to the UAS operation and by the maintenance staff for at least 3 years after those persons have ceased to be employed by the organisation or have changed position within the organisation				
Remote pilot	Self-declaration	5.3 The remote pilot should have the authority to cancel or delay any or all flight operations under the following conditions: 5.3.1 when the safety of persons is jeopardised; or 5.3.2 when property on the ground is jeopardised; or 5.3.3 when other airspace users are jeopardised; or 5.3.4 when there is a violation of the terms of the operational authorisation.				
		5.4 If AOs are employed, the remote pilot should ensure that the necessary number of AOs is available and correctly placed, and that the communication with them can be adequately established.				



Topic	Method of proof	Condition	Reference to documentation			Proof
1	,		Document name	Page number	Chapter number	"I declare compliance."
Remote pilot		5.5 The remote pilot should: 5.5.1 not perform duties under the influence of psychoactive substances or alcohol, or when they are unfit to perform their tasks due to injury, fatigue, medication, sickness or other causes;				
		5.5.2 be familiar with the manufacturer's instructions provided by the manufacturer of the UAS				
		5.5.3 ensure that the UA remains clear of clouds;				
	Self-declaration	5.5.4 perform unaided visual scan of the airspace and ensure that the AO(s) can perform the same, if required, to avoid any potential collision hazard;				
		5.5.5 obtain updated information relevant to the intended operation about any geographical zones defined in accordance with Article 15 of the UAS Regulation; and				
		5.5.6 ensure that the UAS is in a safe condition to complete the intended flight safely, and if applicable, check whether the direct remote identification is active and up to date.				



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Topic	Method of proof	Condition	Reference to documentation			Proof
Multi-crew		5.6 Where multi-crew coordination (MCC)	Document name	Page number	Chapter number	"I declare compliance."
coordination (MCC)		is required, the UAS operator should:				
		5.6.1 designate the remote pilot-in- command to be responsible for each flight;				
	Self-declaration	5.6.2 include procedures to ensure coordination between the remote crew members through robust and effective communication channels; those procedures should cover, as a minimum: 5.6.2.1 the assignment of tasks to the remote crew members; and 5.6.2.2 the establishment of step-by-step communication; and				
		5.6.3 ensure that the training of the remote crew covers MCC.				
Maintenance staff	Declaration supported by data	5.7 Any maintenance staff member that is authorised by the UAS operator to perform maintenance activities should have been adequately trained in the documented maintenance procedures.				
Personnel in charge of duties essential to the UAS operation are fit to operate	Self-declaration	5.8 The personnel in charge of duties essential to the UAS operation should declare that they are fit to operate before conducting any operation, based on the policy that is defined by the UAS operator.				



		PDRA characterisatio	n and conditions			1
Topic	Method of proof	hod of proof Condition	Reference to documentation			Proof
			Document name	Page number	Chapter number	"I declare compliance."
		Technical co	onditions			
General	Self-declaration	6.1 The UAS should be equipped with means to monitor the critical parameters of a safe flight, in particular: 6.1.1 the UA position, height or altitude, ground speed or airspeed, attitude and trajectory; 6.1.2 the UAS energy status (fuel, battery charge, etc.); and 6.1.3 the status of critical functions and systems; as a minimum, for services based on RF signals (e.g. C2 Link, GNSS, etc.), means should be provided to monitor the adequate performance and trigger an alert when the performance level becomes too low.				
		6.2 The UA should have the performance capability to descend safely from its operating altitude to a 'safe altitude' in less than 1 minute, or have a descent rate of at least 2.5 m/s (500 fpm).				



Topic	Method of proof	Condition	Reference to documentation			Proof
Humanmachine interface (HMI)		6.3 The UAS information and control interfaces should be clearly and succinctly presented and should not confuse, cause unreasonable fatigue, or contribute to causing any disturbance to the personnel in charge of duties essential to the UAS operation in such a way that could adversely affect the safety of the operation.	Document name	Page number	Chapter number	"I declare compliance."
	Self-declaration	6.4 If an electronic means is used to support AOs in their role of maintaining awareness of the position of the UA, its HMI should: 6.4.1 be sufficiently easy to understand to allow AOs to determine the position of the UA during the operation; and 6.4.2 not degrade the AOs' ability to: 6.4.2.1 perform unaided visual scan of the airspace where the UA is operating for any potential collision hazard; and 6.4.2.2 maintain effective communication with the remote pilot at all times.				
		6.5 The UAS operator should conduct a UAS evaluation that considers and addresses human factors to determine whether the HMI is appropriate for the operation.				



Topic	Method of proof	Condition	Reference to documentation			Proof
C2 links and communication	Wethod of proof	6.6 The UAS should comply with the applicable requirements for radio equipment and the use of the RF spectrum.	Document name	Page number	Chapter number	"I declare compliance."
		6.7 Protection mechanisms against interference should be used, especially if unlicensed bands (e.g. ISM) are used for the C2 link (mechanisms such as FHSS, DSSS or OFDM technologies or frequency deconfliction by procedure).				
	Self-declaration	6.8 The UAS should be equipped with a C2 link that is protected against unauthorised access to the command-and-control functions				
	Sell-declaration	6.9 In case of a loss of the C2 link, the UAS should have a reliable and predictable method to recover the command-and-control link of the UA or to terminate the flight in a way that reduces any undesirable effect on third parties in the air or on the ground.				
		6.10 Communication between the remote pilot and the AO(s) should allow the remote pilot to manoeuvre the UA with sufficient time to avoid any risk of collision with manned aircraft, in accordance with point UAS.SPEC.060(3)(b) of the UAS Regulation.				



Topic	Method of proof	Condition	Reference to documentation			Proof
Tactical mitigation		6.11 The UAS design should be adequate to ensure that the time required between a command given by the remote pilot and the UA executing it does not exceed 5 seconds.	Document name	Page number	Chapter number	"I declare compliance."
	Self-declaration	6.12 Where an electronic means is used to assist the remote pilot and/or AOs in being aware of the UA position in relation to potential 'airspace intruders', the information is provided with a latency and an update rate for intruder data (e.g. position, speed, altitude, track) that support the decision criteria.				
Containment	Declaration supported by data	6.13 To ensure a safe recovery from a technical issue that involves the UAS or an external system that supports the operation, the UAS operator should ensure that: 6.13.1 no probable failure of the UAS or of any external system that supports the operation would lead to operation outside the operational volume; and 6.13.2 it is reasonably expected that a fatality will not occur due to any probable failure of the UAS or of any external system that supports the operation.				



Topic	Method of proof	Condition	Reference to documentation			Proof
•	·		Document name	Page number	Chapter number	"I declare compliance."
Containment		6.14 The vertical extension of the operational volume should be 150 m above the surface (or any other reference altitude defined by the Member State). Note: The term 'probable' should be understood in its qualitative interpretation, i.e. 'anticipated to occur one or more times during the entire system/operational life of an item'.				
	Declaration supported by data	6.15 The following additional provisions should apply if the adjacent area includes an assembly of people or if the adjacent airspace is classified as ARC-d (in accordance with the SORA): 6.15.1 The UAS should be designed to standards that are considered adequate by the competent authority and/or in accordance with a means of compliance that is acceptable to that competent authority such that: 6.15.1.1 the probability of the UA leaving the operational volume should be less than 10-4/FH; and 6.15.1.2 no single failure of the UAS or of any external system that supports the operation should lead to operation outside the ground risk buffer. Note: The term 'failure' should be understood as an occurrence that affects the operation of a component, part, or element in such a way that it can no longer function as intended. Errors may cause failures but are not considered to be failures. Some structural or mechanical failures may be excluded from this criterion if it can be shown that these mechanical parts were designed according to aviation industry best practices.				



Topic	Method of proof	Condition	Reference to documentation			Proof
Containment	Self-declaration	6.15.2 SW and AEH whose development error(s) could directly lead to operations outside the ground risk buffer should be developed according to an industry standard or methodology that is recognised as adequate by the competent authority. Note 1: The proposed additional safety conditions cover both the integrity and the assurance levels. Note 2: The proposed additional safety conditions do not imply a systematic need to develop the SW and AEH according to an industry standard or methodology that is recognised as adequate by the competent authority. For instance, if the UA design includes an independent engine shutdown function that systematically prevents the UA from exiting the ground risk buffer due to single failures or an SW/AEH error of the flight controls from occurring, the intent of the conditions of point 6.15.1 above could be considered to be met.	Document name	Page number	Chapter number	"I declare compliance."
Remote	Self-declaration	6.16 The UAS has a unique serial number compliant with standard ANSI/CTA-2063-A-2019, Small Unmanned Aerial Systems Serial Numbers, 2019, according to Article 40(4) of Regulation (EU) 2019/945.				



Topic	Method of proof	Condition	Reference to documentation			Proof
Identification ¹	Self-declaration	6.17 The UAS is equipped with a remote identification system according to Article 40(5) of Regulation (EU) 2019/945.	Document name	Page number	Chapter number	"I declare compliance."
Lights ¹	Self-declaration	6.18 If the UAS is operated at night, it is equipped with at least one green flashing light according to point UAS.SPEC.050(1)(I)(i) of the UAS Regulation.				

Signature				
Date	Place			
Printed name				
Signature				

¹ Applicable from 1 July 2022. FV.GO-PDRAG01-01/2, Rev.2, 24.03.2022