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First UAS/RPAS Focal Points virtual meeting of the SAM and SRVSOP States

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Agenda

- ✓ Propose a work program to start the development of:
 - the UAS/RPAS strategic planning;
 - the regulatory framework for UAS/RPAS operations; and
 - the roadmap for the development of these activities.
- ✓ appoint working teams



Estrategic planning

- ✓ Concept of operations (CONOPS) for unmanned aircraft (UA)
- ✓ RPAS CONOPS for international IFR operations
- ✓ UAS traffic management (UTM)



CONOPS for unmanned aircraft (UA)- Proposed topics

- Background;
- the classification of unmanned aircraft according to ICAO;
- the concept of operations for each UA classification;
- development of regulations and guidance material for each type of operation;
- safety management in the UA operations;
- challenges;
- planning and implementation; and
- other topics that the meeting deems necessary to address, etc.



RPAS CONOPS for international IFR operations

This CONOPS will **aim** to describe the operational environment of **manned and unmanned aircraft** thereby ensuring a common understanding of the challenges and how the subset that are remotely piloted can be expected to be accommodated and ultimately integrated into the airspace for **international IFR operations**

References:

- ✓ ICAO RPAS CONOPS for international IFR operations
- ✓ Others documents of other regions and States



UAS traffic management (UTM)

Due to the increasing number of unmanned aircraft (UA) operating in **low-level airspace** and potentially in conflict with manned aviation, ICAO was requested to develop a **global baseline of provisions and guidance material** for the adequate harmonization of UAS regulations, **which are outside** the framework of international instrument flight rules (IFR).

References:

- ✓ ICAO UAS traffic management, Edition 3; and
- ✓ Others documents of other regions and States.



UAS traffic management (UTM) (Cont.)

Since UTM as a concept is already under development, a **common agreement** on its framework and principles is essential to ensure **regional and global harmonization and interoperability**.

References:

- ✓ ICAO UAS traffic management, Edition 3; and
- ✓ Others documents of other regions and States.



UAS traffic management (UTM) (Cont.)

Through this concept, UAS operations will be supported by providing **real-time information** on airspace limitations and the intentions of other aircraft within the **UTM framework**.

References:

- ✓ ICAO UAS traffic management, Edition 3; and
- ✓ Others documents of other regions and States.



LAR UAS model regulatory framework

LARs	References
LAR 101	ICAO UAS model regulation – Part 101
LAR 102	ICAO UAS model regulation – Part 102
LAR 149	ICAO UAS model regulation – Part 149
LAR CA 101-1	ICAO UAS model AC- AC 101-1
LAR CA 102-1	ICAO UAS model AC - AC 102-1
LAR CA 102-23	ICAO UAS model AC - AC 102-23
Other LARs y LARs ACs e.g., LAR AC 922-001	Other model regulations and advisory circulars (AC), e.g., Draft AC 922-001



LAR RPAS regulatory framework

LARs sets	References
LAR PEL set	Annexes 1, 19 /Doc OACI/Other regulations /Other ACs
LAR OPS set	Annexes 2, 6, 18, 19 /Doc OACI/Other regulations/Other ACs
LAR AIR set	Annexes 6, 7, 8, 16, 19 /Doc OACI/Other regulations/Other ACs
LAR ANS set	Annexos 2, 3, 4, 10, 11, 12, 15, 19 /Doc OACI/Other regulations and ACs
LAR AGA set	Annexes 14, 19 /Doc OACI/Other regulations/Other ACs
AIG	Annex 13
Other	Other regulations and advisories circulars (ACs)

LAR ANS set: LAR MET (Annex 3); LAR MAP (Annex 4); LAR CNS (Annex 10); LAR ATS (Annex 11); LAR SAR (Annex 12); y LAR AIS (Annex 15).



Roadmap for the LAR UAS/RPAS development





CONOPS for unmanned aircraft (UA)

Names	Organization	Names	Organization
1. Wladimir Fernández - Rapporteur	DGAC - Chile	10. Javier Alemán	DGAC - Peru
2. Verónica Fontana	ANAC - Argentina	11. Katherine Flores	DGAC - Peru
3. Ariel Oliveto	ANAC - Argentina	12. Claudio Maltese	DINACIA - Uruguay
4. Ailton Júnior	ANAC - Brazil	13. José Palermo	DINACIA - Uruguay
5. Daniele Lins	DECEA - Brazil	14. Alexey Quinteros	INAC - Venezuela
6. Jorge Regis	DECEA - Brazil	15. Pedro Mesisca	INAC - Venezuela
7. Mauricio Gómez	UAEAC - Colombia	16. Ana María Díaz	SRVSOP
8. Mauricio Hidalgo	DGAC - Ecuador	17. Valeria Ramos	SRVSOP
9. Kerima Killingbeck	AAC - Panamá		



Working team

RPAS CONOPS for international IFR operations

Names	Organization	Names	Organization
1. Ailton Júnior - Rapporteur	ANAC - Brazil	10. Pedro Mesisca	INAC - Uruguay
2. Verónica Fontana	ANAC - Argentina	11. Ana María Díaz	SRVSOP
3. Ariel Oliveto	ANAC - Argentina	12. Valeria Ramos	SRVSOP
4. Daniele Lins	DECEA - Brazil		
5. Jorge Regis	DECEA - Brazil		
6. Wladimir Fernández	DGAC - Chile		
7. Javier Alemán	DGAC - Peru		
8. Claudio Maltese	DGAC - Uruguay		
9. Alexey Quinteros	INAC - Venezuela		



UAS traffic management (UTM)

Names	Organization	Names	Organization
1. Daniele Lins - Rapporteur	DECEA - Brazil		
2. Jorge Regis	DECEA - Brazil		
3. Silvia López	UAEAC - Colombia		
4. Mauricio Gómez	UAEAC - Colombia		
5. Jorge Falco	DGAC - Peru		
6. Gabriel Fernández	DINACIA - Uruguay		
7. Rosanna Barú	DINACIA - Uruguay		
8. Carlos Castañeda	INAC - Venezuela		
9. Fernando Hermoza	SAM Office		



Working team

LAR UAS/LAR RPAS model regulatory framework

Names	Organization	Names	Organization
1. César Silva - Rapporteur	ANAC Brazil	10. Katherine Flores	DGAC - Peru
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4. Daniele Lins	DECEA - Brazil	13. Alexey Quinteros	INAC - Venezuela
5. Jorge Regis	DECEA - Brazil	14. Pedro Mesisca	INAC - Venezuela
6. Wladimir Fernández	DGAC - Chile	15. Ana María Díaz	SRVSOP
7. Silvia López	UAEAC - Colombia	16. Jorge Barrios	SRVSOP
8. Andres Villaverde	DGAC - Peru	17. Valeria Ramos	SRVSOP
9. Rafael Calevaro	DGAC - Peru		



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Thank you very much

