



International Civil Aviation Organization

ICAO

**Eleventh Meeting of the Air Traffic Management Sub-Group
(ATM/SG/11) of APANPIRG**

Singapore, 2 – 6 October 2023

Agenda Item 5: ATM Systems (Modernization, Seamless ATM, CNS, ATFM)

ASIA/PACIFIC UNMANNED AIRCRAFT SYSTEMS UPDATE

(Presented by the Secretariat)

SUMMARY

This paper presents updated information on the availability of global and regional guidance for the regulation and integration of Unmanned Aircraft Systems in national airspace. Information is also provided on past and upcoming ICAO unmanned aviation symposia.

1. INTRODUCTION

1.1 The Seventh Meeting of the Air Traffic Management Sub-Group of APANPIRG (ATM/SG/7, Bangkok, Thailand, 05 – 09 August 2019) ATM/SG/7 adopted the *Asia/Pacific Regional Guidance for the Regulation and Safe Operation of UAS within National Airspace (Conclusion ATM/SG/7-9)*.

1.2 The Unmanned Aircraft Systems Advisory Group (UAS-AG) of the Remotely-Piloted Aircraft Systems (RPAS) Panel has developed ICAO UAS Toolkit, ICAO Model UAS Regulations, and UAS Traffic Management (UTM) guidance.

1.3 A series of ICAO COVID-19 series of webinars included several webinars on UAS operations, regulation and UTM systems.

1.4 The ICAO DRONE ENABLE 2023 Symposium will be held in Montreal, Canada, from 05 to 07 December 2023.

2. DISCUSSION

ICAO UAS Toolkit, UAS Regulatory Guidance, UTM Framework and Webinars.

2.1 The ICAO UAS Toolkit is a repository of information provided by ICAO, its member States and other experts on the management of UAS that fall outside the scope of SARPS and PANS developed for Remotely-Piloted Aircraft Systems (RPAS) operations. The Toolkit provides background information, best practices, information on UAS regulations, training, education and authorization, and examples of current State regulations.

2.2 The UAS Toolkit is available at:

<https://www.icao.int/safety/UA/UASToolkit/Pages/default.aspx>.

2.3 The UAS Advisory Group of the RPAS panel also developed the *ICAO Model UAS Regulations*, which provide a template for member States to implement or to supplement their existing

UAS regulations. The ICAO Model UAS Regulations are available at:

<https://www.icao.int/safety/UA/Pages/ICAO-Model-UAS-Regulations.aspx>

2.4 The *Unmanned Aircraft Systems Traffic Management (UTM) – A Common Framework with Core Principles for Global Harmonization Edition 3* document provides a framework and core capabilities of a typical UTM system. Its aim is to provide an overarching framework for such systems, and proposes a common set of guiding principles and enabling actions.

2.5 The UTM framework document is available at:

<https://www.icao.int/safety/UA/Documents/UTM%20Framework%20Edition%203%20Post%20Editorial.pdf>

2.6 The ICAO COVID-19 Series of webinars includes recorded webinars on the following UAS-related topics:

- Enabling UAS Operations ([link](#));
- Enabling UAS Operations Part II – Panel Discussion ([link](#));
- Introducing ICAO UAS Model Regulations ([link](#));
- UAS Beyond Visual Line of Sight Operations – for Regulators ([link](#)); and
- ICAO UAS Traffic Management (UTM) Framework ([link](#)).

ICAO Global Unmanned Aviation Events

2.7 ICAO has conducted global symposia on RPAS and/or UAS each year since 2016. The most recent were the RPAS 2022 and DRONE ENABLE 2022 events held in November 2022. Presentations and videos are available through the following links:

<https://www.icao.int/Meetings/RPAS2022/Pages/default.aspx>

<https://www.icao.int/Meetings/DRONEENABLE2022/Pages/default.aspx>

2.8 The DRONE ENABLE 2023 symposium will be held from 5 to 7 December 2023 in Montreal, Canada. Further details are available at:

<https://www.icao.int/Meetings/DRONEENABLE2023/Pages/default.aspx>



ICAO Regional Unmanned Aviation Events

2.9 The Unmanned Aircraft Systems – Remotely-Piloted Aircraft Systems Implementation/Regulation Webinar was held by video teleconference from 9 to 10 May 2023. Presentations made by China, Hong Kong China, Japan, Republic of Korea, Singapore and ICAO are available through the following link:

<https://www.icao.int/APAC/Meetings/Pages/2023-Unmanned-Aircraft-Systems-%E2%80%93-Remote-Piloted-Aircraft-Systems-Implementation-Regulation-Webinar-for-the-APAC-Region.aspx>

Asia/Pacific Regional Guidance

2.10 The *Asia/Pacific Regional Guidance for the Regulation and Safe Operation of UAS within National Airspace*, developed by the APAC UAS Task Force (APUAS/TF) and approved by ATM/SG/7, is available on the ICAO Asia/Pacific Regional Office eDocuments web-page (ATM Section) at:

<https://www.icao.int/APAC/Pages/eDocs.aspx>.

2.11 The regional guidance provides background information, principles and regulatory considerations for the development of State regulations for the operation of UAS within national airspace systems. The guidance supports the relevant elements of the Asia/Pacific Seamless Air Navigation Services (ANS) Plan.

2.12 The scope of the guidance material was intended to include UAS operations that do not fall within the scope of the Remotely Piloted Aircraft Systems (RPAS) Panel, i.e. that are not RPAS operated in accordance with the relevant Standards and Recommended Practices (SARPS) in Annexes to the Convention on International Civil Aviation, by a licensed remote pilot using a certified remote pilot station.

2.13 The APAC Regional UAS – RPAS Implementation/Regulation webinar held in May 2023 was informed that the APAC Regional Guidance was developed when global guidance was still not available, or was under development. Subsequent to ATM/SG/7 approving the regional guidance the UAS Advisory Group of the RPAS Panel developed global guidance as mentioned in paragraphs 2.2. to 2.5, above.

2.14 Noting the availability of global guidance, the meeting is also invited to note that there are differences between the global and regional guidance. ICAO therefore proposes that the regional guidance should be withdrawn, and the global guidance provided by the RPASP UAS-AG be used.

Draft Conclusion ATM/SG/11-X: Withdraw Regional UAS Guidance

That, noting the availability of UAS guidance prepared by the UAS Advisory Group of the RPAS Panel, the Asia/Pacific Regional Guidance for the Regulation and Safe Operation of UAS within National Airspace be removed from the ICAO Asia/Pacific Regional Office website, and archived.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note and utilize the information available through the ICAO UAS Toolkit, the ICAO Model UAS Regulations, and the UTM framework;
- c) Agree to the Draft Conclusion withdrawing the APAC Regional UAS Guidance; and
- d) participate in the Drone Enable 2023 Symposium.

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Draft Conclusion ATM/SG/11-X: Withdraw Regional UAS Guidance		
What: That, noting the availability on the ICAO website of UAS guidance prepared by the UAS Advisory Group of the RPAS Panel, the Asia/Pacific Regional Guidance for the Regulation and Safe Operation of UAS within National Airspace be removed from the ICAO Asia/Pacific Regional Office website, and archived.		Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To avoid providing two sets of differing guidance material	Follow-up: <input type="checkbox"/> Required from States	
When: 6-Oct-23	Status: Draft to be adopted by Subgroup	
Who: <input type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:		

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