ICAO UAS Advisory Group Update

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Introduction

- UAS-AG Background
- DE/3 RFI Process
- UTM Framework – Edition 1
- UTM Framework – Edition 2
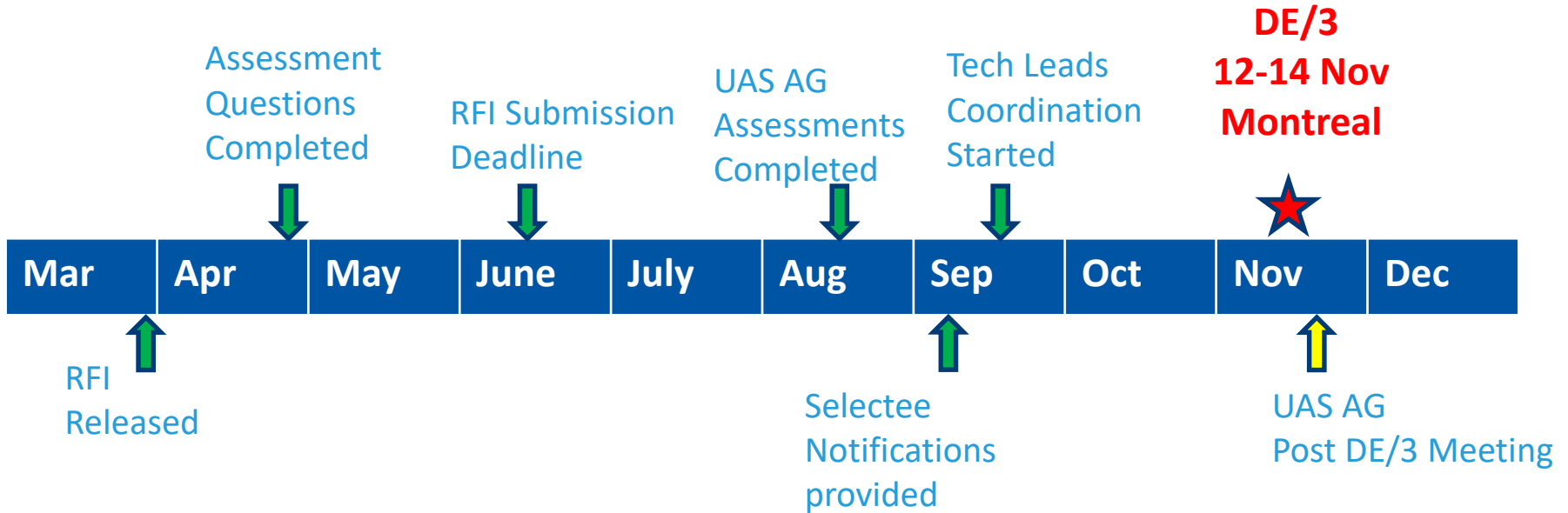- ICAO UAS Toolkit Update
- ICAO 1090/ADS-B State Letter

UAS-AG Background

- Formed in 2015 with the intent of:
  - sharing best practices
  - assisting States with development of guidance material for UAS operations
  - expediting development of provisions to be used to regulate UAS
- 39th Assembly, requested that ICAO develop a global baseline for UAS provisions and guidance material.
  - Includes the ongoing work to address UTM
- Includes States, operators, researchers and academia

DE/3 RFI Process

DE/3
12-14 Nov
Montreal

Assessment
Questions
Completed

RFI Submission
Deadline

UAS AG
Assessments
Completed

Tech Leads
Coordination
Started

Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec

RFI
Released

Selectee
Notifications
provided
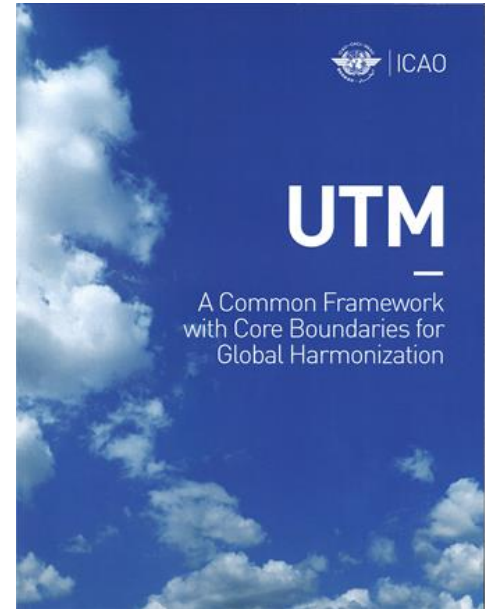
UAS AG
Post DE/3 Meeting

RFI Summary

- 42 Papers Received

- 19 Selected

- Some problem statements were better addressed

- Assessments completed - 15 Aug

- Selectees notified - early Sept

UTM Framework – Overview

- A framework and core capabilities of a "typical" UTM system

- High level UTM requirements/considerations

- Not a technical solutions document

UTM Framework – Objectives

- Foster common framework and harmonization of core UTM principles

- Maintain safety and minimize disruption to existing aviation system

- Support technological developments in UTM and UAS

- Provide safety-focused recommendations for UTM system development

- Address security and environmental risks

- Enable stakeholders to grow safely and efficiently

UTM Framework – Edition 1

- Overall aim to provide:
  - Principles & Building Blocks
  - Services to be provided
  - Gaps/Issues/Challenges
  - Complimentary activities

- Specific focus on:
  - Registration, identification and tracking
  - Communications systems
  - Geofencing-like systems
  - Potential architectures

UTM Framework – Edition 2

- Overall aim to address
  - The potential merging and/or transitioning between UTM and ATM systems.

- Specific focus on:
  - UTM-ATM Boundaries and Transitions
  - Essential Information Exchange between ATM and UTM

ICAO UAS Toolkit

- Aim
  - Provide States and stakeholders with high level guidance material to assist with the regulation and safe operations of small UAS.

- Topics Addressed
  - Regulating UAS
  - Training and Education
  - Authorizations
  - Recreational Operations
  - State Regulations
  - UAS Tools
  - Rules or Guidance

UAS Toolkit Update

- Ensure it remains relevant and current

- All are encouraged to review and provide comments or inputs

- Updates
  - Controlled/uncontrolled airspace
  - Addressing new advancements
  - Including UAS planning tools from various States

ICAO 1090/ADS-B State Letter

- Addressing
  - Saturation of 1090 frequency ban
  - Limited number of 24 bit identifiers

UAS-AG Future Efforts

- Activities
  - UTM Framework Edition-3
  - DE/4 Problem Statements
  - Draft DE/4 RFI
  - RFI Submission Reviews

- Meetings
  - 15 Nov 2019
  - Winter 2020
  - Spring 2020
  - Summer 2020
  - DE/4 Fall 2020

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THANK YOU