



# EASA

European Aviation Safety Agency

## Building a regulatory framework for 'remote aerodrome ATS'

RMT.0624 & ED Decision 2019/004/R

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# Regulatory approach

- Requirements on aerodrome ATS provision exist  
-> still applicable
- Requirements for the assessment of changes to functional systems exist -> still applicable
- Conclusion:  
*Provide/develop a regulatory framework and guidance helping ATS providers to fulfil the existing applicable regulations also in a “remote” environment.*



# RMT.0624 – Objectives

- EASA Rulemaking Task initiated 2014 to:
  - **Address SESAR developments**
  - Address expectations on EASA from the ATM community
  - **Support implementation initiatives within Europe (and worldwide)**
  - Support technological development
  - **Support a cost-efficient and proportionate ATS**
  - **Facilitate harmonised implementation and provide a level playing field**
  - Support and recognise standardisation activities undertaken by EUROCAE



# RMT.0624 – Set-up & deliverables

## ➤ Phase 1, 2014-2015

- Scope limited to 'single mode of operation' and mainly 'low density aerodromes'
- Completed summer 2015 via the publication of:
  - **EDD 2015/014/R**: 'GM on the implementation of the RT concept for single mode of operation'
  - **EDD 2015/015/R**: AMC & GM to Reg. (EU) 2015/340 'Requirements on ATCO Licensing regarding remote tower operations'

*(EDD = EASA Executive Director Decision,*

*GM = Guidance Material,*

*AMC = Acceptable Means of Compliance)*



# RMT.624 – Set-up and deliverables

## ➤ Phase 2, 2016-2018

- RMT.0624 re-launched in summer 2016
- Extended scope to expand into more complex mode of operations, taking into account:
  - the latest SESAR results + other available research/validation results
  - gained operational experiences
- Consider adoption of industry standards (EUROCAE ED-240, ED-240A when available).
- Notice of Proposed Amendments (NPA)2017-21 was published: **20 Dec 2017**
- Public consultation closed: **3 April 2018**
- **EASA ED Decision 2019/004/R and CRD 2017-21 issued on 19 February 2019**



# RMT.0624 – Rulemaking Group

- This RMT has been supported by a RMG  
(Full group composition published on [EASA webpage](#))
- Representation from a broad variety of stakeholders from around Europe + US
- With draft EPAS 2020 - 2024, RMT.0624 is proposed to be maintained
- New ToR expected to be published by Q4 2019



- Providers (CANSO 2, Hungarocontrol 1)
- National authorities (Swe, Nor, Ger)
- Airport operators (ACI Europe)
- Unions (ETF & ATCEUC)
- Eurocontrol
- Observers (DFS, FAA, ASD)
- EASA (Secretary)



# Outcome of NPA public consultation

- NPA 2017-21 was open for public consultation from 20 Dec 2017 to early April 2018.
- In total 832 comments from 46 stakeholders/individuals received.
- Comments review **completed**.
  - *Three review meetings with the rulemaking group were held.*
- **ED Decision 2019/004/R and CRD 2017-21 issued on 19 February 2019**



# Scope of the ED Decision

- Generic guidelines (i.e. not limited to specific operational applications/contexts)
- Main target audience:
  - ATS providers & aerodrome operators,
  - NSAs/Competent Authorities,
  - *Also a foreseen interest from the manufacturing industry*
- Addressing operational, procedural, technological and human resources aspects of remote aerodrome ATS and the management of change, in order to facilitate:
  - safe operations,
  - Fulfillment of ATS objectives,
  - a harmonised implementation throughout EASA Member States and provide a level playing field for stakeholders.





# ED Decision 2019/004/R structure

- ED Decision 2019/004/R repeals ED Decision 2015/014/R
- Consists of two main parts:
  - Annex I - Guidance Material on 'Remote Aerodrome Air Traffic Services (ATS)'
    - Extended in scope, covering also more complex mode of operations (i.e. 'busier/larger airports', 'multiple mode of operation' and 'contingency solutions') and the use of new technical enablers.
    - Enhanced/improved by taking into consideration gained operational experiences and new R&D results.
  - Annex II - GM\* & AMC\*\* to the ATCO training and licensing Regulation (2015/340)
    - An updated set of GM & AMC, to replace the existing corresponding GM & AMC.
    - Refined and extended in scope to cover also e.g. multiple mode of operation.

*\* GM = Guidance Material, \*\* AMC = Aceptable Means of Compliance*



# Related regulatory/standardisation activities

## ➤ ICAO

- Amendment 8 to Doc 4444 (PANS-ATM), which fully enables remote aerodrome ATS, in force since 8 November 2018.
- The amendments include, inter alia;
  - A new definition for 'visual surveillance/presentation system'.
  - A new chapter 7.1.1.2.1 stating that visual observation can be achieved through direct out-of-the-window observation OR through indirect observation utilizing a visual surveillance system.
  - A new "Note" referring to the EASA Guidance Material, thereby giving it global status.
- ICAO ATM Operations Panel (ATMOPSP) has reinitiated the 'remote ATS' Working Group, for the development of ICAO guidelines.
  - Several Working Papers related to remote/digital ATS submitted to AN-Conf/13.
  - AN-Conf/13 likely to provide the basis for this work (ToR yet to be defined).



# Related regulatory/standardisation activities

## ➤ EUROCAE

### ➤ WG-100 "Remote and Virtual Towers"

### ➤ ED-240 published September 2016:

- First 'Minimum Aviation System Performance Specification (MASPS) for Remote Tower Optical Systems'
- Specifying the end-to-end performance of the optical (camera) system
- Did not consider augmentation functions or other sensors (then cameras)

### ➤ ED-240A published October 2018:

- Extension of ED-240 to include "visual target tracking" technologies
  - *Typical use cases: highlighting of moving objects in the visual presentation & PTZ/binocular camera automatic object following*

### ➤ To be followed by a further extension, ED-240B (as so far planned):

- Inclusion of "radar tracking", i.e. information from non-optical surveillance systems/sensors
  - *Typical use case: surveillance system derived position labels (aircraft & vehicles) overlaid in the visual presentation*
- Anticipated late 2020



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## THANK YOU VERY MUCH FOR YOUR ATTENTION

## QUESTIONS?

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