

# Collaboration, coordination and harmonisation in the post-COVID-19 Era

ICAO CAPSCA EUR/MID 11<sup>th</sup> meeting  
25.04.2024

Dr. Med. Cristian PANAIT  
EASA Medical Expert



**Your health safety is our mission**

# Presentation Overview

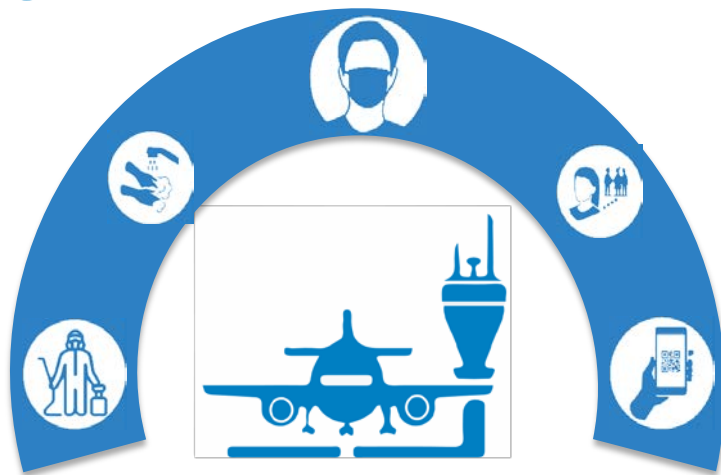
Striving for a harmonised EU response

EASA research activities

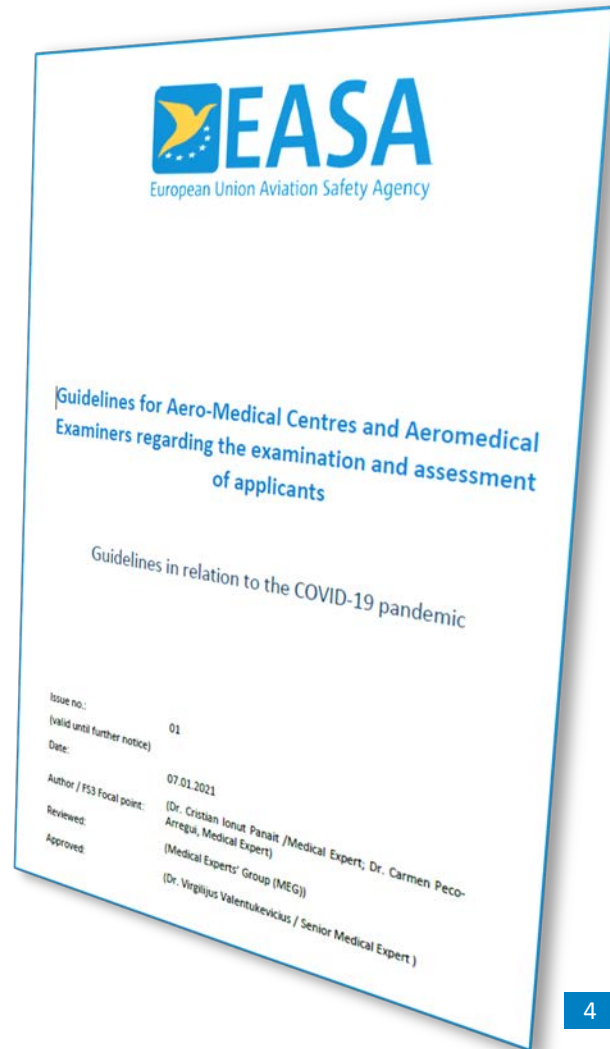
Prevention of international spread

**Striving for a harmonised EU response**

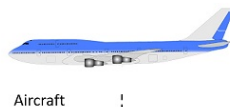
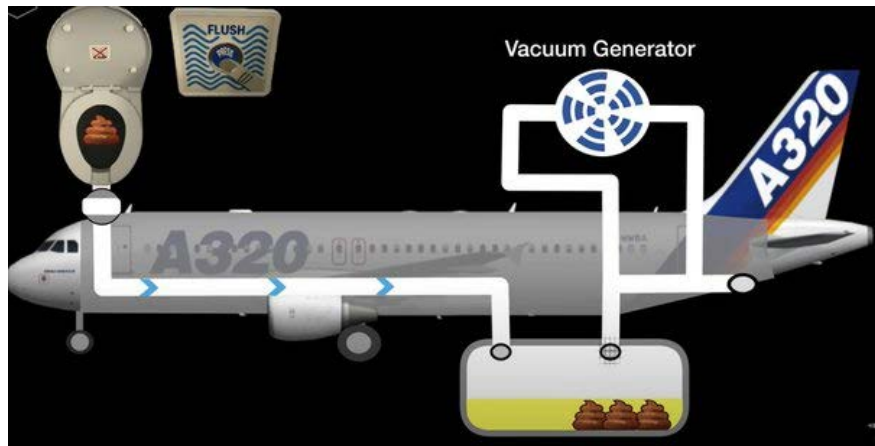
# Purpose



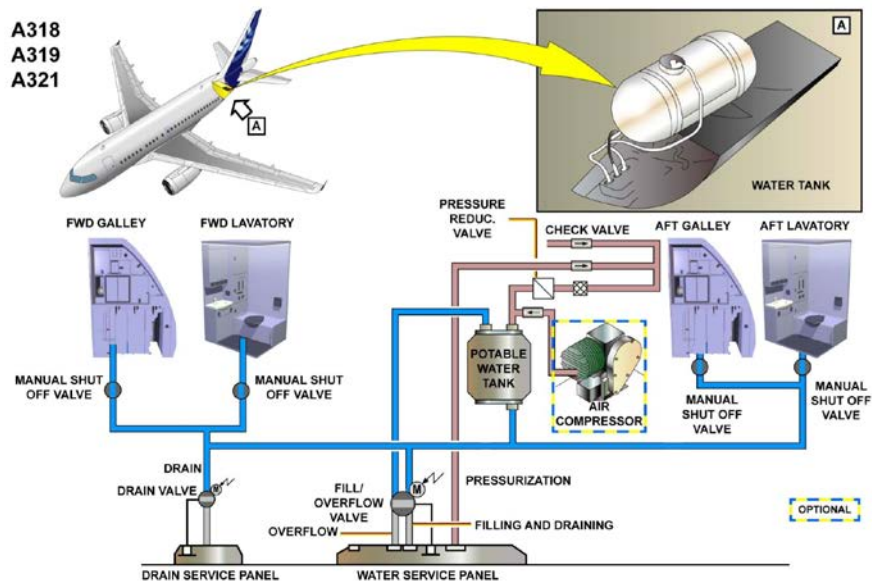
- ➔ Need to ensure **safe and secure operations** and **restore public confidence**
- ➔ Need to ensure a **harmonised EU-wide/world-wide approach** to reduce complexity for operators and travellers
- ➔ **Coordination, communication** and **planning** essential
- ➔ EASA-ECDC AHSP adopted as means of compliance for ICAO CART in Europe



# Wastewater testing



City Sewer



# Return to Normal Operations project

## from WS4 to Health Safety project



- ➔ Aviation activities have resumed through normal mechanisms – rulemaking, oversight, exemptions, safety promotion, etc.
- ➔ RNO project schedule to close 1<sup>st</sup> January 2022 – a Health Safety project will continue to manage the health related activities and documents.

## EASA research activities

# EASA-managed research projects from Horizon funds



37 projects in research sub-portfolio

6 closed

24 ongoing

7 in preparation

## Some of EASA Research projects

### RWYMT, TRIPLE-ONE

Enhancing runway safety standards through new scientific evidence

### FS, MGB, VRS

address rotorcraft safety standards with research on solutions of previous accidents

### MLEAP

build up expertise for enabling the approval of safety-relevant artificial intelligence applications

### NOISE, EMISSIONS, MbM

Advance sustainability through enhanced regulatory environmental tools

### MODEL-SI, VIRTUA, DATAPP

Research on regulatory aspects to enable digital transformation

### MESAFE, CaVD, DM

Addressing and enhancing health standards of critical aviation safety personnel

MED projects starting **HEALTH, VISION**



# New Research Studies - HEALTH

→ HEALTH – Aircraft Surfaces

→ KoM– 20.09.2024

→ 1<sup>st</sup> TM – 27.11.2024

→ 36 month



# HEALTH - *New health safety measures in aircraft*

## → DLR

→ Project manager: **Daniel Schmelling**

Technical lead: **Stefan Leuko**

→ Supported by **Lufthansa** and **AIRBUS**



Deutsches Zentrum  
für Luft- und Raumfahrt

## → EASA

→ Project manager: **Joana Gomes**

Technical lead: **Thomas Ohnimus**

Lead medical expert: **Pedro Caetano**

<https://www.easa.europa.eu/en/research-projects/health>

# HEALTH – Scope



- The spread of infectious agents in the aircraft environment is much lower than in other environments.
- This research project is expected **to analyse scientifically proven solutions to reduce the spread of airborne infectious agents within the aircraft environment.**
- The objectives of the project are to investigate the possibilities to further reduce the spread of a series of airborne infectious agents (viruses, bacteria, fungi) within the aircraft environment by improving filtration systems, recirculation systems and cabin airflow.

# Expected outcome

- This research project is expected to analyse scientifically proven solutions to reduce the spread of airborne infectious agents within the aircraft environment. In addition, risks associated with various disinfection and cleaning methods implemented by operators is a growing concern to aircraft manufacturers and many other parameters remain unquantified and will need an in-depth assessment, not only for initial airworthiness aspects but also for continued airworthiness and maintenance.
- The expected outcome of the project is to provide scientific evidence to support regulatory decision making, as well as an implementation roadmap for the Agency and Industry. The project shall take into consideration retrofit solutions, as well as solutions applicable to new aircraft cabin design.

# Required Output

- To adequately recommend regulatory changes , the project will assess the effectiveness of several solutions to prevent the spread of respiratory virus within the aircraft cabin, and investigate the potential constraints for their permanent use and potential negative impact on materials and/or crew, with focus on:
- Filtration of 70 -150 nm nanoparticles in aircraft
  - Review of effective chemical and non-chemical disinfection methods that are safe to use in an aviation environment on short and long term
  - Safe use of microbial repellent materials in cabin design, namely identification and testing of new anti-microbial materials that could be used in new aircraft design
  - Assessing the potential of spread of microorganisms from a contaminated passenger onboard via inanimate surfaces

## Prevention of international spread

# Prevention of international spread

## → Travel measures

- Closing borders – mathematical models as well as COVID and pre-COVID experience shows closing borders may, at most, delay the importation of pathogen agent (virus/bacteria) by one – maximum 2 – weeks, depending of course of the type of transmission and incubation period
- Post arrival quarantine – may be useful, however, quarantine of all incoming passengers is highly resource consuming and raises the risk of other medical conditions both physical and mental.
- Entry screening (screening upon-arrival) – very limited efficacy, especially with new pathogens. Highly depended on test methods and on presence of symptoms
- Exit screening ( screening before leaving the country of origin) – limited efficacy, especially with new pathogens and when travellers are highly motivated to leave the endemic area. Efficacy may be improved by thorough contact tracing and monitoring in the country of origin
- Information to passengers – Operators together with public health authorities should provide information to all incoming passengers
- Post arrival monitoring of passengers
- Access to passenger details – personal contact details + travel details



# ICAO Annex 9

- Touches many aspects related to public health such as:
  - Disinsection and disinfection of aircraft
  - Certificates of vaccination
  - National Facilitation Committees
- Standard 8.19
  - Each Contracting State shall establish a National Air Transport Facilitation Committee, and Airport Facilitation Committees as required, or similar coordinating bodies, for the purpose of coordinating facilitation activities between departments, agencies, and other organizations of the State concerned with, or responsible for, various aspects of international civil aviation as well as with airport and aircraft operators.



# Health Safety project

- Preparedness planning & Facilitation
  - Gradual escalation and de-escalation strategies to mirror the risk level and to allow the industry to manage all risks
  - Clear communication as early as possible
- Cultivating cross domain and international harmonisation of measures
  - EASA ECDC memorandum of understanding
  - ICAO-WHO memorandum of understanding
  - Regular meetings between ICAO, EASA, FAA, ECDC & US-CDC
  - CAPSCA meetings



# Harmonisation is the key

- Cross-domain and international harmonisation of measures
- Mutual recognition of measures
  - EASA/ECDC AHSP - means of compliance for CART in Europe
- Avoid fraud and abuse in a coordinated manner
  - EU Digital COVID certificates – vaccination/testing/recovery
- Research
- Preparedness planning & Facilitation
  - Facilitating contact tracing
    - Not to burden the operators
    - Be accessible at any time
  - Compliant with GDPR



**Thank you for your attention!**



# Questions

For further information:  
<https://www.easa.europa.eu/the-agency/coronavirus-covid-19>

<https://www.ecdc.europa.eu/en/covid-19>

**Your safety is our mission.**

[easa.europa.eu/connect](https://easa.europa.eu/connect)



***Your health is also our mission.***