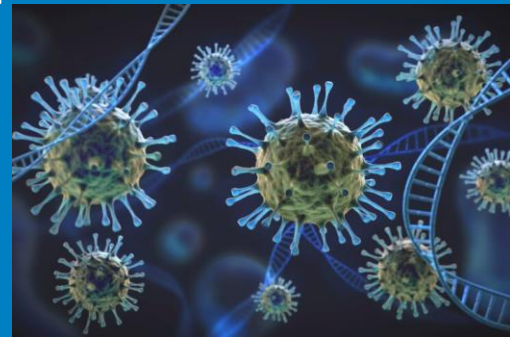


Collaboration, coordination and harmonisation in the post-COVID-19 Era

ICAO CAPSCA EUR/MID #12 meeting
20.05.2025

Dr. Med. Cristian PANAIT
EASA Medical Expert



Your health safety is our mission

Remembering CAPSCA 2014

Many thanks to Egypt, CAA Egypt and ICAO MID!





Guidelines development

Article 91 – “EASA shall, within its field of competence, contribute to a timely response to and mitigation of aviation crises, in coordination, with other appropriate stakeholders”

Participation in specialised bodies

- ICAO CAPSCA
- MEG

Crisis planning and management

- EACCC
- EC response to PHEs
- EU Healthy Gateways

Institutional relations

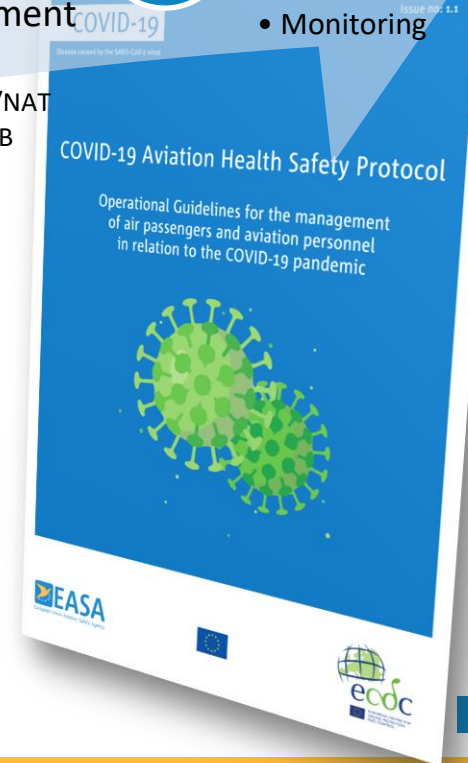
- EASA visit to DG SANTE
- DG SANTE visit to MAB
- Health Security Committee
- Integrated Political Crisis Response (IPCR)

Guidelines development

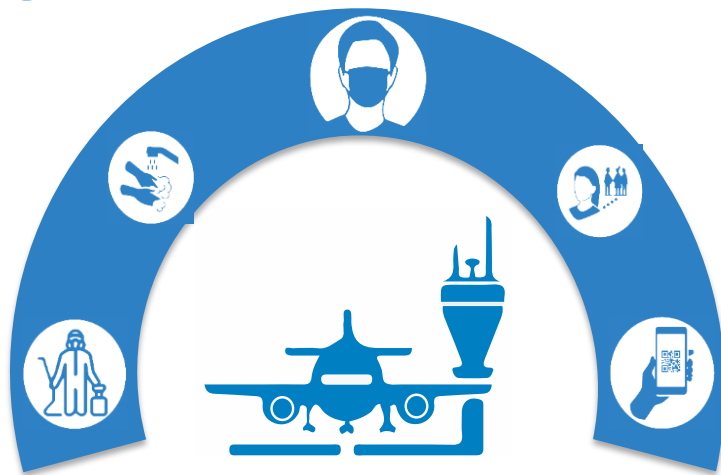
- ECDC
- ICAO EUR/NAT
- MAB & SAB
- MEG

Publication

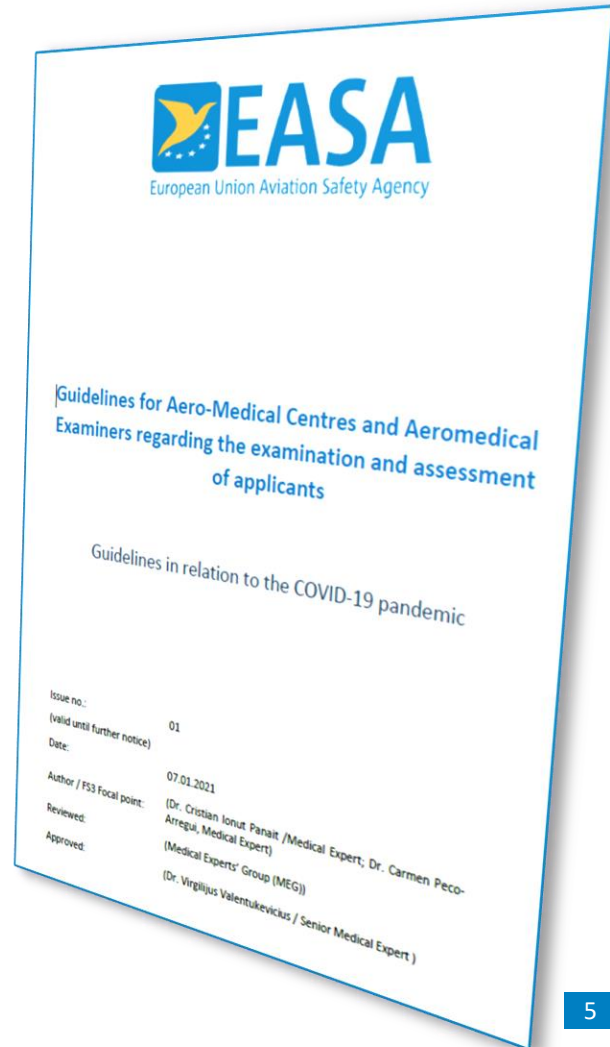
- Promotion
- Liaison
- Monitoring



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



EASA charter programme

Monitoring implementation

- ➔ 53 airport operators (123 reporting airports) and 55 airlines have signed the Aviation Industry Charter, covering around 50% of European air traffic
- ➔ Briefing and [training modules](#) as well as [checklists](#) for Aviation Authorities inspectors on implementation monitoring have been published by EASA
- ➔ Any deficiencies are identified and signaled to the respective organisations and [corrective action](#) is requested
- ➔ The Charter as a pledge to implement the recommendations of EASA and ECDC AHSP remains in force. [But the reporting mechanism will stop.](#)



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 1st January 2022 – a Health Safety project will continue to manage the health related activities and documents.

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
- Contact tracing
- Access to passenger details – personal contact details + travel details



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 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



HEALTH - *New health safety measures in aircraft*

This research project is expected to analyse scientifically proven solutions to reduce the spread of airborne infectious agents within the aircraft environment.

Performed by:

- DLR
- Supported by Lufthansa and Airbus



Timeline:

- 09/2024 to 09/2027



Objective

→ *Reducing Infectious Agent Transmission in Aircraft Cabins*

Investigate means to limit spread of:

- Viruses, bacteria, fungi, others.

Transmission modes:

- **Contact** with contaminated surfaces
- **Inhalation** of airborne particles

Enhance:

- **Passenger & crew safety**
- **Air transport system resilience**



HEALTH – New health safety measures in aircraft



Contractor

Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)

Consortium Members

None

Contract period

02/09/2024 – 01/09/2027

Budget

1.099.709,18€

Scan the QR code or click [here](#) to visit the webpage of this project



Main objectives:

The main objective of the project is to investigate the possibilities to further reduce the spread of a series of infectious agents (viruses, bacteria, fungi) within the aircraft environment. Those agents are spread through contact with contaminated surfaces of cabin interior components (cockpit, lavatories, galleys, seats, etc.) or by inhalation.

In addition, risks associated with contact with contaminated surfaces will be addressed, including the impact that various disinfection and cleaning methods that are implemented by operators may have not only on initial-airworthiness aspects but also on continued-airworthiness aspects.

This research project will analyse scientifically proven measures to reduce the spread of infectious agents within the aircraft environment.

To adequately recommend regulatory changes, the project will report on the assessed effectiveness of several measures to prevent the spread of pathogens within the aircraft cabin, on the potential constraints for their permanent use, as well as on the potential negative impact on materials and/or crew with focus on:

- assessment of the potential of spread of microorganisms from a contaminated passenger onboard;
- improvement of air filtration systems, recirculation systems and cabin airflow, including distribution of individual air supply nozzles;
- introduction of surface treatments (e.g. microbe-repellent materials) that could be used in aircraft interior design;
- review of the efficacy of chemical and non-chemical cleaning and disinfection methods, and of the associated impact on airworthiness of cabin interior materials; and demonstration of possibilities to ensure an adequate/sufficient hygiene level for the prevention of public-health risk.

Impacts & benefits

The anticipated 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.

This project will also contribute to the preparedness of the air transport system to achieve a strong resilience to infectious disease outbreak or high-threat pathogen events, which is an essential enabler for the passenger and crew safety as well as for the sustainability of the air transport sector.

Expected Outcome

→ *Deliverables to Support Regulatory Action*

- Scientific **evidence base** for EASA decision-making;
- **Implementation roadmap** for authorities & industry;
- Retrofit + new cabin design recommendations;
- Propose solutions that ensure compliance with EASA Certification Specs (CSs)

Required Outputs

→ Key Focus Areas & Research Requirements

- Risk analysis of surface contact transmission

Effectiveness of:

- Air filtration, circulation, individual nozzles
- Microbe-repellent surfaces
- Chemical & non-chemical disinfection

Evaluation of:

- Impact on airworthiness (initial & continued)
- Material degradation & crew exposure risks

Recommendations to maintain hygiene & minimize public-health risks

HEALTH – New health safety measures in aircraft



Further reading

Led by DLR, the research project will be carried out in five tasks:

- In a first phase, the project team will perform a **literature review and gap analysis**. This work will provide a thorough understanding of the current state of knowledge and measures related to preventing the spread of pathogens within the aircraft cabin, and identify areas where additional research or measures are needed to better protect public health during air travel.
- An **identification and assessment of spread of contagious diseases** will then be carried out. This task will focus on identifying the specific areas and procedures that may contribute to the spread of contagious diseases onboard an aircraft.
- Based on these results, as well as on the measures identified in the first task, at least three (3) measures will be tested and evaluated. The overall aim of this **testing phase** is to achieve effective, safe and durable measures that can be implemented in aircraft cabins to enhance the health safety of passengers and crew.
- In task four (4), the project team will study the **implementation of the identified measures** related to preventing the spread of pathogens within the aircraft cabin, described in the previous work packages, in new aircraft design as well as retrofit measures for existing aircraft. The specific objective is to identify the most effective measures that can prevent the spread of infectious agents (viruses, bacteria, fungi) within the aircraft environment, while considering factors such as certification, costs, feasibility, and passenger safety.
- Lastly, the project team will develop a **final report and recommendations** for implementing the proposed measures related to preventing the spread of pathogens within the aircraft cabin, in aircraft design, based on the results of the previous tasks.

Relevant stakeholders will be consulted throughout the project, and project reports will be made available through the EASA website.

This project is part of the portfolio of EASA managed research projects funded under the European Research Programmes. Projects under this portfolio address research needs of civil aviation authorities and are geared to generate mid-term benefits after the successful completion of the project to enhance safety, security and sustainability.



Deliverables

- D1.1 & D1.2 Comprehensive Analysis of Pathogen Transmission and Mitigation Strategies in Aircraft Cabins: Airflow, Surfaces, and Disinfection – published - see the link below:
- [D-1.1 Comprehensive Analysis of Pathogen Transmission and Mitigation Strategies in Aircraft Cabins](https://www.easa.europa.eu/en/research-projects/health)
- <https://www.easa.europa.eu/en/research-projects/health>



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



Your health is also our mission.