Biosafety for Air Transport

A Roadmap for Restarting Aviation

v.3

Restarting aviation

Almost every challenge in aviation requires a team effort to solve it. Today we face the biggest challenge in commercial aviation's history: restarting an industry that largely has ceased to operate across borders, while ensuring that it is not a meaningful vector for the spread of COVID-19.

Meeting this challenge will mean making significant changes across the arc of the air travel experience: pre-flight; at the departure airport; onboard; and post-flight.

- It will require governments to assume broad new responsibilities in terms of assessing and identifying traveler health risks, as governments did for security after 9.11;
- Airlines and airports will need to introduce and adapt processes and procedures to minimize contagion risk in the airport and aircraft environments;
- Passengers will need to be empowered to take more control of their travel journey, including responsibly assessing their own level of health risk before a journey.

This document represents the airline industry's effort to identify a roadmap to resuming operations based on our longstanding commitment to safety as our highest priority. **It is aligned with the International Civil Aviation Organization's (ICAO's) global provisions for restoring air connectivity**. These are contained in: *Takeoff: Guidance for Air Travel through the COVID-19 Public Health Crisis*, which offers an authoritative and comprehensive framework of risk-based temporary measures for air transport operations.

Success depends on governments rapidly implementing the ICAO guidelines in partnership with other stakeholders in the travel chain, most prominently airlines and airports.

The recommendations presented here are outcome-based, not prescriptive. The recommendations draw on the current understanding of how COVID-19 is most commonly transmitted, and therefore what are the risks needing to be mitigated and what are the best solutions to do this effectively. Because there is no silver bullet solution at present, we recommend a layered approach for the initial restart, as is already done with safety and security, while avoiding unnecessary redundancies and ineffective remedies. As improved risk mitigation methods become available, more burdensome and less effective measures should be replaced.

We believe that the Biosafety for Air Transport roadmap outlines a risk-based approach that assures that aviation continues to be the safest form of long distance travel the world has known, and that it does not become a meaningful vector for the transmission of COVID-19.

This roadmap is guided by the following principles:

- All measures should be outcome based, supported by scientific evidence and a robust fact-based risk assessment;
- Health screening measures should be introduced as upstream as possible, to minimize risk of contagion in the airport environment and assure that most passengers arrive at the airport ready to travel. Any measures that need to be applied during the travel process should be applied prior to departure rather than on arrival;
- Collaboration is vital:
  - Among governments to implement internationally consistent, mutually accepted measures is essential to restoring air connectivity and passenger confidence in air travel;
  - Between governments and industry, particularly to ensure the practicable development and implementation of operational measures.
- Measures should only be in place for as long as deemed necessary; all measures should be re-evaluated under a fixed schedule. When more effective and less disruptive measures become available, they should be implemented at the earliest opportunity and defunct measures removed;
- Existing roles and responsibilities of governments, airlines and airports should be respected in implementing the response to COVID-19.

Successfully restarting air passenger travel while restoring confidence in the safety of air travel are vital prerequisites to enabling the global economy to recover from COVID-19. In normal times, aviation delivers US$2.7 trillion in global GDP contribution. Every one of the 25 million employees in the airline industry helps to support up to 24 other jobs in the broader economy. More than a third of global trade by value moves by air.

Airlines are providing irreplaceable services in the fight against COVID-19, transporting critical medical supplies—including Personal Protective Equipment (PPE)—and pharmaceuticals. When the crisis ends, aviation needs to be ready for another role—helping to restore battered economies and lift people's spirits through the power of travel. We hope this roadmap is a useful tool in that effort.

The passenger experience

Temporary biosafety measures

Pre-flight

Additional Passenger Information

We foresee the need to collect more detailed passenger information which can be used for health information and tracing purposes, in line with applicable data privacy protection rules.

Where possible, the data should be collected in electronic form, including web applications and in advance of the passenger arriving at the airport including through eVisa and electronic travel authorization platforms.

As per ICAO's recommendation, where contact tracing is implemented, interaction between passengers and governments should be made directly though government portals. Using internet-based technology will allow the use of a wide range of devices for the data capture (computers, laptops, tablets, mobile phones, etc.).

Departure airport

Airport terminal access should be restricted to workers, travelers and accompanying persons in situations such as for passengers with disabilities, reduced mobility or unaccompanied minors.

Temperature screening, where mandated by the relevant authorities, smart thermal cameras should be installed at entry points to the terminal building to scan the temperature of multiple passengers rapidly and unobtrusively. The screening needs to be carried out by professionally trained staff who can decide if a passenger is fit to fly or not. In addition, the screening staff need to have all the required equipment at their disposal.

Physical distancing needs to be implemented according to the local rules and regulations. As a minimum, IATA recommends ranges from 1-2 meters (3-6 feet). In conjunction with the local airport authority, the passenger flow through the terminal - check-in, immigration, security, departure lounge and boarding – needs to be modified to ensure physical distancing. Airports Council International (ACI) has published examples of this.

Use of masks and PPE: Guidance of the local health authorities needs to be followed. IATA however recommends the use of face coverings for passengers along with suitable PPE for airline and airport staff.

Cleaning and sanitizing of equipment: In observance of local rules and regulations, airlines, airports and governments need to cooperate to ensure that equipment and infrastructures are sanitized and hydroalcoholic gel is easily made available. The frequency of the sanitizing should be established, communicated, and appropriate resources need to be put in place to enforce it. This applies to such items as carts, trolleys, e-gates, self-service kiosks, fingerprint readers, wheelchairs, trays, used medical masks disposal container, on-board equipment, etc.

COVID-19 testing: The industry supports the use of testing. However, indications from the medical community are that reliable testing with fast results

is not yet available. An effective test that could be applied on entry to the terminal would enable the airport environment to be considered as 'sterile'. Therefore, this is a measure which needs to be incorporated into the passenger process as soon as an effective test, validated by the medical community, has been developed.

Immunity passports: In principle, we believe that immunity passports could play an important role in further facilitating the restart of air travel. If a passenger could be documented as having recovered from COVID-19 and thus as being immune, they would not need protective measures such as face cover, temperature checks, etc., during the travel process. However, the medical evidence regarding immunity from COVID-19 is still inconclusive, so immunity passports are not currently supported. At such time as the medical evidence supports the possibility of an immunity passport, we believe it is essential that a recognized global standard be introduced, and that corresponding documents be made available electronically.

Check-in

In order to minimize the time spent at an airport, passengers should complete as much of the check-in process as possible before arriving at the airport. Therefore, IATA suggests that governments should remove any regulatory obstacles to enabling such things as mobile or home printed boarding passes and electronic or home printed bag tags and personal data capture online. Physical distancing should be implemented both at counters and self-service kiosks.

At airports, self-service options should be made available and utilized as much as possible to limit contact at all passenger touchpoints. A general move towards greater use of contactless technology and biometrics should also be pursued.

Self-Bag drop

Where baggage self-service devices are in use, airlines should proactively guide passengers to self-bag drop options to minimize the interactions (physical handover of baggage) between passengers and check-in agents.

Boarding

An orderly boarding process will be necessary to ensure physical distancing, especially once load-factors start increasing. Here good cooperation between the airline, airport and government is vital. Airlines will need to revise their current boarding process to ensure physical distancing. Airports will need to assist in redesigning gate areas and governments will need to adapt any applicable local rules and regulations. The increased used of automation, such as self-scanning and biometrics should be facilitated.

Especially during the early stages of the restart phase, carry-on baggage should be limited to facilitate a smooth boarding process with physical distancing.

Inflight

Based on information we have analyzed, the risk of transmission of COVID-19 from one passenger to another passenger on board is very low. Possible reasons are that customers sit facing forward and not toward each other, seat backs provide a barrier, the use of HEPA filters and the direction of the air flow on board (from ceiling to floor), and the limited movement onboard aircraft once seated add to the onboard protection. As an added protection against possible in-flight transmission, IATA recommends the use of face coverings by travelers in situations where physical distancing cannot be maintained, including in flight. In this regard, it should not be assumed that physical distancing on board (e.g. through blocked seats) would be necessary.

Comprehensive guidelines have been developed for cabin crew that includes the management of a suspected case of communicable disease on board, for which WHO also has aligned guidance. This includes advice for simplified service and pre-packaged catering.

For added passenger comfort, sanitization wipes could be provided to customers to clean the spaces around them and implement procedures to limit movement onboard.

Revised guidelines for aircraft cleaning have been published by IATA, Centers for Disease Control and Prevention and EASA.

Arrival airport

Arrival process

We recognize that current temperature screening methods may not provide sufficient confidence at present. If required, non-intrusive mass temperature screening equipment needs to be used and the screening should be conducted with appropriate social distancing and as efficiently as possible by appropriately trained staff who can safely deal with the possibility of an ill passenger.

All parties at the airport should cooperate to ensure that passengers are clearly informed of the measures that are in place and given clear instructions on what they need to do, if they develop symptoms of COVID-19 after arrival.

Border and Customs Control

Where declarations are required on arrival, governments should consider electronic options (mobile applications and QR codes) to minimize human-to-human contact.

For customs formalities, where possible green/red lanes for self-declarations are recommended. Appropriate sanitary measures must be taken at secondary screening points to protect passengers and staff.

It is suggested that governments should simplify border control formalities, by enabling contactless processes (e.g. reading of passport chips, facial recognition etc.), setting up special lanes, and training their agents to detect signs of unwell passengers.

Possible redesign of immigration halls needs to be coordinated between the airport, airlines and the government.

Baggage collection

All efforts need to be made to provide a speedy baggage claim and ensure that passengers are not made to wait for excessive amounts of time in the baggage claim area. For example, all available belts should be made use of, in order to allow physical distancing.

It will also be important that governments ensure that the customs clearance process is as speedy as possible and that appropriate measures are taken in case of physical baggage inspections to ensure physical distancing.

Transfer screening

Security screening for transferring passengers should take maximum advantage of “one stop-security arrangements”. This relies on mutual recognition of screening measures at the originating airport and eliminates re-screening in the transfer process, thus eliminating a queuing point in the journey. Where this is not possible for all transfer traffic, consideration should be given to specific arrangements among trusted partners.

Where transfer security screening is required, it should follow appropriate social distancing and sanitary requirements as previously described in the departure process.

Where health screening, including temperature checks, may be required the recommendations for the arrival process should be followed.

Conclusion

There is currently no single measure that can mitigate all the biosafety risks of restarting air travel. However, we believe that implementing the above-mentioned range of measures that are already possible represents the most effective way of balancing risk mitigation with the need to unlock economies and to enable travel in the immediate term.

As further clarity is achieved in terms of additional measures such as effective COVID-19 testing and immunity, new measures can be incorporated into the passenger process to further mitigate the risks and further build confidence in air travel, thus taking us further on the journey towards a resumption of ‘normal’ operations.