



International Civil Aviation Organization

Council Aviation Recovery Task Force (CART)

Montréal, Canada, 27 May 2020

REPORT

EXECUTIVE SUMMARY

From the onset of the coronavirus disease 2019 (COVID-19) crisis, the aviation system has faced ever-growing challenges. The International Civil Aviation Organization (ICAO), through the Council Aviation Recovery Task Force (CART), has resolved to partner with its Member States, international and regional organizations, and industry to address these challenges and to provide global guidance for a safe, secure and sustainable restart and recovery of the aviation sector.

This restart and recovery is best supported by an international approach which is based on 10 key principles:

- 1) **protect people: harmonized but flexible measures;**
- 2) **work as one aviation team and show solidarity;**
- 3) **ensure essential connectivity;**
- 4) **actively manage safety-, security- and health-related risks;**
- 5) **make aviation public health measures work with aviation safety and security systems;**
- 6) **strengthen public confidence;**
- 7) **distinguish restart from recovery;**
- 8) **support financial relief strategies to help the aviation industry;**
- 9) **ensure sustainability;** and
- 10) **learn lessons to improve resilience.**

Globally- and regionally-harmonized, mutually-accepted measures are essential. Such measures should be compatible with safety and security requirements; proportionate to the improvement of public health; flexible where possible to allow for a viable economic recovery; and safeguarded not to distort markets. Measures that impose costs or burdens on the industry must be carefully considered and justified by safety, public health, and confidence of passengers and crew.

These measures can be regrouped in four categories:

- a) **Aviation safety-related measures.** States may temporarily depart from ICAO Standards but must do so in a manner that does not compromise safety and security, and which is duly reported to ICAO. These departures should not be retained beyond the crisis.
- b) **Aviation public health-related measures.** States should establish public health procedures aligned with the guidance included in the annexed document, *Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis*. The necessity of these measures should be regularly reviewed. The measures which are no longer relevant should be discontinued when the need for their application has ceased to exist.

- c) **Security- and facilitation-related measures.** States should enhance cross-sectoral coordination by establishing a National Air Transport Facilitation Committee or equivalent, and systematically use the Passenger Health Locator Form as a reference. It is States' responsibility to maintain security across all operations.
- d) **Economic and financial measures.** These should be inclusive, targeted, proportionate, transparent, temporary and consistent with ICAO's policies, while striking an appropriate balance of interests without prejudice to fair competition.

States and the civil aviation industry will need to commit towards building a more resilient air transport system, supported by clear communication and the recognition of aviation's vital role as a worldwide enabler, more so in times of crisis. In particular, States should identify and bridge gaps, with ICAO's assistance, to ensure adequate support to vulnerable segments of the international community and provision of essential services. A major element for future preparedness will involve analysing insights and experience gained from this crisis to improve processes and coordination mechanisms.

The success of aviation's recovery today and future resilience is best achieved with collective efforts among stakeholders across regions and sectors. Rigorous follow-up to the recommendations and measures outlined in this report will be required at all levels, local, national and international. The measures will also need to be adjusted to respond to the evolving situation. For that purpose, ICAO, in cooperation with all civil aviation stakeholders, should continue to monitor and assess the situation by seizing the opportunity to reinforce the aviation ecosystem.

RECOMMENDATIONS

This is a summary of recommendations contained in this Report.

Recommendation 1

During the global COVID-19 outbreak, Member States should continue updating COVID-19 Contingency Related Differences (CCRDs) in the Electronic Filing of Differences (EFOD) subsystem.

Recommendation 2

Member States should avoid retaining any COVID-19 related alleviation measures as soon as normal operations are resumed. Differences that remain after the contingency if any should be filed in the EFOD system.

Recommendation 3

Member States should expedite the development of guidance for safety management of new operations or operation change during this crisis.

Recommendation 4

Global and regional harmonization of procedures is essential to strengthen public and passenger confidence in air travel. To that end, Member States should establish aviation public health procedures aligned with the guidance in the *Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis*.

Recommendation 5

In order to support the fastest possible return to normal aviation operations, Member States should regularly review the necessity of continuing the application of risk mitigation measures as the risk of COVID-19 transmission diminishes; and measures which are no longer needed should be discontinued.

Recommendation 6

Member States that have not done so should immediately establish a National Air Transport Facilitation Committee (or equivalent) as required by Annex 9 to increase national level cross-sectoral coordination.

Recommendation 7

Member States should systematically use a Passenger Health Locator Form to ensure identification and traceability of passengers to help limit the spread of the disease and resurgence of the pandemic.

Recommendation 8

While temporarily adapting their security-related measures, using the guidance provided, Member States should strengthen their oversight system to ensure these measures are consistently applied with the objective of protecting aviation against acts of unlawful interference.

Recommendation 9

Member States should take measures to ensure that relevant personnel are provided training to identify and manage unruly passenger situations related to non-respect of essential aviation public health and safety measures.

Recommendation 10

Member States should consider appropriate extraordinary emergency measures to support financial viability and to maintain an adequate level of safe, secure and efficient operations, which should be inclusive, targeted, proportionate, transparent, temporary and consistent with ICAO's policies, while striking an appropriate balance among the respective interests without prejudice to fair competition and compromising safety, security and environmental performance.

Recommendation 11

Member States should facilitate information-sharing and exchange on their actions and best practices by contributing to an ICAO database of measures.

1. SETTING THE SCENE

Role of civil aviation during the unprecedented crisis

The COVID-19 pandemic has imposed an enormous human, social and financial toll on the world and civil aviation¹. At the same time, civil aviation has proven its role as a worldwide enabler in overcoming hardship, through vital air cargo services and in support of global supply chains, as well as timely emergency and humanitarian response. Air passenger services had an instrumental role when repatriating hundreds of thousands of people during the early stages of this public health emergency. However, these important contributions cannot hide the fact that severely reduced air services put a heavy strain on the global economy and on our societies.

It is important to recognize aviation's role in economic growth, job creation, delivery of goods and services, and global connectivity. It is a sector that brings the world closer together, promotes its social and cultural richness, and provides critical access to remote regions, isolated islands and other vulnerable States. Restoring air connectivity will be a key contribution to a successful and rapid recovery of the global economy post-COVID-19.

Early action by ICAO to protect the civil aviation ecosystem

Since the early stages of the COVID-19 outbreak, ICAO has provided support and guidance to States and the civil aviation industry on the expedited release and clearance of goods carried by air, licensing and certification of crew, aviation safety risk management and facilitation of repatriation flights. To resolve disruptions to trade and global supply chains, ICAO worked to enable expedited air cargo movements, coordinated delivery of humanitarian goods through the United Nations Humanitarian Air Service (UNHAS), and most recently published guidance for the implementation of Public Health Corridors to protect crews operating cargo flights².

These practical actions stemmed from efforts orchestrated by Member States, regional and international organizations especially the World Health Organization (WHO) and the World Tourism Organization (UNWTO) as well as the industry and through fora such as the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA).

The ICAO Council Aviation Recovery Task Force (CART)

Following the *Council Declaration on the novel coronavirus (COVID-19)* adopted on 9 March 2020, the ICAO Council Aviation Recovery Task Force (CART) was established. This task force, composed of representatives from States, and international, regional and industry organizations and supported by the ICAO Secretariat, was tasked to identify and recommend strategic priorities and policies to support States and industry based around three pillars:

- a) coping with the challenges faced by States and the civil aviation industry due to the COVID-19 pandemic in the immediate term;
- b) facilitating the restart of aviation operations in a safe, secure, sustainable and orderly manner as soon as practicable taking into consideration the evolution of the pandemic and decisions by international and national public health authorities; and
- c) building a more resilient aviation system in the longer term.

¹ <https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx>

² <https://www.icao.int/Security/COVID-19/Pages/default.aspx>

2. KEY PRINCIPLES

Ten (10) key principles for a safe, secure and sustainable recovery

A safe, secure and sustainable restart and recovery of the global aviation sector is best supported by an internationally harmonized approach based on the following principles:

1. ***Protect People: Harmonized but Flexible Measures.*** States and industry need to work together to put in place harmonized or mutually accepted risk-based measures to protect passengers, crew, and other staff throughout the travel experience.
2. ***Work as One Aviation Team and Show Solidarity.*** The respective plans of ICAO, States, international and regional organizations, and the industry should complement and support each other. While national and regional needs may require different approaches, States should harmonize responses to the extent possible, in line with ICAO's standards, plans and policies.
3. ***Ensure Essential Connectivity.*** States and industry should maintain essential connectivity and global supply chains, especially to remote regions, isolated islands and other vulnerable States.
4. ***Actively Manage Safety-, Security- and Health-related Risks.*** States and industry should use data-driven systemic approaches to manage the operational safety-, security-, and health-related risks in the restart and recovery phases, and adapt their measures accordingly.
5. ***Make Aviation Public Health Measures Work with Aviation Safety and Security Systems.*** Health measures must be carefully assessed to avoid negatively impacting aviation safety and/or security.
6. ***Strengthen Public Confidence.*** States and industry need to work together, harmonizing practical measures and communicating clearly, to ensure passengers are willing to travel again.
7. ***Distinguish Restart from Recovery.*** Restarting the industry and supporting its recovery are distinct phases which may require different approaches and temporary measures to mitigate evolving risks.
8. ***Support Financial Relief Strategies to Help the Aviation Industry.*** States and financial institutions, consistent with their mandates, should consider the need to provide direct and/or indirect support in various proportionate and transparent ways. In doing so, they should safeguard fair competition and not distort markets or undermine diversity or access.
9. ***Ensure Sustainability.*** Aviation is the business of connections, and a driver of economic and social recovery. States and industry should strive to ensure the economic and environmental sustainability of the aviation sector.
10. ***Learn Lessons to Improve Resilience.*** As the world recovers, the lessons learned have to be used to make the aviation system stronger.

A risk-based and gradual approach to restoring civil aviation resilience

The COVID-19 pandemic has highlighted the complex nature in which aviation operates, both within and between States. Such extraordinary situations require collaborative decision-making based on currently available information and with the respective assessment and management of risks, leveraging applicable methodologies and tools, that extend beyond the boundaries of managing aviation safety and security risks.

Considering the global economic and social impact of the crisis, the path to recovery is likely to be unpredictable and challenging. It will take place through a phased process and call for unprecedented measures and solutions. States may find themselves in different phases at different times, depending on the scale and development of the public health crisis.

States should give careful consideration to the potential impacts of their decisions on the efforts of other States in managing the risks, while recognizing the sovereignty and responsibility of States over their national recovery plans. They, along with industry, should look to learn lessons from those who are in a different phase in managing the crisis. And they should endeavour to maintain an appropriate balance in their planning for the benefit of all civil aviation stakeholders, as well as a proportionate approach with regards to other sectors of the economy.

3. A FLIGHTPLAN FOR INTERNATIONAL CIVIL AVIATION RESTART AND RECOVERY

The global aviation system is a network, and mitigation measures are only as strong as the weakest link. This principle is especially important in strengthening public confidence worldwide. While national and regional needs may require different approaches, it is of paramount importance to avoid a global patchwork of incompatible health safety measures. States should implement globally and regionally-harmonized, mutually-accepted measures that do not create undue economic burdens or compromise the safety and security of civil aviation.

Beyond the public health emergency, COVID-19 also presents systemic and organizational risks for aviation safety due to the financial situation that most airlines and service providers currently face. A healthy aviation industry is critically important for ensuring high levels of aviation safety and security. Based on global objectives and performance-based standards, COVID-19 risk mitigation measures should be flexible and targeted to ensure that a vibrant and competitive global aviation sector will drive the economic recovery. Measures that impose costs or burdens on the industry must be carefully considered and justified by safety, security, public health, confidence of passengers and crew, or other benefits.

Aviation safety-related measures

At the outbreak of COVID-19, States were faced with the urgent need to temporarily depart from ICAO Standards. A focus of ICAO has therefore been to support States in managing such alleviations while ensuring that any associated safety risks were adequately addressed, facilitating recognition and acceptance by other States, and making that information readily available for all stakeholders.

Physical distancing practices, closure of workspaces in Civil Aviation Authorities (CAAs) in some States and other measures as a result of the COVID-19 outbreak made it difficult for some States to comply fully with certain ICAO Standards. The Chicago Convention requires States to implement ICAO Standards or to file differences if their regulations depart from those Standards. ICAO has set up a tool to identify any temporary differences from ICAO Standards on certification and licensing that are necessary to maintain operations during the COVID-19 pandemic via a user-friendly interface and making the information readily available³. ICAO Regional Offices and Regional Safety Oversight Organizations are supporting States in uploading harmonized information, as well as in implementing mitigation measures at the regional level. Initial response has been very positive.

ICAO has expedited the development and publication of new guidance, *Handbook for CAAs on the Management of Aviation Safety Risks related to COVID-19* (Doc 10144)⁴ to support the continuation of safe operations. ICAO also developed material, including quick reference guides on establishing and implementing alleviations for provisions identified in the tool and for other operational issues that States are facing during this

³ <https://www.icao.int/safety/COVID-19OPS/Pages/ccrd.aspx>

⁴ <https://www.icao.int/safety/SafetyManagement/Pages/COVID-19-Safety-Risk-Management.aspx>

contingency. This material and other best practices are published on a webpage⁵ to make them available for the benefit of the global aviation community.

States and industry are already using these ICAO tools very effectively. States are encouraged to keep the information updated during the global crisis. Those few that have yet to participate are invited to do so. Making this information available ensures regulatory certainty for operators of States that are still in contingency and continue with alleviations, when flying to another State. States should be mindful of the safety risk of prolonged alleviation and put in place the necessary mitigating measures to offset those risks.

As operators were having difficulties in positioning their aircraft crew due to an incorrect interpretation of the definitions for passenger and cargo aircraft in Annex 18 – *The Safe Transport of Dangerous Goods by Air*⁶, ICAO guidance was issued to ensure the accurate interpretation and avoid unnecessary operational constraints⁷.

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Aviation public health-related measures

ICAO set up the *Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation* (CAPSCA) programme in 2006 in response to the SARS crisis⁸. As a voluntary multi-sectoral platform, CAPSCA combines resources and expertise from both aviation and public health sectors to support the preparedness for, and management of, public health events affecting civil aviation. The CAPSCA network links ICAO, the World Health Organization (WHO) and other United Nations (UN) entities, International Aviation Organizations, Civil Aviation Authorities and Public Health Organizations at global, regional and national levels.

CAPSCA recommended the implementation of the ICAO Public Health Corridor (PHC) concept to engender confidence in the restart. The PHC concept was developed using a risk-based approach, taking into account relevant safety management principles, WHO recommendations and aviation sector pandemic guidance. The first guidance material developed under this concept, *Implementing a Public Health Corridor to Protect Flight Crew during the COVID-19 Pandemic (Cargo Operations)*⁹, aims at the facilitation of essential cargo flights to support supply chain operations in the delivery of essential medical supplies as part of the global response to the pandemic.

⁵ <https://www.icao.int/safety/COVID-19OPS/Pages/default.aspx>

⁶ <https://www.icao.int/safety/DangerousGoods/Pages/annex-18.aspx>

⁷ <https://www.icao.int/safety/COVID-19OPS/Pages/DangerousGoods.aspx>

⁸ <https://www.capsca.org/CoronaVirusRefs.html>

⁹ <http://www.capsca.org/Documentation/CoronaVirus/eb030e.pdf>

A baseline set of health risk mitigation measures as a core enabler for recovery

CART considered all of the aforementioned initiatives when evaluating the critical priorities to be addressed to ensure the restart and recovery of aviation. Passenger operations were identified as a key area that required further guidance.

The guidance document, *Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis*, in the **Attachment** to this report is the core element of a strategy for international civil aviation recovery. This guidance document puts forward a comprehensive framework of recommended measures to address and mitigate the risk for passengers and aviation workers during all phases of a journey. It has been developed by CART in collaboration with experts from Singapore, United States, Zambia, and the following organizations: WHO, European Union (EU)/ European Aviation Safety Agency (EASA), Arab Civil Aviation Organization (ACAO), Airports Council International (ACI), Civil Air Navigation Services Organisation (CANSO), International Air Transport Association (IATA) and International Coordinating Council of Aerospace Industries Associations (ICCAIA).

The pace and stages of the COVID-19 outbreak have differed across the world; and have therefore required appropriate and adapted mitigation measures. In the second quarter of 2020, significant parts of the global aviation sector were either in a stage of minimal movement, or just about to leave that stage. These recommended measures are therefore meant to be applied according to the evolving situation to support a risk-based, safe and secure resumption of passenger traffic until the pandemic is brought under control.

The guiding considerations for developing the Take-off document are to:

- ***Remain Focused on Fundamentals: Safety, Security and Efficiency;***
- ***Promote Public Health and Confidence among Passengers, Aviation Workers, and the General Public;*** and
- ***Recognize Aviation as a Driver of Economic Recovery.***

The recommended measures should strengthen aviation public health and consumer confidence while minimising negative operational and efficiency impacts. The measures should capitalise on the sector's risk management experience and be as consistent as possible, yet flexible enough to respond to regional or situational requirements. Incorporating new public health measures into the aviation system in a practical manner should further enable the sector to support economic recovery and growth.

The Take-off document recommends risk mitigation measures that are generally applicable to all phases of air passenger and cargo transport under four separate modules, i.e. airports, aircraft, crew members and cargo services. These measures apply to the entire passenger journey, from arriving at the terminal, to leaving the baggage claim area, and also address aviation workers in the cabin, on the flight deck and on the ground. The document recommends clear and consistent information to passengers and crew, the use of face coverings and masks, physical distancing and sanitation procedures amongst other measures. Together, the measures outlined in the document form the basis upon which a restart and recovery plan can be built. This Take-off document will facilitate global and regional harmonization in aviation health safety, while giving States the flexibility to implement measures based on their risk assessments and stage of the outbreak.

The Take-off document is a “living” document. It will be updated as more scientific evidence becomes available, and in view of practical experience when applying the recommended measures. The framework of the document could be adapted to other types of operations and aviation activities such as general aviation, air traffic control, and maintenance organizations. The application of those public health measures should be monitored and evaluated on a dynamic basis as the situation evolves, to avoid retention by default, unnecessary regulatory burden and inefficiencies.

Recommendation 4

Global and regional harmonization of procedures is essential to strengthen public and passenger confidence in air travel. To that end, Member States should establish aviation public health procedures aligned with the guidance in the *Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis*.

Recommendation 5

In order to support the fastest possible return to normal aviation operations, Member States should regularly review the necessity of continuing the application of risk mitigation measures as the risk of COVID-19 transmission diminishes; and measures which are no longer needed should be discontinued.

Security- and facilitation-related measures*States' obligations under Annex 9 – Facilitation provisions*

In light of border closures and travel restrictions in response to the COVID-19 pandemic, measures that facilitate the movement of people and goods (known as “facilitation” under Annex 9 to the Chicago Convention) are more vital than ever in the recovery of aviation post-COVID.

The level of States' non-compliance with relevant Annex 9 Standards and Recommended Practices (SARPs) poses risks to an effectively coordinated civil aviation response to a pandemic. Limited use by States of a Passenger Health Locator Form as recommended by ICAO undermines States' ability to perform contact tracing following the arrival of cases of infection. Establishing a National Air Transport Facilitation Committees, as required by Annex 9, or its equivalent, and ensuring its effective functioning, can deliver the level of coordination amongst government and industry stakeholders required for prompt and effective actions.

Increased use of advanced technologies is encouraged to facilitate contactless processing of passengers at various stages of their journey.

An Implementation Package composed of standardized training and tools will be available in June 2020 to guide the implementation of the relevant facilitation provisions by States' authorities, aviation service providers and supply chain stakeholders.

Aviation security guidance

Adjustment to aviation security-related measures will also be needed. A guidance document, *Aviation Security Contingency Plan during COVID-19 Pandemic*, will be published in June 2020 as a reference in maintaining an adequate level of security in the current circumstances. This guidance will recommend procedures at airport security checkpoints and for other aspects of aviation security such as access control, surveillance, security of cargo and mail, aircraft security and staff training.

Treatment of unruly and disruptive passengers

Increased stress imposed on passengers through new processes and their overall travel experience may lead to increased disputes between passengers or with the crew. For guidance on the management of such occurrences, States should refer to the *Manual on the Legal Aspects of Unruly and Disruptive Passengers* (Doc 10117).

Passenger's understanding of and compliance with the aviation public health and safety measures is essential for the effectiveness of such measures, and for the trust that other passengers will place in the safety of their journey. It is the responsibility of States to raise public awareness of the consequences of disobeying crew

instructions or disturbing good order and discipline on board aircraft. Authorities should publish the relevant information and identify the best channels to reach out to passengers. States are expected to review their national legislation to ensure that unruly and disruptive behaviour relative to COVID-19 measures is properly covered.

States should also ensure that airlines' staff are appropriately trained in passenger service skills, in the recognition of the signs of a potential unruly behaviour of a passenger and in crisis containment under these exceptional circumstances.

Recommendation 6

Member States that have not done so should immediately establish a National Air Transport Facilitation Committee (or equivalent) as required by Annex 9 to increase national level cross-sectoral coordination.

Recommendation 7

Member States should systematically use a Passenger Health Locator Form to ensure identification and traceability of passengers to help limit the spread of the disease and resurgence of the pandemic.

Recommendation 8

While temporarily adapting their security-related measures, using the guidance provided, Member States should strengthen their oversight system to ensure these measures are consistently applied with the objective of protecting aviation against acts of unlawful interference.

Recommendation 9

Member States should take measures to ensure that relevant personnel are provided training to identify and manage unruly passenger situations related to non-respect of essential aviation public health and safety measures.

Economic and financial measures

In the global effort to contain the spread of COVID-19, governments have imposed stringent travel restrictions, closed borders, and severely limited the movement of people. These decisions as well as the global economic downturn have had significant impact on the viability of the civil aviation industry worldwide.

Taking into consideration the direct and indirect economic benefits generated by air transport to their national economies, States should provide the most appropriate means for supporting stakeholders across the civil aviation sector, if and when deemed necessary, possibly through regional or international economic cooperation as well as with the private sector and financial institutions. Such extraordinary emergency measures could range from regulatory relief, operational flexibilities, grants of extra-bilateral air service rights or traffic rights, to economic stimulus or direct financial assistance.

These measures must be inclusive, targeted, proportionate, transparent, temporary, limited to what is necessary to mitigate the impact of COVID-19 and consistent with ICAO's policies while striking an appropriate balance among the respective interests without prejudice to fair competition or compromising safety, security and environmental commitments.

Capabilities of States to provide support to their industry vary greatly. As diverging and competing requests will be made by different industry stakeholders, States will need to adhere to principles of good governance,

through corresponding institutional and regulatory frameworks, in order to reconcile objectives and needs with responsibilities and resources, often in the face of rivalling, and/or conflicting priorities.

Recommendation 10

Member States should consider appropriate extraordinary emergency measures to support financial viability and to maintain an adequate level of safe, secure and efficient operations, which should be inclusive, targeted, proportionate, transparent, temporary and consistent with ICAO's policies, while striking an appropriate balance among the respective interests without prejudice to fair competition and compromising safety, security and environmental performance.

Regular monitoring and sharing of experiences through ICAO

The level of implementation of measures contained in the previous sub-sections of this report will need to be regularly monitored. ICAO, as the specialized UN agency for the international civil aviation system, should be the central resource for this, including the documentation of all actions taken by States with regards to these measures.

In playing this role, ICAO should facilitate the sharing of experiences and best practices among States and serve as basis to identify gaps and needed support. Through this information, ICAO will be able to provide appropriate, targeted and timely guidance, training and assistance to Member States for the effective implementation of measures outlined in this Report.

Recommendation 11

Member States should facilitate information-sharing and exchange on their actions and best practices by contributing to an ICAO database of measures.

4. BUILDING RESILIENCE

States have the primary role in developing their own air transport system, which should be resilient to future crises and underpinned by effective regulatory oversight capability and capacity. ICAO encourages States to adopt a flexible approach to enable a sustainable recovery and growth of air transport at the national, regional and/or global level. To this end, measures should be harmonized to the extent possible, in line with ICAO's standards, plans and policies, proportionate to the evolution of the public health situation, and coordinated among civil aviation, public health authorities and other ministries, as well as with relevant international and regional authorities, and industry.

High-level commitments

Building the necessary resilience will depend on a high-level of commitment and engagement at every level, namely Governments (including national civil aviation and public health authorities), international and regional organizations (including ICAO), and the entire civil aviation industry, as well the travelling public. Recalling aviation's contribution towards national, regional and global priorities, States are urged to engage political efforts and willingness to lead a full post-COVID-19 recovery and to plan for future crises as part of their national aviation strategies. To strengthen this commitment, ICAO should consider convening a high-level meeting.

International obligations

In addressing COVID-19 and future crises, it is important that obligations and commitments under international agreements and practices are upheld. This includes the need to pay particular attention to global standards, plans and policies related to all ICAO's Strategic Objectives.

This pandemic has reaffirmed civil aviation as a worldwide enabler of support and recovery in times of crisis. In the process of building resilience, States should recognize the vital contributions of aviation and strive for the orderly recovery and long-term sustainability, consistent with the United Nations 2030 Sustainable Development Goals.

Clear communication

The road to a more resilient aviation system is underpinned by comprehensive advocacy and outreach, including clear, accurate, transparent and continuous communication among all stakeholders, as well as towards the general public. Harmonized and comprehensible information, emphasizing the safety, security and operational integrity of the aviation systems will strengthen compliance with the risk mitigation measures taken and help build resilience while dealing with recovery and growth in demand.

ICAO, civil aviation and public health authorities, in cooperation with the industry, should communicate clearly and effectively to strengthen the confidence of the travelling public and help individuals understand how they can contribute to a safe travel journey. Digital platforms should be used wherever feasible. ICAO should support this by publicizing this report.

Support to States and regional communities

Aviation plays a particularly important role in meeting the needs of the vulnerable segments of the international community, namely Small Island Developing States, Landlocked Developing Countries, and Least Developed Countries, as well as in providing essential connectivity to remote regions and isolated islands.

ICAO should identify the resources necessary for the coordination and provision of implementation packages containing assistance, guidance, training and other services to States in need under the ICAO *No Country Left Behind (NCLB)* initiative. International financial institutions are called on to provide financial/in-kind assistance for States that do not have the means and capacity to meet their needs and to mitigate the existing and future risks.

Lessons learned

While the immediate priority is to manage the current crisis, it is vital to identify lessons learned and experience gained from this challenge as the world recovers and the civil aviation industry moves onto a more stable footing. States and the industry will need to seize the momentum for a “bigger picture” analysis of the measures and steps taken during the crisis which will serve as foundation for defining a more resilient, sustainable aviation sector in the future.

Building on the insights and practices, particular focus should be placed on the improvement of risk management and crisis preparedness in response to unforeseen situations. This could be achieved by considering the extension of the scope of State Safety Programmes (SSP) in Annex 19 to the Chicago Convention – *Safety Management*, allowing States and service providers to manage risks in a more integrated manner. Such preparedness will rely on States' capabilities to strengthen their national emergency planning, as well as on the establishment of clear coordination, communication mechanisms and, processes at all levels to be triggered in the event of a future crisis.

ICAO should lead and facilitate the review of global standards, plans and policies, especially health-related provisions in coordination with the WHO, to support States in building a resilient aviation system. As part of this work, ICAO should consider the recommendations from the recently-created ICAO Task Force on Health Issues Outbreaks in Aviation which will review all the health-related provisions and corresponding guidance material contained in Annex 9 to the Chicago Convention. States are encouraged to contribute to the work of the Task Force.

In light of this, it is important for States to embrace the speed of world's change and to adopt innovative solutions enabling, inter alia, to make aviation regulatory processes and governance, including ICAO's own systems and processes, more streamlined and responsive to future such events. The lessons learned from the flexible work and meeting arrangements, accelerated digitalization, and ad-hoc, fast-tracking of proposals should all be incorporated into the aviation regulatory operational processes.

5. WAY FORWARD

Acknowledging the uncertainty surrounding the evolution of the COVID-19 pandemic, ICAO and all stakeholders involved in the production of this report emphasize the importance of adopting a flexible, progressive approach to enable a swift restoration of air transport and connectivity, which should be proportionate to the improvement of the public health situation, taking into account expert medical advice and existing safety and security standards. In addition, we should remain vigilant of the risk of further outbreak and plan accordingly, being prepared to reintroduce measures if necessary.

When defining their approach and the subsequent implementation of measures, States are strongly encouraged to follow the ten key principles in Section 2 and the eleven associated recommendations in Section 3, as well as to pay particular attention to the set of recommended risk mitigation measures presented in the annexed document *Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis*. A successful path from this crisis will rely on a diligent and consistent follow-up to these recommendations and measures at all levels, including ICAO.

With the unfolding public health situation, the mitigation and containment measures of States are being progressively alleviated, which should be accompanied by a proportionate opening of skies globally. The measures outlined in this report may need to be adjusted according to the epidemiological situation to ensure tangible results and a successful restart and recovery. ICAO, in cooperation with all civil aviation stakeholders, should continue to monitor and assess the situation by leveraging this harmonized global approach for a timely response to the evolution of the crisis and by seizing the opportunity to reinforce the aviation ecosystem.

The success of aviation's recovery today and preparedness for tomorrow can only result from collective efforts. A closer and continuous collaboration between ICAO and civil aviation industry, as well as international and regional organizations, will be beneficial for information sharing and a harmonized global response suitable for all States, regions and stakeholders.
