



HIGH-LEVEL CONFERENCE ON COVID-19 (HLCC 2021)

FACILITATION STREAM

Montréal, Canada, 12 to 22 October 2021

Agenda Item 9: Future approaches to the management of sustainable health-related Facilitation measures for the passenger experience and advancing the implementation monitoring

9.3: Fostering resilience of air transport facilitation systems and processes

INNOVATION FOR RECOVERY, FACILITATION, AND SUSTAINABILITY

(Presented by Airports Council International (ACI))

EXECUTIVE SUMMARY

COVID-19 has accelerated the uptake of new technologies and prioritized resilience and innovation in the industry. This paper presents proposals for ICAO to evolve its processes and working methods in order to keep pace with innovation and promote sustainable practices.

Action: The Conference is invited to agree to support Recommendation 9.3/x – Innovation for recovery, facilitation, and sustainability presented in Paragraph 3.

1. INTRODUCTION

1.1 Resolution A40-27 of the 40th ICAO Assembly in 2019 asked the ICAO Council to assess the need for ICAO to evolve its processes and working methods to keep pace with innovation. One of the actions arising from this Resolution was the creation of a high-level Industry Consultative Forum (ICF) to engage at a strategic level with Council members. Its inaugural meeting took place in June 2021 under the theme of innovation and brought CEOs from all parts of the industry to provide a “horizon scan” to inform future forums.

1.2 One of the themes that emerged from the ICF was that COVID-19 had accelerated the uptake of new technologies and innovation across the industry. A report published by ACI in March 2021² confirmed that airports have accelerated investments in technology to aid in the recovery from the effects of the pandemic. These investments are important for both the short-term response to new health

¹ English, Arabic, Chinese, French, Russian, and Spanish versions provided by Airports Council International (ACI)

² [Airports invest in technology to advance industry recovery - ACI World](#), 11 March 2021.

requirements and are also essential for the long-term sustainability of the industry as well as its resilience to future disruptive events.

1.3 While the pandemic may have accelerated the rate of innovation across the industry in certain areas, the rate of technological change, development of new operating methodologies, and overall adoption of innovative working methods pre-dates the pandemic. The industry's focus on efficiency and sustainability, particularly over the last decade in response to the aviation system's "capacity crunch" that has affected many regions, has seen an even greater need for the rapid adoption of innovative technologies and operating methods.

1.4 This paper highlights some of the most significant changes identified from the airport's perspective and suggests ways in which ICAO can stay engaged with this accelerated pace of innovation.

2. DISCUSSION

2.1 The COVID-19 pandemic has shown that resilience must be at the heart of aviation's infrastructure, operations, systems, and regulations. The industry demonstrated its agility by quickly adapting its operations and standard processes to focus on essential activities, implement health measures, reduce costs where possible, and allow operations to continue despite an extremely challenging environment.

2.2 ICAO equally demonstrated its ability to innovate and respond to new situations. The creation of the Council Aviation Recovery Task Force (CART), an agile and consultative mechanism working directly with industry and other non-aviation organizations, is an example of agility for which ICAO should be applauded.

2.3 The use of this agile and consultative mechanism highlights the contrast with the traditional structures and machinery of the ICAO regulatory development process. The working methodology of panels has not evolved; they continue to conduct their work in the same way, focussing on new or amended Standards and Recommended Practices (SARPs), policies, and guidance material, and follow the same frequency and protocols for meetings. Calls for innovation in processes and technologies are often welcome but struggle to find a home in the ICAO framework. For example, industry proposals to review border processes and move towards contactless and off-airport processes were considered "premature" by the Facilitation Panel at its last meeting in July – despite being critically needed as air traffic is starting to pick up again.

2.4 The direct submission process, most recently applied in the context of Time-Based Separation (TBS) operations by the Air Navigation Commission, is an interesting methodology allowing for streamlined regulatory developments, leveraging the collective industry expertise and experience. These types of accelerated regulatory mechanisms are of great importance to ensure that ICAO keeps pace with the rate of change within the industry. Taking stock of industry inputs and requests for changes, tied to a rapid and agile validation and adoption process, is critical to embracing future needs and ensuring the availability of a performance-based and well-balanced regulatory framework that will support the entire industry.

2.5 ICAO's policies and SARPs serve to generate uniformity and standardization in global civil aviation. However, this framework does not provide a common and harmonized pathway allowing for States to mature or innovate over time and as needed by the industry. This results in new ideas maturing in a disconnected way on a national basis within State specific frameworks, which in turn generates

complexity when attempts are made to bring global consistency based on different national or regional practices. States that have already introduced new policies outside of the existing SARPs tend to resist the introduction of new SARPs that might deviate, even slightly, from their national practice. There should be a process in place to agree on a common approach before national practices are put in place and become too entrenched in the standard operating practices of a State.

2.6 Similarly, ensuring the environmental, economic, and social sustainability of the aviation industry must be accompanied by the availability of appropriate policy and a performance-based regulatory framework, allowing for adequate flexibility in its application. These tools need to incentivize innovation to accelerate and focus on solutions which address the main challenges and risks to the overall air transport system, allowing the industry to implement approaches in a timely and harmonized way while ensuring global applicability.

2.7 For instance, addressing the urgent and major threat of climate change will require agile mechanisms within ICAO that can produce the appropriate framework facilitation and respond to the pace of development and implementation of innovative solutions and new technologies. ICAO should support and facilitate an appropriate regulatory environment where aviation infrastructure and operations are adapted to and aligned with the global goal to reduce the sector's environmental impact and build resilience and preparedness to prevent, resist, respond, and recover from the inevitable impacts of climate change or other disruptive events.

2.8 Creating a timely and responsive policy and regulatory environment that allows aviation to build resilience and implement more efficient and innovative operating procedures, technologies, and methods will permit the industry to thrive, reduce costs where possible, become more efficient as a whole, and continue its development, driving well-needed global economic growth. This will be achieved by ICAO using more agile regulatory and policy development methodologies, but also by listening to the needs of the industry and leveraging the inputs provided.

2.9 Therefore, there is merit in reviewing ICAO's traditional standard-setting mechanisms to support the faster pace of innovation and the urgency to implement required solutions that will benefit the entire aviation ecosystem. ICAO policies and SARPs could be complemented by new provisions, within or outside of Annexes, that would provide unified aspirational objectives and progression plans accompanying the rate of change inside and outside the industry. Since innovation moves at a fast pace, such provisions should be subject to a flexible decision-making and validation process facilitated by the possibility for subject matter experts to meet virtually on a more regular basis. This methodology would need to be accompanied by a streamlined State and industry consultative process, leveraging agile electronic platforms, which would still ensure the overall robustness and standardization of the framework.

2.10 There is equally merit in reviewing ICAO's assessment mechanisms to align with the pace of innovation. It is perceived that there is currently a two-tier system between SARPs which are subject to audits by ICAO, and for which there tends to be intense scrutiny by States, and those that are not subject to audits. A performance-based non-prescriptive assessment system focusing on outcomes rather than specifics should be introduced. This mechanism, in which industry would be able to propose Alternative Means of Compliance, allowing for compliance with the performance-based SARPs and which would be accepted on a national level and then notified to ICAO, creates an environment that ensures standardization while building in a degree of flexibility and agility for industry and States.

3. CONCLUSION

3.1 The air transport ecosystem will benefit from a more agile and performance-based regulatory framework that supports the rapid implementation of innovation, new technologies, and operating methods. These benefits will not only help the industry recover from its current low in a shorter time but should strive to ensure the development of a more sustainable and resilient industry in the long-term. Environmental, economic, and social sustainability is at the heart of many industry concerns and ensuring that the regulatory machinery in place within ICAO is structured to accompany the industry on the path to long-term sustainability is essential.

3.2 Considering the above, the Conference is invited to agree to the following recommendation:

Recommendation 9.3/x – innovation for recovery, facilitation, and sustainability

That States:

- a) conclude that ICAO's structures and working methods should evolve to support the rapid introduction of innovation to benefit the short-term sustainable recovery and longer-term sustainability of the industry; and
- b) recommend a review of traditional regulatory development and assessment mechanisms to identify opportunities for the implementation of a more agile and performance-based methodology that is adapted to the rapidly changing aviation industry.

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