



THE FIFTH ANNUAL ICAO WORLD AVIATION FORUM INNOVATION IN AVIATION

MONTRÉAL, CANADA | 22 - 23 SEPTEMBER 2019

The Fifth ICAO World Aviation Forum (IWAF/5) will focus on the timely topic of “**Innovation in Aviation**” given the incredible evolution now underway toward the electrification of air transport and the new era of urban air mobility now emerging worldwide.

ICAO World Aviation Forum events take a high-level policy perspective on air transport developments and are aimed at promoting discussions and networking on strategic insights and knowledge for senior government officials responsible for aviation, transport, science and technology, infrastructure, finance, economic planning, environment, tourism, trade, and other key portfolios. Considering the important role of innovators to innovation, this year’s IWAF will also feature the participation of key industry partners and cutting-edge high-tech companies at the forefront of these exciting new developments.

Panels and discussions at this year’s event will review how the last decade has witnessed an acceleration in technologies and processes which are making air transport and urban connections more viable, seamless, efficient and affordable. They will explore how the sharing economy, Internet of Things, transport automation, digitalization, and frontier technologies, have already generated substantial benefits for consumers while introducing opportunities and challenges for incumbent businesses, regulators, and policy makers.

Whether we are considering new search and rescue, emergency aid, or medical uses for drones, new applications in air transport for blockchain and artificial intelligence (AI), machine learning, big data analytics, or 3D printing, just to name a few, these game-changing technologies are poised to revolutionize the world of flight and regulators and policy makers need to be at the leading edge of these developments.

The 2019 Innovation IWAF will therefore feature important tracts on how and why technological advancement in aviation can only be realized alongside concurrent progress in regulatory processes and awareness-raising efforts to respond to the new technology landscape. It will discuss how prescriptive regulation can too often impede technological development, and why initiatives and efforts being made by States should aim to reduce institutional complexity, facilitate agile coordination and collaboration with the private sector and other governments, and establish the supporting framework that can incentivize entrepreneurs and “start-ups” for innovation.

Further discussions will surround the exigency to mobilize resources for research and development (R&D) and the roll-out of new technologies, make better use of existing technologies and assets, ensure that the value created is not tarnished, and realize potential benefits of the sharing economy and digitalization.

Together, technological and regulatory-process innovations hold the key to accelerating how national governments can realize the socio-economic and environmental benefits provided by a seamless air transport system, in addition to the Sustainable Development Goals set in the United Nations (UN) *2030 Agenda for Sustainable Development* and ICAO’s objectives to ensure there is *No Country Left Behind*.



THE FIFTH ANNUAL ICAO WORLD AVIATION FORUM INNOVATION IN AVIATION

MONTRÉAL, CANADA | 22 - 23 SEPTEMBER 2019

With the focus on the role of technological innovation in ensuring sustainable air transport progress, the objectives of this special edition of the **ICAO World Aviation Forum (IWAF/5)** are to:

- a) develop policies and business models to support, encourage and drive technological innovation, unlock potential benefits from innovation and close the technological divide between States;
- b) develop innovative regulatory processes and frameworks, as well as good governance, to expedite decisions made and facilitate collaboration in responding to new technology landscape;
- c) develop a package of policy and regulatory measures that can strengthen incentives for entrepreneurship, improve the likelihood of successful new business start-ups and enable the early deployment, use and diffusion of frontier technologies;
- d) demonstrate and evaluate the effects of new technologies while promoting knowledge and information exchange and enhancing transparency among stakeholders; and
- e) encourage cooperative and multi-stakeholder innovation relationships, including at the business-to-business, business-to-government, and government-to-government levels.

This year's IWAF will consist of four different meeting formats to stimulate discussion among the participants with a view to leading to concrete outcomes:

- **Ministerial Roundtable** (invitation only), which will provide Ministerial-level participants with an opportunity to discuss central topics of IWAF, exchange views and positions, and agree on formal recommendations to advance forward-looking policies and practices;
- **High-level Talks** which will encourage consultation and information exchange on the outcome of the Ministerial Roundtable discussion among the three distinct groups of participants, including. Ministers, industry leaders and technology providers;
- **A Plenary Session** which will be a solution-oriented discussion in a panel format to collaboratively develop a list of practical measures related to the central topics of IWAF;and
- **A Workshop** (jointly organized with the Innovation Fair) where international leaders and entrepreneurs will present case studies to examine specific issues together with participants who will be invited to share recent examples and best practices in the form of an open conversation.

THE FIFTH ANNUAL ICAO WORLD AVIATION FORUM INNOVATION IN AVIATION

MONTRÉAL, CANADA | 22 - 23 SEPTEMBER 2019

Draft Programme

Sunday, 22 September 2019

09:00 – 17:00 **ICAO Innovation Fair (Day 1)**
Ground floor, third floor, Conference Room 3 and Delegates' Lounge

Opening: ICAO Innovation Fair

- Welcome and Introduction by **Dr. Olumuyiwa Benard Aliu**, President of the Council of ICAO

Next Generation Aviation Professionals (NGAP) Youth Event (including presentations by winners of the Aviation Innovation Competition)

Panel on Urban Air Mobility

Panel on AI in Aviation

Focus on Exhibitors (including industry presentations and demonstrations)

18:30 – 21:00 - **Welcome Reception for Innovation Fair** Welcome and Introduction by **Dr. Fang Liu**, Secretary General of ICAO

Monday, 23 September 2019

09:00 – 17:30 **ICAO Innovation Fair (Day 2)**
Ground floor, third floor, Conference Room 3 and Delegates' Lounge

09:00 – 09:15 **IWAF/5 Opening**
- Keynote address by **Dr. Olumuyiwa Benard Aliu**, President of the Council of ICAO

09:15 – 10:00 **Opening Plenary: Innovation for Sustainable Aviation Development**
Assembly Hall

In support of ICAO's *No Country Left Behind* (NCLB) initiative, making frontier technologies accessible and affordable can contribute to the early realization of the United Nations (UN) Sustainable Development Goals set in the UN 2030 Agenda.

This Plenary Session is designed to provide insight on the ways innovation can be implemented for aviation development and inspire policy makers on how innovation can be embraced by governments. The high-level discussants will address measures to, inter alia, establish innovation-friendly markets; strengthen incentives for entrepreneurship; improve the likelihood of successful new business start-ups; and allow for fast deployment, diffusion and widespread use of frontier technologies.

10:00 – 10:40 **Ministers' Tour of Innovation Fair**
Ground floor, third floor and Delegates' Lounge

Coffee Break

THE FIFTH ANNUAL ICAO WORLD AVIATION FORUM INNOVATION IN AVIATION

MONTRÉAL, CANADA | 22 - 23 SEPTEMBER 2019

10:40 – 12:10	MINISTERIAL ROUNDTABLE 1 Policy and Business Models for Innovation Council Chamber (by invitation only)	IWAF/INNOVATION FAIR WORKSHOP 1 Frontier Technologies in Aviation Assembly Hall
	<p>New technological innovation such as “mobility revolution” and “sharing economy” has created disruptive effects on the market and generated benefits for wider society. The aviation industry should continue to embrace new technologies to transform ways of doing business while ensuring their safe, secure, efficient and sustainable use. The major task of governments is bringing innovation to the heart of aviation and development priorities in response to increasing complexity and rapidly changing demands by the industry and the public.</p> <p>This Ministerial Roundtable will aim at developing policy frameworks and business models to support, encourage and drive technological innovation and unlock potential benefits from frontier technologies. It will also explore the possibility of leapfrogging and taking full advantage of such technologies to bridge the technological divide between developed and developing countries.</p>	<p>This hands-on interactive workshop will feature a number of presentations from entrepreneurs and leading thinkers who showcase latest successful innovation stories in aviation, urban and last-mile transportation. These case studies will shed light on the power of innovation and give attendees the confidence that such technologies can be affordable for all.</p> <p>The participants will be invited to share examples and best practices on cutting-edge, transformative technologies in use in aviation, as well as the benefits and challenges that accompany the deployment and transitional process of such technologies.</p>
12:10 – 14:10	Lunch Break	
14:10 – 15:40	MINISTERIAL ROUNDTABLE 2 Innovation in Aviation Regulation and Governance Council Chamber (by invitation only)	IWAF/INNOVATION FAIR WORKSHOP 2 Air Transport for Today and Tomorrow Assembly Hall
	<p>Technological progress is enabled through the relevant regulatory processes in each State, but government policies and practices have often not kept pace with the speed of change. The key is to establish good governance with greater coordination and communication between and across transport authorities and other ministries in charge of related portfolios, streamline decision-making among them and drive process optimization in response to technological progress.</p> <p>This Ministerial Roundtable will aim at innovating legacy regulatory processes and frameworks. The topics of discussion include how States can move their regulatory processes beyond the current “catching-up” mode; how States can use latest and future technologies to improve the regulation of air transport; and how governments are taking steps to make innovation a routine and integrated practice.</p>	<p>In the air transport sector, just as in any other area of modern society, new technologies bring about new ideas, promises, expectations, ambitions and dreams.</p> <p>Focusing on future air and urban mobility landscapes, entrepreneurs and leading thinkers will describe how far technological advances can go and what makes innovation an enabling technology force in aviation. The participants will be invited to exchange their ideas, discuss concepts and distinguish the realistic future of air transport from pipe dreams or fantasy.</p>
15:40 – 16:00	Coffee Break	



THE FIFTH ANNUAL ICAO WORLD AVIATION FORUM INNOVATION IN AVIATION

MONTRÉAL, CANADA | 22 - 23 SEPTEMBER 2019

16:00 – 17:00 **HIGH-LEVEL TALKS BETWEEN GOVERNMENT, INDUSTRY AND TECHNOLOGY PROVIDERS**

Multi-stakeholder Cooperation for Embracing Innovation

Assembly Hall

Policies and regulation can enable or hinder innovation and entrepreneurship. They will affect the demand for research and development (R&D), as well as the business environment and market conditions for start-ups, especially Small and Medium-sized Enterprises (SMEs). Regardless of breakthrough invention or small-scale, incremental improvements, cooperation among all stakeholders is required to identify and evaluate the effects of these new technologies, accurately estimate the future demand and costs incurred for using them, and mobilize and secure necessary resources.

Looking toward the future, this dialogue will take place to deliberate “how innovation can be used by governments to increase their efficiency and effectiveness”, “which approach should be taken to make innovation more accessible and deployable” and “what kind of policies can encourage and accelerate the pace of innovation” amongst the three participant groups, i.e. Ministers, top leaders of the industry, and technology providers. Ministers will present the outcome of the Roundtables, to which the latter two groups respond based on their experiences, short-term needs and long-term visions.

17:00 – 17:10 Issuance of Concluding Communiqué

Closing Remarks by **Dr. Fang Liu, Secretary General, ICAO**

— END —