



**Keynote address by
the Council President of the
International Civil Aviation Organization (ICAO)
Mr. Salvatore Sciacchitano,
to the CANSO Executive Summit (CANSO Airspace World event)**

(Geneva, Switzerland, 7 March 2023)

*Dear distinguished participants to the CANSO Executive Summit,
Colleagues and friends,*

This CANSO Airspace World event is particularly significant for the Aviation Community in the new era for civil aviation.

It is in itself a milestone in the aviation industry's renewed commitment to work together to deliver the safe, efficient, and sustainable skies of tomorrow, and accordingly it is a great honour for me to deliver this keynote address.

I wish to express my sincere gratitude to Mr. Simon Hocquard, the Director General of CANSO, for not only his kind invitation, but also for his enduring support, engagement, and friendship towards ICAO.

We have never seen disruption to aviation as severe as the disruption caused by the COVID-19 pandemic. I would like to take this special opportunity to commend air navigation service providers once again for their crisis response and actions.

Air traffic was safely managed and maintained despite the intense challenges of the period, helping to ensure the sustainability of the system and setting the stage for its effective recovery.

This required collaboration and support from all stakeholders at global, regional and national levels, which in turn touches at the heart of ICAO's *raison d'être*.

ICAO made every effort to ensure that our coordination, standard-setting and implementation support activities would continue without disruption or without compromise of our safety, security, and sustainability imperatives.

On this point, we must also acknowledge the efforts which led to accident and incident levels remaining consistent throughout this past triennium, and this despite the variety of risks associated with the restart of the global flight system. The ICAO safety report shows that the accident rate in 2021 fell to just below 2 accidents per million departures.

The hardships and challenges we have experienced as an aviation community shall not be forgotten. Indeed, they have translated into bitter but valuable lessons that we are now applying or we will

apply with amended SARPs and Guidance Material in cooperation with WHO.

The most important lesson learned is that collaboration remains key.

The ICAO Council Aviation Recovery Task Force, commonly known as CART, established in early 2020, was a central component of the industry's immediate response to the pandemic, on a global scale. Looking at collaboration, what made the CART particularly unique and effective was the involvement of not only ICAO Member States but also a large scope of relevant stakeholders. On this point, I must thank again CANSO for their active participation and invaluable contributions.

Air traffic levels are now reaching 80 per cent of their 2019 levels, and in some regions even surpassing them. These are very encouraging indications, and we all hope to see the continuation of this positive development. According to ICAO's forecasts, air passenger demand in 2023 will rapidly recover to pre-pandemic levels on most routes by the first quarter and that growth of around 3 per cent on 2019 figures, would be achieved by year-end.

Some words on the 41st Session of the ICAO Assembly last year, it saw over 2,500 Ministers and senior government officials and representatives from 184 States and 56 international organizations come together. As you surely recall, the Assembly took an historical decision on air transport decarbonisation by 2050. The so-called Long Term Aspirational Goal (LTAG) will relay on multiple factors. Sustainable Aviation Fuels (SAFs) will play a fundamental role and ICAO is heavily committed to facilitate investments and production of SAFs worldwide. Technology will play another fundamental role with new emerging scenarios involving in particular hydrogen and electric aircraft. But I wish to stress the point that this Assembly decision was taken counting also on the fundamental contribution of ANSPs. In fact, let me remind that according to our technical assessment, the most aggressive scenario envisages that CO₂ emissions could be reduced in 2050 by 87% counting on 21% deriving from new technologies, 55% from fuels and 11% from operations. The rest should be reduced presumably via market based measures. I wish consequently to underline that the aviation community counts very much on the role of ANSPs to decarbonize aviation.

The 41st Assembly discussed many of the priorities that are relevant to CANSO and its members, such as the need to strike an appropriate balance between the needs of the service providers and users when implementing economic and financial measures in times of crisis, and ensuring that difficulties are shared amongst all parties in a reasonable manner.

The Assembly took place under the theme of "Innovation and Resilience." Discussions and decisions in these areas focussed on the vital importance of accelerating innovations to assure a resilient recovery and sustainable future for global aviation.

Consequently, in the 2023-2025 triennium, the priority will be to support building a more robust, sustainable and resilient civil aviation system, recovering, and learning lessons from the COVID-19 pandemic.

This task is taken very seriously at both the ICAO global and regional levels. Here, I would like to commend the improvements to the European aviation crisis management framework, taking recent lessons learnt into account. This regional framework is encompassing all types of crises that may impact aviation, including public health events, volcanic ash, nuclear contingencies, and conflict zones.

We also recognize challenges associated with new emerging digital technologies and processes that can expose the system to cyber-attacks and disrupt operations at a local or regional scale. ICAO, together with the entire aviation and research community, is working hard to safeguard digital identity management and resilient network procedures, which are crucial.

As we look ahead to the near and medium-term, I am sure that ICAO and CANSO will have to reinforce the valuable partnership, particularly within the context of our duty to anticipate challenges and opportunity, establish initiatives that support innovation and its implementation, and enable the timely realization of the resulting benefits.

As air traffic demand increases, the air transport sector will more than ever rely on data-driven policy and decision-making.

Direct access to reliable, accurate and comprehensive data will be the key component for authorities worldwide in designing flexible, scalable and forward-looking national and regional aviation strategies and building resilience in the long term.

In this regard, ICAO has developed advanced dashboards that leverage big data to monitor civil aviation and to support States in their decision and policy-making. ICAO is also developing a standard methodology for establishing a global aviation competitiveness index for States to measure the performance of their aviation sector, and consequentially assist policymakers in identifying areas for improvement or prioritization.

CANSO and the members of the Complete Air Traffic System (CATS) Global Council have also taken very significant steps forward in this area with the “Shared Vision for 2045” which was presented by the CANSO Director General to the ICAO Council last year. I would like to take this opportunity to congratulate you all for this excellent document.

While we must acknowledge the challenges that we will be facing in achieving the CATS Global Airspace, as many stakeholders are brought together into one vision, if we work collaboratively with openness and align our programmes in a rational manner, I am confident we will be able to pave the road for the implementation of the CATS vision.

In this respect, I will highlight some of the ICAO air navigation work programme initiatives and activities that are aligned with the CATS vision and that support the development of a modernized ATM system.

The flight and flow — information for a collaborative environment (FF-ICE) concept is intended to address limitations and constraints of the current flight planning mechanism. It is intended to enable the transition to a fully collaborative environment, where a flight trajectory is shared and optimized during all phases of a flight. This is known as trajectory-based operations (TBO). To support the global transition toward implementing Flight and Flow –Information Collaborative Environment, ICAO has developed global requirements and procedures, and these provisions will become applicable in November next year.

Collaborative air traffic flow management (ATFM) has evolved beyond issues around excess traffic to now contribute in all instances to a safer, more orderly, expeditious and environmentally sustainable flow of air traffic, and to support cross-border collaboration. This evolution is about ensuring that air traffic control capacity is optimized and utilized to the maximum extent possible.

ATFM also supports the effective implementation of coordinated ATM contingency measures and recovery plans. The COVID-19 pandemic heightened awareness of the criticality of ATFM being a foundation for handling disruptions, prioritization, exemptions and managing regional and inter-regional traffic flows in a collaborative and harmonized manner. Updated ICAO provisions, procedures, and guidance material concerning collaborative ATFM to support a global harmonized implementation will be made available by 2026.

ICAO has also introduced enhanced wake turbulence separation minima. These wake-related separation minima, taken in addition to other new separations, would increase aerodrome capacity and enhance efficiency.

Meanwhile, the advantages of performance-based navigation (PBN) implementation continue to resonate. Feedback from one operator indicated that they had saved enough low-level track miles in one year to go from the Earth to the Moon, and back again.

I would also like to talk about cooperation between civil and military aviation stakeholders, who should work together to achieve a more sustainable and efficient global aviation system.

The flexible use of airspace is fundamental in supporting the optimization of airspace for both civil and military operations, resulting in nationwide benefits. Addressing the future evolution of airspace requirements will be key. Further to the publication of the *Manual on Civil-Military Cooperation in Air Traffic Management* (Doc 10088) in 2021, ICAO has rolled out a series of workshops to support States, and I am now pleased to announce that we and EUROCONTROL will be hosting the Global Civil-Military Aviation Summit, which will take place in Brussels on 21 and 22 June this year.

Looking further ahead this year, the Global Aeronautical Distress and Safety System (GADSS) is also set to take another step forward, with the scheduled deployment of the location of an aircraft in distress repository (LADR).

LADR will permit real-time sharing between operators, ANSPs, and search and rescue centres of position information of aircraft in, or potentially in, distress. Full implementation of LADR within their existing processes and systems by those stakeholders will improve search and rescue response times, increasing the chances that survivors of aircraft accidents will be rescued in a timely manner.

Turning to remotely piloted aircraft systems (RPAS), ICAO has prioritized ATM integration and is about to provide, for comment, contingency procedures for when an RPAS is in a lost C2 Link state. The intention of the proposed Standards and provisions concerning lost C2 Link is to increase the “predictability” and “consistency” of RPAS action.

Meanwhile, noting similarities between airborne collision avoidance systems (ACAS) and Detect and Avoid (DAA), ICAO has reviewed and developed an integrated response to both DAA advisories and ACAS Resolution and Traffic Advisories. However, while similar in many ways, differences between DAA and ACAS have been clarified and are catered for in the proposals.

ICAO has already provided model unmanned aircraft system (UAS) regulations for States to address demands for airspace access by smaller unmanned aircraft that are not intended to operate in the conventional ATM system. These regulations are a starting point for Open and Specific categories of UAS operations.

Adding to the work on RPAS and UAS, ICAO is now commencing studies into advanced air mobility with many more new types of aircraft which will operate in airspace that has not been part of the conventional ATM system. Some of these aircraft will have a pilot onboard; however, that pilot may have very limited direct control of the aircraft’s trajectory. The pilot role may be more that of a safety monitor, rather than a safety manager.

Advanced Air Mobility operations are likely to require new communication, navigation and surveillance (CNS) systems, and new sources of aeronautical information and will be conducted in a highly digitalized environment. Some of these operations will also be part of the conventional system,

operating between airports and city centres, or from one city centre to another.

I would now like to look even further ahead.

The 41st Assembly also acted with respect to Higher Airspace Operations (HAO). While we are still years ahead of the sector having regular flights, there is much to prepare. The potential socio-economic benefits that can be provided by many of the concepts are significant, encompassing for example the provision of connectivity, to carrying out surveillance post-disaster, and to allowing more detailed earth observations.

These functions can be provided by Higher Airspace Operations concepts at a fraction of what it would cost to do it from space. Not to mention that it will help to address the space debris problem.

Two subject sessions on higher airspace operations will be held at the upcoming ICAO global air navigation event planned for August 2023 at ICAO Headquarters in Montréal. These sessions are meant to be a place for an open dialogue which will then provide insight into what ICAO and the community should do over the coming years.

In parallel, the technology for digital air traffic services for aerodromes (DATS), formerly known as remote towers, continues to evolve. In this respect, new ICAO global requirements, procedures and guidance material are being developed with an envisaged applicability date of November 2026 to support the safe and harmonized implementation of air traffic services for aerodromes using a visual surveillance system.

Before concluding, I would now like to return to the very real challenge we all face turning ideas into reality.

The ICAO global plans for air navigation and aviation safety (the GANP and the GASP) are living documents that provide an up-to-date indication of the future of air navigation and safety, and therefore provide a roadmap for investment in new capabilities and implementations. States and ANSPs can refer to these plans in their decision making to ensure an informed and cooperative approach to ATM.

I would like to reiterate that ICAO's mission is to transform visions and plans into implementable safety and air navigation standards and guidance. Guidance that offers certainty to industry and investors and that supports the achievement of stakeholders' collaborative goals and vision.

However, with 193 Member States, it is still quite challenging and time-consuming to forge a consensus, despite the recognition by governments that the technology is evolving rapidly, and the pace of change is in fact accelerating.

To match this acceleration and be successful, ICAO requires the engagement and support of industry leaders, working with Member States.

That is why a large part of the importance of this Executive Summit lies in bringing together executive leaders and key decision-makers to meet, exchange ideas, and develop new insights on both the complex challenges that the industry faces and the ways we need to best prepare for them.

I would like to conclude with this emphasis on the need to continue working on enhancing our global collaboration mechanisms, through high-level events and hands-on workshops such as this Summit and CANSO Airspace World.

It will address today's challenges and facilitate ATM implementation through focused knowledge information and experience sharing, as well as in the planning and deployment of more advanced services.

I am confident that CANSO will have a key role and make valuable contributions to the success of that event, as it will to this one.

On that point, I wish to thank CANSO and its Director General once again for inviting me; I wish all participants fruitful and constructive discussions. Thank you.

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