Remarks of CANSO Director General, Jeff Poole, at the CANSO Latin America and Caribbean Conference, in Buenos Aires, Argentina, on 5 November 2018

Introduction

Good morning. Welcome to the CANSO Latin America and Caribbean Conference 2018. It is great to be in this wonderful city of Buenos Aires and I wish to thank our good friends in EANA for their local organisational support, as well as the lead sponsor Aireon and our other sponsors and exhibitors. I also wish to thank my hard-working CANSO team for making this Conference happen and achieving a record of over 150 participants.

This is the third time I have made speeches in this region in the past couple of months alone. After participating in the ICAO World Aviation Forum in Fortaleza, Brazil, and the ALTA Aviation Leaders Forum in Panama City, it is a great pleasure to be here in Argentina with the CANSO family.

Why am I spending so much time in the region? It is because this is such a fast moving region with huge potential. We are all fortunate to work in an amazing industry at a particularly exciting time in the evolution of air traffic management (ATM); as many of the technologies that have been developed over recent years are now being deployed and will help to address the growth and capacity issues.

In the Latin America and Caribbean region, we are seeing a steady growth in cooperation between ANSPs across the region, of which CADENA – the CANSO Air Traffic Flow Management Data Exchange Network for the Americas – is a leading example of which we can all be proud.

I am also pleased that we are seeing an increasing level of cooperation with other stakeholders in the region such as ICAO, States, regulators, airlines and airports. CANSO is playing its part in all of this, which is why the Memorandum of Understanding that I signed last week with ALTA – the Latin American and Caribbean Air Transport Association and the representative of airlines in the region – is such an important milestone and opportunity. I welcome to this Conference my very good personal friend Luis Felipe de Oliveira, Executive Director of ALTA, as further proof of this strong and growing relationship in the region

We need more of this type of cooperation and partnership because our experience is that, in reality, we only add value when two parties have an agreed list of priority projects on which they jointly commit and work, with agreed deliverables and timescales.

We need to build on the present momentum of ATM in the region because much more can be achieved through even stronger regional cooperation on issues such as airspace planning, air traffic flow management and common processes and procedures. So, today I want to talk about: the opportunities for ATM in the region; what we need to do to take full advantage of those opportunities; and what we are asking others to do. Please let me start by taking a quick look at the figures.

Economic benefits of aviation

Last month the Air Transport Action Group – ATAG (of which I am a Board member) – published its latest report on the economic benefits of aviation called *Aviation: Benefits Beyond Borders.* Air traffic continues to grow rapidly, and according to forecasts, will double in the next 15 years.

This increasing air transport demand is boosting economies in the region and the link between aviation and its economic benefits is now well established. For example, the Latin America and Caribbean region represents 8% of global air traffic; regionally, air transport supports 7.2 million jobs and U$ 156 billion in economic activity. Some 813,800 people are directly employed in aviation with around 34,000 or 4% working in ATM. Over 316 million passengers boarded over three million flights on 181 airlines departing from 489 commercial airports. And all this controlled by 30 ANSPs.

But how does ATM contribute to this economic growth? And why is link between ATM and the other parts of the aviation industry so important to achieving this growth? Our task in ATM is to handle the growth of air traffic safely, cost-effectively and efficiently; thus improving connectivity, providing access to markets, and boosting tourism.

Investing in infrastructure

But if ATM is to manage this growth it needs modern, efficient ATM infrastructure. Without it, there is a risk of congestion, delays, and reduced connectivity. This requires large and long-term investments. Yet although there are huge and obvious investments in airline fleets and airports, sometimes ATM seems to be a secondary priority. There is no point in modern efficient aircraft and airports if we do not have sufficient and modern ATM to manage the traffic.

It is the role of States to ensure that improvements in ATM infrastructure are adequately financed. There is plenty of finance available for good projects with business cases but in many instances those cases are not properly articulated or advocated.

This Conference will discuss how we can do a better job of organising ourselves, our projects and our business cases to secure funding for investment, whether from governments, institutions or the private market. In this region there are some good examples of investing in infrastructure.

Jamaica is spending around US$ 36 million to modernise Jamaica´s air navigation system. This includes state of the art communications navigation and surveillance (CNS) infrastructure and technologies; and modernisation of six sites with advanced Thales ATM systems.

Colombia is assigning around US$ 30-50 million per year over five years to upgrade air navigation infrastructure and equipment, including working with Aerocivil and KLM on free route operations.

COCESNA is investing US$ 20 million, which includes automatic dependent surveillance broadcast (ADS-B) capabilities; modernising navigation aids in Central America; and modernising ground-air communications.

This is all very welcome but unfortunately these are the good examples. There are too many countries in the region that are not making adequate plans to put in place a modern, efficient air navigation infrastructure that will cater to the challenges of the future such as growing air traffic, new entrants to airspace such as drone and high altitude vehicles, and the cyber threat.

However, I have a strong and clear message for those countries and ANSPs that are lagging behind. New technologies give you a huge opportunity to implement infrastructure modernisation that will enable you to make a technological leap to the latest systems; improve efficiency and safety of airspace to meet the challenges of growing air traffic; and with much stronger business cases than current systems, particularly when we take account of the economic and social benefits of aviation. So, States should encourage investment in new ATM infrastructure to ensure that ANSPs are able to exploit these new technologies. Here are some examples of what I mean.

Technology is transforming global ATM performance

Big data will enable more efficient operations based on actual performance and greater cooperation across the aviation industry.

Space-based ADS-B will enable surveillance in oceanic and remote areas not currently covered and will allow us safely to reduce separation distances thus improving capacity.

Voice over Internet Protocol (VOIP) via satellites will enable communications in remote and oceanic airspace.

Digitisation of air traffic control towers is enabling remote control of air navigation services (ANS) at aerodromes; improving connectivity through the ability to cost-effectively manage traffic at remote and lesser used airports.

System wide information management (SWIM) will enable the provision of the right information at the right time, anywhere to the user or system that needs it.

Automation in ATM will enable planes to fly closer together and ATM to build capacity.

Artificial Intelligence (AI) will progressively replace today's unique human input in dynamic decision making, e.g. in optimising airport collaborative decision-making (A-CDM).

Some of these technologies do not require the same high levels of capital investment that our industry has traditionally needed in, for example, building towers and installing radars. All have strong and compelling business cases.

Human performance

I have talked about some transformative technologies but I would like to take a moment here to talk about the role of the human in all of this. CANSO recognises that safely implementing the latest technologies, such as automation and artificial intelligence, does impact air traffic control staff who need to be proactively involved. A high level of performance from the humans in the system has never been so important. Adaptation and flexibility are necessary in order to keep ATM safe, efficient and effective at global, regional and national levels.

However, while words are important, real action is essential. CANSO is therefore developing a Standard of Excellence in Human Performance Management to help ANSPs to manage change and improve human performance. The Standard will include 12 elements of human performance such as: policy, strategy and resources i.e. the organisational focus on human performance; ATM equipment and support tools; investigation and learning.

Like in the CANSO *Standard of Excellence in Safety Management Systems*, each of the elements will have five levels of maturity and each ANSP should assess their current maturity and improvement plans relative to their business goals. The *Standard of Excellence in Human Performance Management* and its implementation will be discussed in detail at the CANSO Global ATM Safety Conference in Banff, Canada, in a few weeks and will be launched in 2019.

Global approach to regulation and standards through ICAO and States

Another area that I would like to mention in the context of investing in and modernising ATM infrastructure is ensuring we have appropriate regulation and standards. A few weeks ago I attended the 13th ICAO Air Navigation Conference in Montreal, which is very important to CANSO Members as it sets the air navigation agenda for the coming years.

One of our main objectives this time was to get States to enable the aviation industry to take full advantage of the opportunities offered by the latest technologies. We were delighted that States at ICAO approved all nine CANSO papers that we presented. I would like to explore the implications of three of these papers for our industry.

First, investing in ATM infrastructure.

In our paper on investing in ATM infrastructure, we encouraged States to develop robust plans to guide funding priorities and encourage long-term planning and strategic balance for investment in ATM and other infrastructure.

ICAO can further help by continuing to promote the separation of regulation from service provision. In this region 11 ANSPs have still not separated these functions so I would encourage you all to promote the benefits of separation.

We also asked ICAO to promote the benefits of allowing ANSPs to act as normal businesses; free from the uncertainties of government budget rounds and able to make the long-term business plans required for ATM. In this region two thirds of ANSPs are still dependent on the State budget, so we have some way to go.

Second, global standards.

The industry is working towards a highly interoperable global data environment that supports operational concepts such as trajectory-based operations (TBO); system-wide information management (SWIM) and the safe integration of remotely piloted aircraft systems (RPAS) and unmanned aerial systems (UAS) into airspace.

All of these require detailed technical specifications to be harmonised globally. CANSO therefore asked ICAO to advise standards organisations that their proposals should follow a standard approach to ensure global interoperability.

Third, a performance-based approach to regulation.

CANSO asked regulators to take an approach to regulation based on what is to be achieved. For example, CANSO believes there is no need to change regulatory requirements to accommodate the use of remote / digitised air traffic control towers as remote towers fulfil the same performance requirements as conventional towers; performance indicators would be the same and the regulatory oversight can remain unchanged.

Having achieved our goals at the Thirteenth ICAO Air Navigation Conference, our task now is to work with States and industry partners to implement the results. CANSO will also focus on taking the key recommendations forward to the 40th session of the ICAO Assembly in 2019.

Conclusion

The Conference programme over the next few days reflects the themes I have touched in this morning with sessions on exploring how new technologies help ATM manage traffic growth in the region; how we can prepare our people for the implementation of these technologies; and how we can optimise investment in ATM infrastructure. We will also be discussing some of the other issues facing air traffic management (ATM) in the region such as improving safety, with a focus on runway safety and defending against cyber attacks. I know you will find this CANSO Conference informative, relevant and useful.

These are exciting times in ATM in the Latin America and Caribbean region, which has a golden opportunity to modernise its ATM infrastructure to meet the challenges of air traffic growth and provide the connectivity that drives very significant economic and social benefits. The essential steps are to invest in and exploit the incredible technologies now available: allow ANSPs to act as normal businesses; adopt a pragmatic, performance-based regulatory framework; ensure even greater cooperation in ATM across the region; and ensure a clear focus on human performance.

Working together, we can continue to build momentum in ATM in the region. Please exploit the opportunities offered by this Conference to ensure that CANSO also grows as your voice in the region as well as globally.