

International Civil Aviation Organization

WORKING PAPER

# THIRTEENTH AIR NAVIGATION CONFERENCE

### Montréal, Canada, 9 to 19 October 2018

# **COMMITTEE A**

# Agenda Item 3: Enhancing the global air navigation system 3.5: Other ATM issues

### INVESTMENT IN AIR TRAFFIC MANAGEMENT (ATM)

(Presented by the Civil Air Navigation Services Organisation (CANSO))

# EXECUTIVE SUMMARY

This paper presents the need for States to support air navigation services providers (ANSPs) in creating efficient, effective management of investments in air traffic management (ATM) systems and creating the appropriate environment for ATM advancement. ICAO should use all possible venues to promote this.

Action: The Conference is invited to encourage States to support the investment in ATM infrastructure and assist CANSO to work with States and regulators in three key areas:

a) raising awareness of:

- 1) the important role of ATM by increasing global connectivity, enhancing capacity including at airports, improving efficiency of airspace, and ultimately delivering social and economic benefits worldwide;
- 2) the need for stakeholders to support investment in ATM infrastructure in line with capacity needs. It is vital to ensure the entire aviation value chain develops in a harmonised way to ensure maximum value is generated from investments in aircraft, technology and airport capacity; and
- 3) the need to promote the benefits of aviation to governments and make them aware of the importance of States' investments in infrastructure;
- b) ATM implementation States should develop robust plans to guide funding priorities and encourage long-term planning and strategic balance when it comes to investment in ATM infrastructure, alongside other forms of infrastructure; and
- c) States should adopt a holistic view of ATM, recognising the importance of regional air traffic flow management (ATFM) and regional airspace initiatives including facilitating the crossing of flight information region (FIR) boundaries, rather than just operating within national boundaries.

#### 1. **INTRODUCTION**

1.1 Aviation is the safest and fastest means of transportation, traversing oceans and borders to connect people and support economic growth. By spurring tourism and trade, air travel contributes to

increasing consumer benefits and choices, creating jobs, and generating socio-economic benefits. Aviation supports USD 2.7 trillion in global economic activity and 62.7 million jobs.

1.2 The challenge for the future is to ensure the sustainable growth of air traffic, while maintaining or increasing the existing level of safety. To maximise the benefits of aviation, States will need to develop an aviation infrastructure (including air navigation systems and airports) commensurate with predicted traffic growth and based on ICAO's global plans. In order to cover the cost for the needed infrastructure update and enlargement, States may need to promote diversified funding and financing sources in partnership with States, international and regional organisations, the ATM industry, as well as development banks and other financial institutions

#### 2. BACKGROUND

2.1 To cater for this projected growth sustainably, a large number of investments to modernise and expand aviation infrastructure are required over a long period. Investment in aviation infrastructure ensures that the capacity of the global aviation system can meet future demand; generate gains such as reductions in travel time and improvement of service predictability and reliability; and, at the same time, maintain public confidence that aviation is safe, secure and environmentally responsible.

2.2 Although aviation's socio-economic benefits, its multiple links to other economic sectors are widely recognised, this has rarely translated into the level of investment which is necessary to truly derive these benefits. It is noteworthy that air transport received a mere 4.2 per cent (USD 4.6 billion) of the total official development assistance (ODA) provided by all donors for economic infrastructure and services from 2005 to 2013. In comparison, road transport was allocated a share of 54.7 per cent, which amounts to USD 60.9 billion. Unlike other modes of transport such as rail, marine or road, the vast majority of aviation infrastructure is fully recovered from its users, yet investment budgets are often subject to government appropriations that do not take this into consideration. Infrastructure costs are covered through payments of user charges, most of which are added to airfares.

2.3 The ATM industry and aviation as a whole supports the UN Sustainable Development Goals (SDGs) and actions are being undertaken across all 17 SDGs by partners in the aviation industry.

2.4 To build a transparent, stable and predictable investment climate, it is necessary for States to take pragmatic measures, for example, by engaging multiple stakeholders, diversifying funding sources and elevating the role of the private sector, including through private investment, restructuring and business reform, private finance initiatives, public-private partnerships (PPPs) and various incentive schemes.

2.5 States should recognise the benefits of ANSPs working independently from States and civil aviation authorities (CAAs), as normal businesses with a long-term business plan. This will allow them to plan and execute the necessary investments and improvements to ATM needed to manage the projected growth in aviation.

2.6 Many ANSPs have difficulty in acquiring funding to modernise infrastructure. ATM investment needs long term planning and stability as infrastructure procurement has long-lead times. ANSPs in many States are subject to government budgets and have to compete with education, health and other departments. To ensure predictability and to facilitate access to sufficient funding, States should separate responsibility for providing air navigation services (ANS) from the regulatory function, so that ANSPs could operate as normal businesses within a performance-driven framework. This can also be achieved by privatisation or corporatisation of ANSPs. Investments will have to be based on solid

business cases, supported by relevant stakeholders. This will make a stronger case for funding and stable, long-term investments. Importantly, any investment decisions need to be well considered and developed. Prioritisation is key to this and States must develop robust implementation plans to guide funding priorities.

2.7 ANSPs also invest in navigational aids at airports and modernisation of terminal airspace, which will be vital for increasing capacity at airports, and keeping this in balance with en-route capacity. Elements may include the transition from instrument landing systems (ILS) to global navigation satellite system (GNSS), landing systems with use of ground-based augmentation system (GBAS), greater use of performance-based navigation (PBN) procedures, advanced-surface movement guidance and control system (A-SMGCS), remote towers, etc.

#### 3. CONCLUSION

3.1 ANSPs are not always able to make the necessary investments to cater for the projected growth in air traffic. For this reason, CANSO requests ICAO to encourage States to invest in ATM infrastructure and to assist CANSO to work with States and Regulators.

3.2 The Conference is requested to agree to the actions detailed in the executive summary.