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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

SUSTAINABLE AND RESILIENT AVIATION INFRASTRUCTURE

(Presented by the International Air Transport Association (IATA))

EXECUTIVE SUMMARY

Air transport is sensitive to the macro-environment in which it operates. Aviation infrastructure planning and investment, should be done within the context of its contribution to the economy as a whole. Climate change and its impact on weather is a macro-critical driver that should not be ignored during operational and fiscal planning. Aviation infrastructure, including airports, is vulnerable to the same risks and damages as any other utility in a country. To ensure its resilience through disasters, States should take a more strategic approach in their contingency planning and preparedness, taking into account the costs which may result from underinvestment.

Action: The Conference is invited to agree with the recommendation in paragraph 3.1.

1. INTRODUCTION

1.1 Air Transport plays an essential role in providing aid and relief during and after a disaster occurs. While the country's priority during and after a disaster situation may focus on hospitals, roads, and other social facilities, the continued support and influx of goods and supplies is dependent on air transport. During a disaster, airports become staging points for the carriage of relief supplies and goods, and for the evacuation of survivors and injured personnel. Airlines in particular, have historically assisted in these humanitarian activities. After a situation is normalized, commercial aviation continues to play a significant role in the recovery of that country by transporting goods and people. Therefore, the continuity of civil aviation during and after a disaster is essential, not only from an airline operational stand-point, but more importantly for the country recovering from the disaster.

1.2 Annex 11 — *Air Traffic Services*, Attachment C, contains material relating to contingency planning. Annex 15 — *Aeronautical Information Services*, Chapter 5 also provides information on promulgation by NOTAM of contingency measures.

[1] English Arabic, Chinese, French, Russian and Spanish versions provided by IATA.

1.3 The 39th Session of the ICAO Assembly considered the need for the establishment of a framework to guide the Organization's response to crises and directed, inter alia, "the Council to establish a crisis response policy" (Assembly Resolution A39-24). The primary aim of the policy is to address the Organization's response to crises including aircraft accidents, natural and man-made disasters, acts of unlawful interference and pandemics that significantly impact international air transport and affect public confidence in the safety and security of air transportation.

2. DISCUSSION

2.1 In addition to the increasing numbers of lives lost due to disasters, economic losses are now averaging US$250-300 billion each year[2]. This trend is set to continue, just as the economic flows towards hazard-prone countries that are already vulnerable, also continues. For example, the expected annual losses to Small Island Developing States (SIDS) caused by natural disasters are equivalent to 20per cent of their total social expenditure. Yet tourism, to these same SIDS countries continues to grow.

2.2 As the frequency and severity of natural disasters is expected to increase with climate change, it is also expected that in the Caribbean, climate change will contribute to an additional US$ 1.4 billion in annual losses from cyclone wind damage alone.

2.3 In order to be resilient, we need to move from managing a disaster, to managing the risks and building resilient infrastructures that are sustainable. A key enabler to sustainable and resilient operations is information sharing and exchange.

2.3.1 Often during a contingency situation there is little or no information available to the airline operator to make operational decisions. Communication and coordination are essential to ensure the right flow of information is exchanged, and the effective use of airline resources is accomplished. This is particularly important during a natural disaster when airlines play an essential role in transporting goods and passengers for humanitarian relief, and for evacuations.

2.3.2 One example which is working at the tactical level is the Contingency Coordination Team, an ICAO and IATA initiative that has proven beneficial in the Middle East. Another is the IATA teams embedded in the Federal Aviation Administration (FAA) Command Center and Eurocontrol, which support airline operators during contingency scenarios. However, the availability of reliable information during a disaster remains a challenge.

2.4 Another aspect of building resilient infrastructures is learning from a disaster and enhancing the infrastructure and processes. In the spirit of "Building Back Better" policy makers, air navigation service providers, airports, and airline operators, should conduct post-operative reviews that will assist policy makers in driving local capacity building, and also in developing use cases that could benefit other regions.

2.5 Often a disaster has a spill-over effect. The impact of a disaster may not only be felt in its immediate location, but also within that region, and sometimes across several regions. With that, preparedness for contingencies and disasters should be considered on a regional and inter-regional scale, and must be;

a) strategic and look at operation end-to-end;

[2] Source: United Nations Office for Disaster Risk Reduction (UNISDR)

b) consider concepts such as third-party service provision and delegation of air navigation services during a contingency situation; and

c) rehearsed through drills, to ensure that the set procedures are practical and will work in the case of a contingency.

2.6 When looking at the economics of disasters, the economic benefits from investments in disaster risk planning should be considered, as well as the economic losses which stemmed from the occurrence of disasters. Loss assessments of major disasters have been conducted more consistently, than assessments of the benefits disaster risk reduction planning could have achieved, or assessments of the cost associated with the lack of preparedness. While major financial institutions, both in the public and private sector, are measuring their performance against macro-critical indicators, such as climate resilience, disaster risk-informed and climate-smart investments in ATM infrastructure are critical to ensure a States sustainability and resiliency.

3. CONCLUSION

3.1 A resilient air traffic management (ATM) infrastructure, and strategic contingency plan for disasters, will not only reduce the risk of interruption of operations during a disaster, but they will also enable airline operators to effectively provide the much needed disaster relief and aid that will be required. Building on Assembly Resolution A39-24, the Conference is invited to:

a) include in ICAO's regional framework post-operative assessments for countries that underwent a disaster;

b) request ICAO to develop contingency strategies and plans across major traffic axes in collaboration with IATA and other organizations. Such plans should be rehearsed and reviewed on regular basis;

c) building on existing models for communication and coordination, request ICAO to develop a framework for contingency communication and coordination that is inclusive of not only States and air navigation service providers, but of airline operators and other organizations, for example humanitarian relief organizations and

d) request ICAO to work with IATA, and other industry partners and stakeholders on the business case for the "Value of Continuity of Civil Aviation through Disasters".

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