

*International Civil Aviation Organization*

ICAO

**Twenty Fourth Meeting of the Communications/  
Navigation and Surveillance Sub-group (CNS SG/24) of  
APANPIRG**

Web-conference, 30 November – 4 December 2020

**Agenda Item 13:** CNS related work/projects impacted by COVID-19**ANS PLANNING AND PROVISION – A NEW NORMAL?**

(Presented by CANSO)

**SUMMARY**

This paper discusses the potential impact of Covid-19 on ANSPs in the planning and provision of air navigation services. It draws on the survey results of ANSPs produced by Egis in a webinar hosted by CANSO entitled ‘New Normal’: What about the New Possible? Building a Better Future for ATM.

**1. INTRODUCTION**

1.1 Last year, more than 128,000 flights carried 12.5 million passengers and about USD 18 billion worth of goods every day. But the world and aviation in particular has changed dramatically these past few months. With the onset of the COVID-19 pandemic, air traffic world-wide plummeted by over 70% in April this year.

1.2 Like airlines and airports, ANSPs are also severely impacted by the crisis. ANSPs are losing revenue with the drastic downturn in air traffic but they must maintain airspace availability for the aircraft that are still flying such as cargo, repatriation and humanitarian flights and they must avoid cutting costs that will jeopardize the recovery when it comes such as laying off essential staff or cancelling essential projects.

1.3 There is still much uncertainty ahead as travel restrictions and border closures remain in place. It is still not possible to predict when and how fast the recovery will take place. Air traffic operational complexities will vary greatly depending on how long the downturn lasts and how fast traffic resumption occurs. The shape and pace of recovery may be different in different regions and in different parts of a region.

1.4 To shed light on how this will impact ATM and ANSPs in particular, CANSO hosted a webinar entitled ‘New Normal’: What about the New Possible? Building a Better Future for ATM. This paper discusses the results of a survey conducted by Egis and the views of the panelists.

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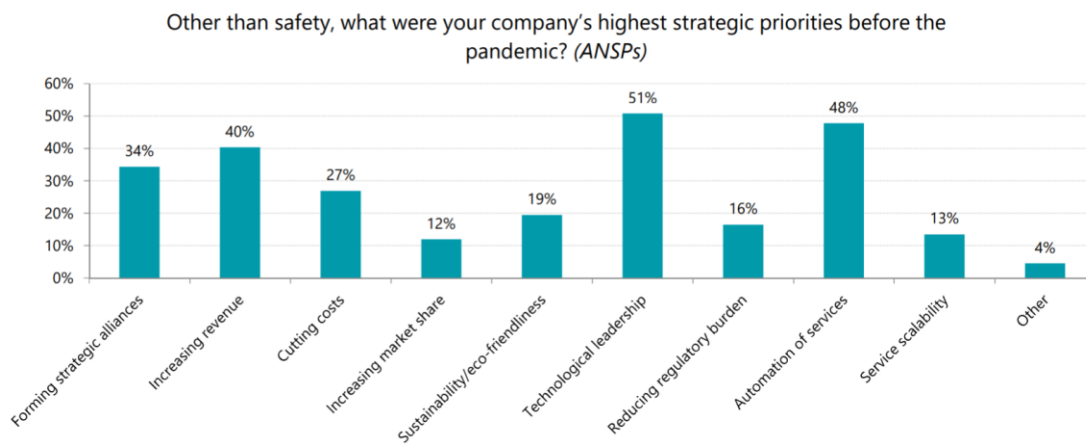
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**2. DISCUSSION**

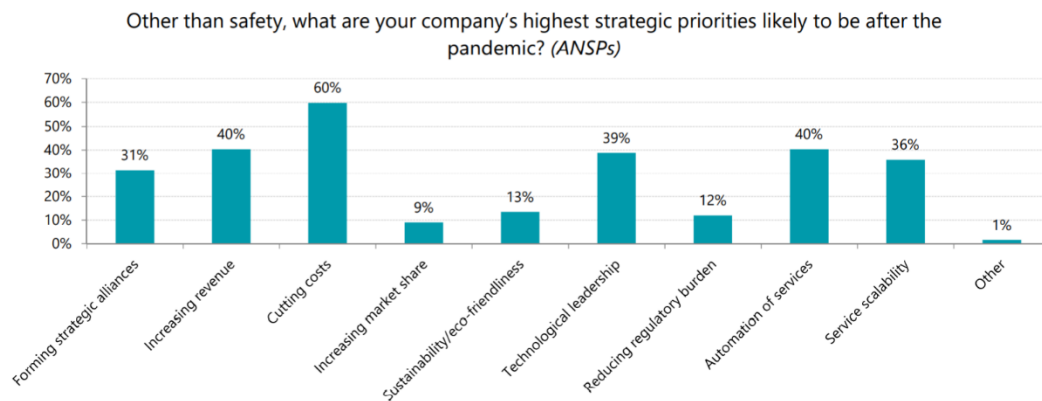
2.1 The strategic priorities of ANSPs have no doubt been impacted by the crisis. How much of the previous focus on capacity building has shifted to recovery and business continuity management and does the depressed traffic warrant a rethink of project implementation timelines? The following two charts illustrate how the strategic priorities of the ANSPs have shifted as a result of the pandemic and how they could impact their planning and adoption of new technology.

2.2 Chart A shows the strategic priorities of the surveyed ANSPs before the pandemic. The top 3 strategic priorities out of a list of 10 were: technological leadership, automation of services and increasing revenue. Cutting costs was number 5 and service scalability was No.8.

**CHART A**



**CHART B**

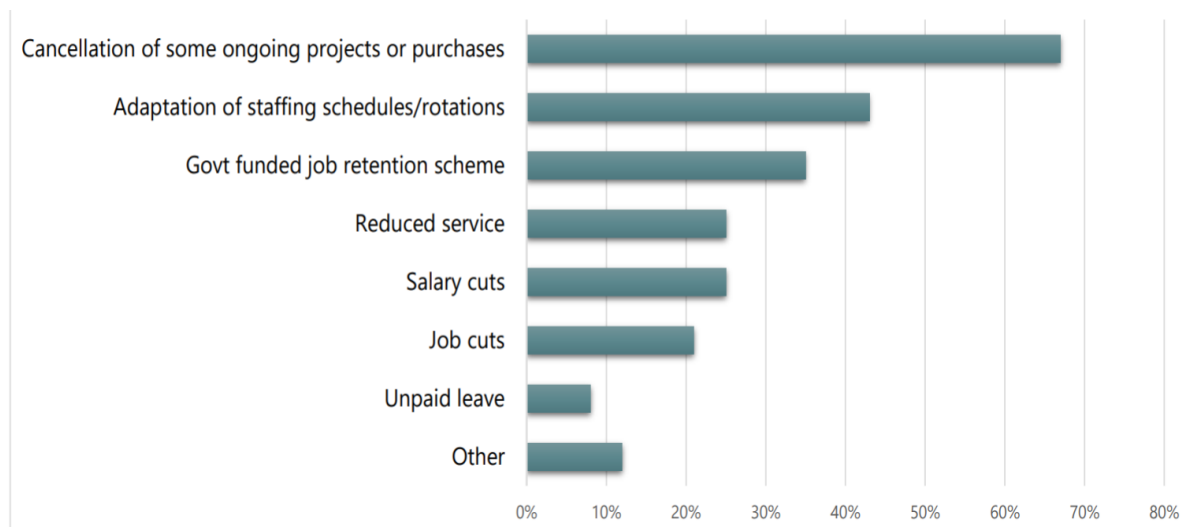


2.3 Chart B shows the likely strategic priorities of the ANSPs after the pandemic. The top priority is now: cost cutting followed by a tie between increasing revenue and automation of services. These are followed closely by technological leadership and service scalability. Cost cutting had moved

from No. 5 to No. 1 which is not unexpected while service scalability has moved from No.8 to No. 4. Automation of services remained a priority at No 2. Service scalability has increased in importance, reflecting the difficulties that ANSPs face in delivering safe and efficient services from the same cost base, with reduced revenues from airspace users.

2.4 Chart C below shows how the surveyed ANSPs have responded to the urgent need for cost cutting, It shows that the most implemented measure to save cost is project postponement or cancellation followed by staff related measures.

**CHART C**



2.5 How then will ANSPs re-prioritise capital investments in the New Normal? From the survey results, it is likely that ANSP priorities will shift to technologies that offer lower costs and enhanced resilience and scalability. For example, greater use of cloud based digital technology, use of space-based technologies, data sharing, remote service provision, regional/sub-regional service provision etc

2.6 As airlines retire their older aircraft during the downturn ANSPs will likely be dealing with a more modern and better equipped fleet than before. This is an opportunity for ANSPs to advance projects such as PBN and ADS-B which require typically relatively lower capital. Such investments will enable a more modernised airspace while potentially reducing ATM costs through the rationalisation of nav aids and radars.

2.7 There will be a stronger focus on the essentials. Current reduced traffic demand provides ANSPs with an opportunity to focus on implementing strategic changes and to review what are the really important investments. What will give us the most value? For example, improving resiliency to the aviation industry as a whole, investing in technology that relies less on people (automation) and creating operations to keep people separated when needed (remote operations).

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2.8 While Covid-19 has brought respite to the airport and airspace capacity crunch in the APAC region, it has drastically reduced ANSP revenues. As evident in the survey results, cost-cutting is now the top priority of many ANSPs and this will significantly impact their investment plans. However, in re-prioritising capital investments and undertaking resource planning ANSPs should be conscious of the long lead time for technology implementation as well as the recruitment and training of staff.

2.9 In this crisis there are opportunities for ANSPs to “build back better”. The down-turn is a pause in air traffic growth and an opportunity to improve service provision. We should look at how best to use that pause to better harmonise our efforts and ensure that benefits are optimised across the region. With reduced traffic levels, there are opportunities to review current airspace restrictions and look for ways to improve service provision to minimise operational delays and inefficient routings. As we look to the future, our eye should be on those measures that enhance the resilience and sustainability of ATM operations.

2.10 There are also opportunities for greater collaboration and partnerships. New operating models are needed that will facilitate greater collaboration with external partners to share risks, and greater use of digitalisation and automation for improved efficiency, flexibility, scalability and resilience. An ATM system designed around operational needs rather than one tied to specific geographical locations or national borders, and one that can innovate while still providing safe services.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) Note the potential impact of Covid-19 on ANS planning and provision;
- b) Discuss any other matters as appropriate

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