



ICAO

International Civil Aviation Organization

The Eighth Meeting of the APANPIRG ATM Sub-Group

Video Teleconference, 23 – 27 November 2020

**Agenda Item 9: Any other business**

**COVID-19 ATM ECONOMICS**

(Presented by IATA)

**SUMMARY**

The airline industry is in an extremely precarious financial position. Every single cent of airline expenditure counts and must deliver a benefit. To ensure that the Asia Pacific region can start recovering from the impacts of COVID-19 and continue to realize the broad and deep economy-wide benefits offered by air transport, a whole of government response is required. This must include government support for key system enablers like Air Navigation Service Providers (ANSPs) in order to avoid unsustainable cost increases that airlines will not be able to absorb.

**1. INTRODUCTION**

1.1 The airline industry is in an extremely precarious financial position. Every single cent of airline expenditure counts and must deliver a benefit.

1.2 The COVID-19 recovery is fragmented and uneven, international borders are not reopening and strict quarantine rules restrict passengers from flying and constrain airlines from growing their schedules again.

1.3 Without international operations, ANSPs have lost significant revenue and the concern is that some may seek to increase their charges in order to recoup lost revenue in a short timeframe. Unfortunately, this action will only serve to decrease the rate of recovery as airlines struggle to maintain financial viability due to greatly decreased levels of income and cash flow, and greatly increased levels of debt.

1.4 Apart from normal expectations for States and their ANSPs to rationalize and reduce all capital and operational costs, something even more critical in the current environment, there will be an inevitable reliance on governments throughout the Asia/Pacific Region to fund ANSPs in some form or another until aircraft movements and associated revenues grow back to sustainable levels. Without this funding the restart and recovery of aviation will continue to be mired in a vicious circle of low growth and absent cash-flow.

1.5 Current funding models and organizational structures may not be fit for purpose for some time and there does not appear to be any viable way to support recovery without additional government funding. Driving ANS charges up before airlines can re-establish flight schedules will create an endless loop that results in a slower recovery of flights and therefore less ANS revenue.

1.6 Governments will likely need to sustain the recovery by meeting the gap in revenue required to deliver services until volumes of movements are sufficient and stable, and levels of revenue reach break-even points. This highlights the ongoing importance of whole of government involvement in aviation planning.

## 2. DISCUSSION

### CAPEX, OPEX, and Cost-Base

2.1 A transparent ANS charges consultation includes discussion on what is an appropriate investment for the required service provision, including the timing for those investments. Post COVID-19 will bring a changed environment with different airline fleets and associated CNS capabilities meaning that a forensic review of National Air Navigation Plans (NANPs) will likely be required to determine the service provision levels.

2.2 Outcomes of a review could include deferral of projects, acceleration of implementation of cheaper advanced technology with early retirement of redundant assets, and / or potentially extending the depreciation schedules of some assets to reduce annual cost base. A review could also include consideration of temporary or permanent graduated services in consultation with the expectations and risk management of the airspace users.

2.3 Aligned to CAPEX, when there is agreement on an appropriate investment to meet the target level of service provision, the associated operational support can be identified. Post-COVID-19 requires a review of services provided with consideration of a rationalisation of services or assessment of a system of graduated services.

2.4 It is also critical from the airspace users' perspective that any investment in change, either as a capital project (CAPEX) or an operational initiative (OPEX), is driven by one or more of the following objectives - to:

- a) enhance safety;
- b) provide a tangible benefit to Airspace Users in the form of efficiency or fuel savings; and/or
- c) provide a tangible cost saving to the State or ANSP.

2.5 When quantifying the cost of a project or initiative, any technology, procedure and coordinated transition strategy should be agreed upon collaboratively between the State or ANSP and Airspace Users and other stakeholders. All investments should be supported by a positive cost-benefit-analysis conducted by the State agency that is the proponent for the change and accountable for the investment.

2.6 One primary area of OPEX is the cost of providing ATC services at various locations, and in particular remote locations. ANSPs should consider, in conjunction with Airspace User risk assessments, whether some regional units can be unmanned either temporarily (including changes in daily operating hours) or permanently.

2.7 Another significant operational cost is the resourcing of rescue and fire-fighting facilities at airports currently charging for a service level guided by State Regulations. Those ANSPs that administer the provision of rescue and fire-fighting services should, in conjunction with airspace user risk assessments, consider rationalisation or graduation of services to reduce associated operational and capital costs. This should be reflected in updated Regulations to permit the change.

2.8 For every type and mode of service delivery, the need for minimising cross-subsidisation in any operational expenses should be a key consideration.

### Target Revenue and a Governments' Role in Sustaining a Recovery

2.9 As stated earlier, there does not appear to be any viable way to support a system recovery without sustained or additional government funding.

2.10 In the first instance, a forensic review of CAPEX and OPEX as discussed above should produce a lower cost-base and therefore lower threshold of revenue required to meet service delivery costs in the recovery period. If this is not achieved the target revenue will be unchanged from previous years and so the amount to be supplemented by governments will be larger meaning it is in a government’s best interest to help drive cost reductions (**Appendix A**).

2.11 The rate of diminishing subsidy from governments depends on the speed of growth in the recovery. To help drive growth, it is preferred that ANSPs reduce current charges in order to stimulate flights, which are the revenue driver. In analysing the elasticity of demand, analysis has shown that a combination of lower rates driving a more rapid growth in the number of flights can increase revenue more rapidly. Alternatively, maintaining or increasing charges will likely result in slower growth in flights as airlines will not be able to afford to fly. The Draft Conclusion illustrates this economic theory.

2.12 If a reduction in charges is provided, a gradual return to a new cost-recovery level could be accommodated through the same theory as a ‘step-climb’ in ATC. This would mean aligning incremental increases of charging rates to actual traffic levels first passing growth milestones. This way increases are tied to real increases in traffic, as opposed to being applied at arbitrary time periods.

2.13 We also note that any other Government subsidies, such as wages or property rental support, provide direct relief of the cost-base for an ANSP and this should be reflected in the target break-even revenue required.

2.14 The meeting is invited to discuss the following Draft Conclusion, for APANPIRG’s consideration:

**Draft Conclusion/Decision ATM/SG/8-X: Review of National Air Navigation Plans (NANPs)**

That, States should review their NANPs in accordance with a whole-of-government approach and the requirements of the Regional Air Navigation Plan to: (1) include airspace user consultation to determine post COVID-19 service provision levels and the related investment and expenditure required, including identifying temporary or permanent service provision modification to reduce operational costs; and: (2) seek government support for their Air Navigation Service Providers (ANSPs) during the post-COVID-19 recovery.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) discuss any relevant matters as appropriate; and,
- c) discuss and agree the following Conclusions:

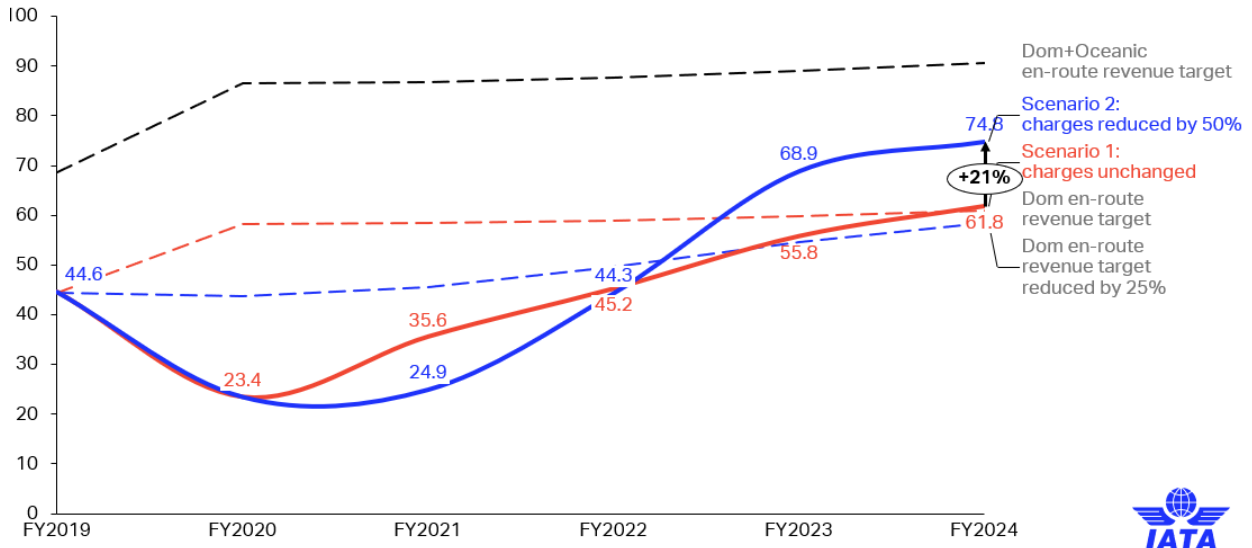
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<b>Draft Conclusion/Decision ATM/SG/8-X: Review of National Air Navigation Plans (NANPs)</b>	
<p><b>What:</b> That, States should review their NANPs in accordance with a whole-of-government approach and the requirements of the Regional Air Navigation Plan to:</p> <p>(1) include airspace user consultation to determine post COVID-19 service provision levels and the related investment and expenditure required, including identifying temporary or permanent service provision modification to reduce operational costs; and</p> <p>(2) seek government support for their Air Navigation Service Providers (ANSPs) during the post-COVID-19 recovery.</p>	<p><b>Expected impact:</b></p> <p><input checked="" type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p><b>Why:</b> Review of service provision can support reductions in ANSP cost-base and therefore a reduction in target revenue required for cost-recovery, which drives ANS charges. Effective market stimulation and recovery can reduce the financial exposure of the government.</p>	<p><b>Follow-up:</b> <input checked="" type="checkbox"/> Required from States</p>
<p><b>When:</b> 18-Dec-20</p>	<p><b>Status:</b> Draft to be adopted by PIRG</p>
<p><b>Who:</b> <input type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:</p>	

**Appendix A:**

# En-route revenue projections

## With reduced charges and reduced ANS cost base



This generic comparative analysis looks at the impact on ANSP revenue as a function of cost-base / target revenue and reduction or waiver in aviation charges. The analysis is based on real data from one of our ASPAC States. The example uses 25% reduction in target revenue based on reduced costs and 50% discount in ANS charges rates.

The analysis shows that the liability for this Governments to support its ANSP in the post-COVID-19 recovery could potentially be reduced markedly if cost-base / target revenue is reduced and aviation charges are reduced or waived. The elasticity for demand is based on IATA member airline feedback and the IATA economists' experience and tools for forecasting the aviation market.

## Decreasing en-route charges by 50% Could reduce government funding requirements by 39%

