



# Seamless Asian Skies: Economic Analysis of Benefits

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# Background

- APSAPG/2 (Tokyo, August 2012) agenda item 3: *“Drivers for a Seamless ATM Environment”*
- IATA commitment: work with States and Agencies to quantify the benefits of Seamless ATM for Asia Pacific
- IATA commissioned an economic analysis
- This identifies the broader benefits of aviation activity to national economies in Asia Pacific
- Comparison to investments in other modes of transport in terms of costs and benefits

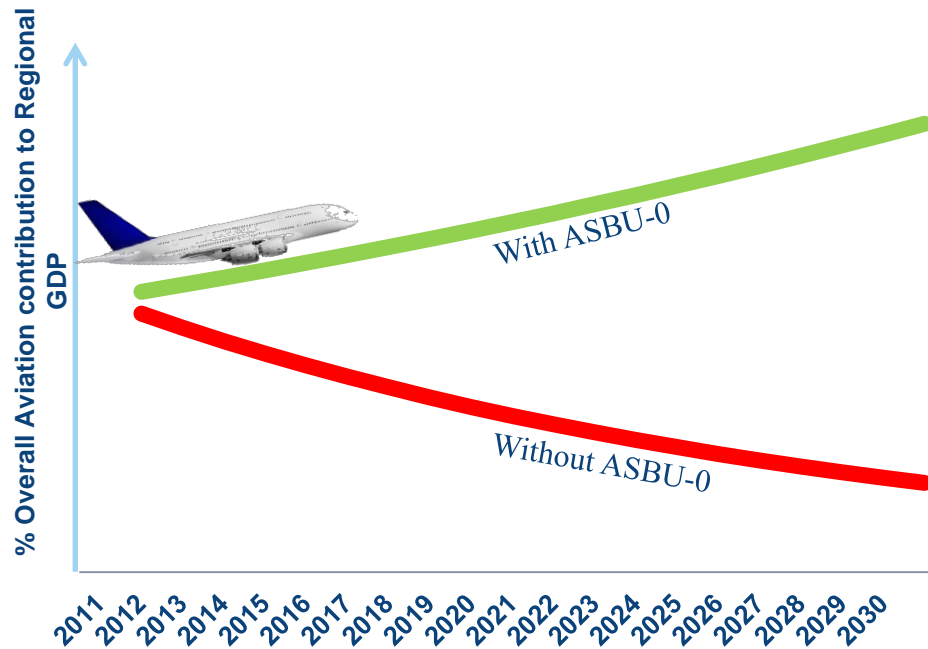


# Current Situation

- Many key airports operate at near full capacity
- Variance in air navigation service capabilities
- Asia-Pacific is forecasted to be the world's fastest growing region for air transport over the next 20 years
- Air transport connectivity is a critical link to markets and a generator of wealth
- Close link between GDP growth and air travel demand



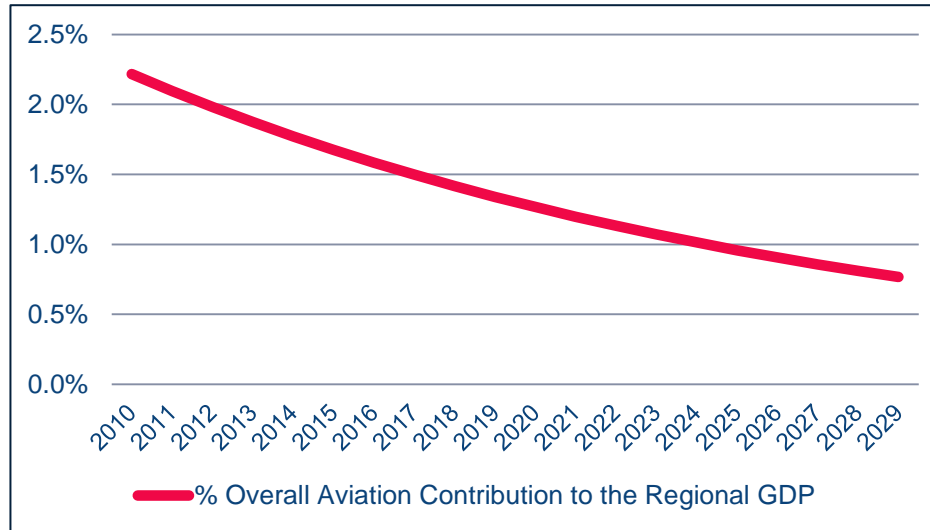
# Effect of Congestion on Regional Economy



*Without enhancements, the current infrastructure in Asia Pacific cannot meet the projected future demand*

\* ASBU-0: Aviation System Block upgrade - 0

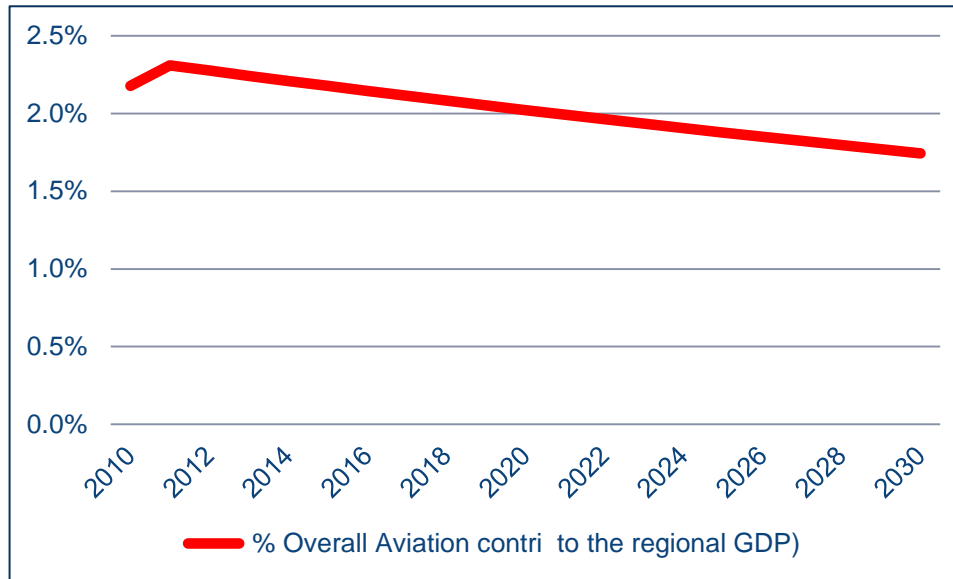
# Scenario I - 0% Capacity enhancement



**US\$ 14.97 trillion**  
 accumulated loss of benefits by 2030

	2010	2030
Overall Aviation Contribution to the regional GDP	2.2%	0.8%

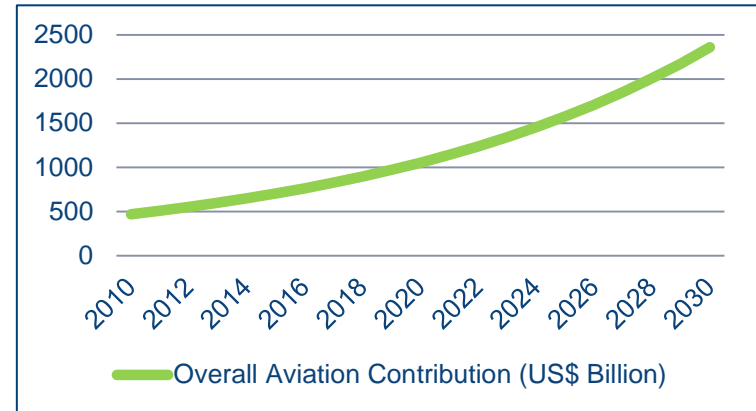
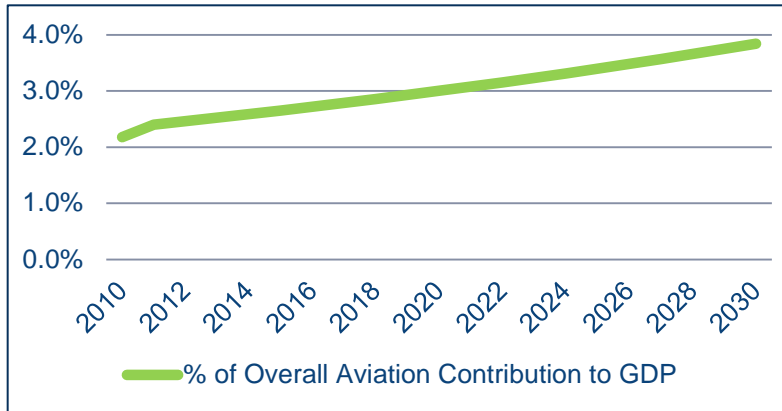
# Scenario II - 50% Capacity enhancement



**US\$ 9.5 trillion**  
accumulated  
loss of  
benefits by  
2030

	2010	2030
Overall Aviation Contribution to the regional GDP	2.2%	1.7%

# Scenario III - 100% capacity enhancement (ASBU-0)



	2010	2030
%overall Aviation Contribution to regional GDP	<b>2.2%</b>	<b>4%</b>
Overall annual Aviation Contribution to the regional GDP (US\$ billion)	<b>470</b>	<b>2358.76</b>



Implementation of the Asia Pacific Seamless ATM Plan will also lead to potential productivity gains service providers.

# Case Study Philippines

**A case study for the Philippines shows that:**

- Seamless ATM implementation for MNL would lead to a total benefit for its users of **USD 85.2 million per year**

*Ninoy Aquino  
International Airport  
(MNL)*





# Air Transport Investments Compared to Investments in Other Transport Domains

- Comparison between air, rail, sea and road transport investments in terms of economic benefits and rates of return (based on study of 31 publicly available reports)

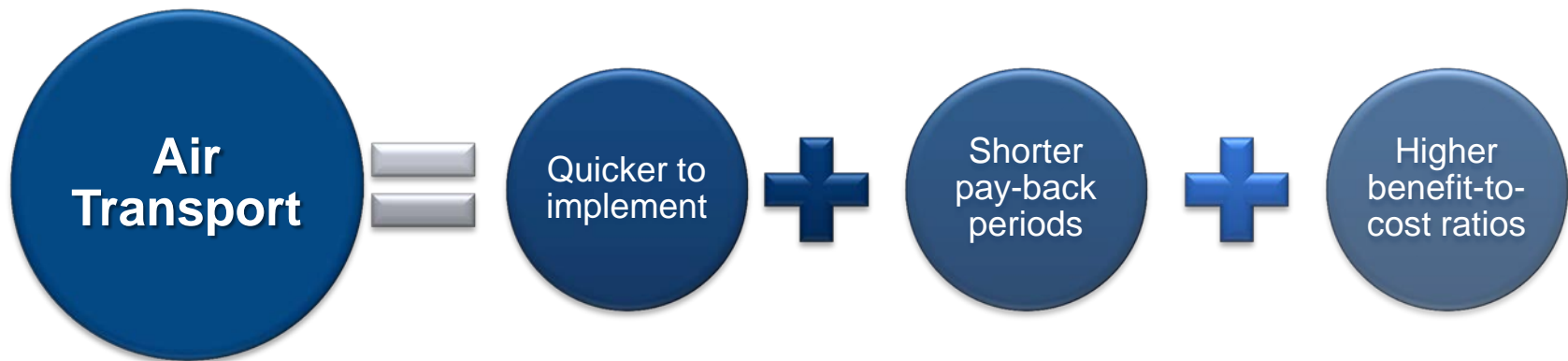
	Air	Rail	Sea	Land
Sample range investment (USD m)	351 to 3250	304 to 57200	210 to 7000	264 to 619
Sample range benefit-to-cost ratio	2.3	0.9 to 4.4	7	0.6 to 2.0
Sample range increase in national connectivity (%)	0.07 to 0.9	0	0	0
Sample range annual economic rate of return ERR (%)	16 to 59	2.6 to 10.4	5 to 14	-0.01 to 56
Sample range pay-back period (years)*	6.3 to 1.7	∞ to 3	20 to 7.2	∞ to 22

# Air Transport Investments Compared to Investments in Other Transport Domains

- Air transport projects are typically **less costly** than projects in other transport domains (rail in particular)
- Air transport projects are generally **quicker to implement** with **shorter pay-back periods** and **higher benefit-to-cost ratios** (with a corresponding impact on GDP growth)



# Air Transport Investments Compared to Investments in Other Transport Domains



# Air Transport Investments Compared to Investments in Other Transport Domains

- Compared to other modes of transport, the air transport network **more readily adapts to changes in market conditions** and hence is able to rapidly support the development of new markets
- More than other modes of transport, **air transport encourages international trade** and is particularly important for low-weight high-value exports (air cargo accounts for 35% of world trade by value)



# Conclusions

- Economic analysis shows that:
  - Not implementing the Asia Pacific Seamless ATM Plan will lead to significant loss of economic benefits for the region
  - There is a need to increase capacity and efficiency of the aviation system
- Investment in air transport infrastructure compares favourably to investments in other modes of transport in terms of:
  - Higher benefit-to-cost ratios
  - Higher rates of return
  - Shorter pay-back periods
- The aforementioned benefits are even more clearly observed for investments in air traffic management and less so for airport infrastructure investments



# Recommendation & Next Steps

- Historically, investment in ATM was individual state's responsibility, whereas Seamless ATM plan requires regional collaborative investment.
- Next steps:
  - Conduct detailed analysis to quantify the investment
  - Joint investment decision by Air Navigation Service Providers (ANSPs) in the participating nations
  - Regional solution which is managed cooperatively
  - **We need your support!**



תודה  
Dankie Gracias  
Спасибо شکرًا  
Merci Takk  
Köszönjük Terima kasih  
Grazie Dziękujemy Děkojame  
Ďakujeme Vielen Dank Paldies  
Kiitos Täname teid 谢谢  
**Thank You** Tak  
感謝您 Obrigado Teşekkür Ederiz  
Σας Ευχαριστούμ 감사합니다  
ขอบคุณ  
Bedankt Děkujeme vám  
ありがとうございます  
Tack

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