



# Strengthen the ASEAN ATM System:

Airspace Design Improvements

## Conclusions and Recommendations

Anders Hallgren  
ARISE+ ATM Expert

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# Conclusions

- ✓ **Noted with great appreciation the presentations made by ATMRI together with the States that had been involved in their simulation activities so far, congratulating them on the professional conduct of these studies and the very good outcome of them.**
- ✓ **Appreciated the visit to the ATMRI premises, recognising the significant evolution of the institute as compared to the previous visit during the AATIP project.**



# Conclusions

- ✓ **Noted the challenges the region is facing in terms of traffic growth and the immediate need to create additional capacity both in the ATC sectors as well as at ASEAN airports.**
- ✓ **Recognised that the application of modern ATC methodology together with improvements to airspace design and management are important enablers to provide this increase in capacity.**



## Conclusions

- ✓ **Noted the presentation from the ICAO ATM Regional Officer on airspace planning in the APAC Region and the performance expectations expressed in the Seamless ATM Plan.**
- ✓ **Agreed that the modern ATM automation systems that are established in most ASEAN States need to be utilised to its full capacity in order to meet these performance expectations, including the use of minimum separation and avoiding the use of FLAS where they are not needed.**



# Conclusions

- ✓ **Noted the need to continue to make every effort to engage the military, to promote the economic and reputational benefits of close civil-military cooperation and FUA.**
- ✓ **Noted the wish expressed by IATA for ANSPs to work together across borders to provide seamless, interoperable operations and services, recognising the requirement to make sure latent capacity is utilised.**



## Conclusions

- ✓ **Based on the ASEAN Leaders' Vision Statement that reiterated the governments' commitment towards a Seamless ASEAN Sky and increased ATM capacity, it was agreed that ASEAN have the political mandate for close collaboration on ATM improvements.**
- ✓ **Noted that this gave ASEAN the opportunity to pursue seamless development and implementation in the area, and appreciated the support promised by IATA.**



# Conclusions

- ✓ **Agreed that the ASEAN ATM Master Plan should be the basis for collaboration on ATM improvements as its aim is to build airspace capacity and reduce delays.**
- ✓ **Recognised the need to work together to identify future developments in the area of airspace design improvements, and to use the ATM Master Plan as the vehicle to develop these initiatives.**



# Conclusions

- ✓ **Noted the explanation of what a Functional Airspace Block is and recognised the work performed in Europe to establish such Functional Airspace Blocks.**
- ✓ **Recognised that the work to establish these Functional Airspace Blocks had brought about a closer collaboration between ANSPs resulting in significant additional benefits in terms of regional improvements to the ATM system.**





# Conclusions

- ✓ **Recognised the need to address technical aspects when moving to a Free Route application, including updates to the flight planning system and its processing rules, as well as the functioning of AIDC for correct data exchange between centers.**
- ✓ **Acknowledged the need for additional system functionalities, such as MTCD (Medium Term Conflict Detection), to improve controllers situational awareness.**



# Conclusions

**Noted that in order to implement any form of Free Routes there is a requirement for the flight planning system to have:**

- ✓ **the ability to validate flight plans to ensure adherence to correct procedures for entering and leaving the area; and**
- ✓ **the ability to reject flight plans with a trajectory that enter an active military training area or any other restricted area.**



# Conclusions

- **Understood that the application of free routes in the ASEAN area does not require a “big bang” implementation but that it rather could be done like in Europe, on a step-by-step basis, starting in low density airspaces during low density traffic periods.**



# Conclusions

- ✓ Discussed the update of the ATM Master Plan and considered the inclusion of 4D TBO as one of the possible improvement initiatives, as it brings predictability, efficiency and capacity.
- ✓ Acknowledged that the integration of ADS-C /EPP capability into ATC ground tools (including conformance monitoring, arrival manager, ...) is a step by step approach . Every equipped aircraft can bring additional efficiency.



## Conclusions

- ✓ **Agreed with the proposal by ICAO and IATA to ask the ARISE+ project to provide support in the development of short-term improvements to increase the capacity of the ATM network in the area.**
- ✓ **Agreed that the priorities of future work on the Master Plan were to both pursue the operational deployment of the five identified initiatives, as well as to start considering an update to the Master Plan, and it was agreed to ask the support of the ARISE+ project for both activities.**



Thank you for your attention!

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