

MINISTRY OF TRANSPORT
CIVIL AVIATION AUTHORITY OF MALAYSIA
THE NEW AIR TRAFFIC CONTROL CENTRE AND
RELATED SYSTEMS FOR KUALA LUMPUR FLIGHT
INFORMATION REGION PROJECT

Main Points

What we
examined?

- J The New Air Traffic Control Centre and Related Systems for Kuala Lumpur Flight Information Region Project or New KL ATCC was undertaken based on the following factors:
 - To meet the needs of the three runways at Kuala Lumpur International Airport (KLIA) through the implementation of Simultaneous Independent Parallel Approaches/Departures;
 - The surge in air traffic at KLIA and Subang as well as overflights have caused radio communication congestion and increased the workload of Air Traffic Controllers.; and
 - The need to upgrade the Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) systems which are obsolete and in line with the development of these systems in neighbouring countries to meet the requirements of International Civil Aviation Organisation (ICAO) in the Global Air Navigation Plan – 2030.
- J The original project ceiling allocation approved in the 11th Malaysia Plan and 12th Malaysia Plan was RM650.37 million and the Economic Planning Unit (EPU) has approved an increase in the project ceiling to RM665.19 million on 17 May 2022. The cost of the project feasibility study was RM22.87 million.
- J This audit covers two main areas: the performance and management for the years 2015 to 2021.
- J The performance of the project was evaluated based on achievement of the output and outcome. Output achievement was evaluated based on the New KL ATCC project implementation while the achievement of outcome was evaluated based on the five outcomes as follows:

- INCREASING AIRSPACE CAPACITY CAN REDUCE AIRCRAFT DELAYS BY MINIMIZING HOVERING TIME IN AIRSPACE FROM 30 MINUTES TO NOT MORE THAN FIVE MINUTES;
- Reducing carbon dioxide (CO2) emissions that cause environmental pollution while saving on fuel costs/operating costs of airlines;
- Improving safety level with the increase in the number of sectors (areas & approaches) by reducing the number of aircraft from 30 to 15 aircraft for each sector;
- Enhancing the capability of Search and Rescue (SAR) operations with a more precise location of accident area through the use of satellites; and
- Increasing the number of inbound and outbound aircraft movements at KLIA from 68 to 108 movements per hour.

J Project management includes financial performance, planning, procurement of the Main Contract and Independent Checker Consultant (ICC) Contract, contract administration, Industrial Collaboration Programme (ICP), system development, hardware and network, construction management, maintenance and operations management.

Why it is important to audit?

J To evaluate whether the objectives of the New KL ATCC project to fulfil the need of three runways at KLIA, overcome radio communication congestion and reduce workload of Air Traffic Controllers as well as upgrade the CNS/ATM system have achieved its objectives.

What we found?

J Overall, the New KL ATCC project has been completed and started its operations on 31 August 2021. However, there are some weaknesses in implementation aspects of Final Acceptance Test (FAT) which resulted in the objective of FAT was not achieved and not in line with contract provisions. As for the outcome, the assessment cannot be made due to the low number of air traffic at present.

J In addition, there were weaknesses in the aspects of project management as follows:

- the Government's contract commitment (including cost for variation order and extension of times) had exceeded the project ceiling allocation;
- the implementation of the Value Management Laboratory was ineffective due to weaknesses in project planning;
- the decision of the Ministry of Transport (MOT) to administer the contract on a hybrid basis does not guarantee that the interests of the Government are always safeguarded and has breached the financial regulations;
- project was not managed efficiently due to weaknesses in the management of the extension of times for the project and its maintenance;
- the ICP programme has not yet been completed and the delay in signing the ICP Supplementary Agreement has resulted in the implementation of the ICP being made without a valid stipulation;
- the extension of the ICC Contract period was invalid because it was made after the original contract period had expired. This has resulted in payments amounting to RM4.88 million made, was in excess of the valid contract cost;
- a total of RM5.33 million payment to ICC could not be verified whether it was in order; and
- weaknesses in the physical security aspects of the building as well as access to the system have exposed the operations of the New KL ATCC to the risk of intrusion, modifications and data loss.

What do we recommend?

) To overcome the weaknesses highlighted and to ensure that the same things do not reoccur, it is recommended the parties involved implement the following improvement actions:

- MOT needs to review all terms and condition of the contract and ensure the interests of the Government are protected.
- MOT and Civil Aviation Authority of Malaysia (CAAM) must ensure the contractor performs all scopes of maintenance services properly and imposes appropriate penalties/fines accordingly.
- MOT needs to expedite the process of gazetting the New KL ATCC as a Protected Areas and Protected Places so that this area

is fully protected in line with its very important function in Malaysian civil aviation.

- MOT and Technology Depository Agency Berhad (TDA) must ensure the implementation of the ICP runs as planned and achieve its objectives as intended by the Government.