## <u>Details and Cost of each new function/enhancement for</u> <u>Contract Variations added to the ATMS</u>

## **Contract Variation #2**

The details and cost for each item under the scope of Contract Variation #2:-

Description	Cost
(a) with the evolution of the project and more insight gained from the hands-on experience during the training sessions, new or enhanced functionalities (in particular functions in air traffic flow management and human-machine interface) were found necessary to improve the operational efficiency and competency of the air traffic controllers in managing the increased airspace capacity which would in turn enhance flight safety	
• Enhancement of the operational ATMS to improve operational efficiency of air traffic controllers in managing increased airspace capacity while maintaining flight safety.	HK\$17.5M
• Enhancement of various simulation and pseudo-pilot display functions to increase the fidelity, flexibility and comprehensiveness of air traffic simulation scenarios, thereby enhancing quality of training for air traffic controllers and improving operational competency of air traffic controllers, which in turn will enhance flight safety during real operations.	HK\$10.2M
<ul> <li>(b) the enhancements were related to meeting the new requirements of ICAO viz. the GANP (which was endorsed in November 2012) and PBN.</li> <li>Additional functions were added to enable creation of circular "special use of airspace" on real-time basis, and manual highlighting of flight level box as assigned by air traffic controllers to improve operational safety and efficiency in compliance with the latest GANP endorsed by ICAO in its Air Navigation Conference held in November 2012.</li> </ul>	HK\$3.4M
<ul> <li>Additional functions were added to provide Required Navigation Performance 1 capability in the Arrival Manager in compliance with the latest ICAO Asia Pacific Regional PBN Implementation Plan for provision of efficient and safe air traffic control operations.</li> </ul>	HK\$15.7M
Total:	HK\$46.8M