

Project Title: Preventing Marginalization in Air Passenger and Freight Business - a Global Network Decision Support System

研究題目: 避免香港航空業的邊緣化—一個全球航空網絡決策支持系統的研究

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- ABSTRACT -

避免香港航空業的邊緣化—一個全球航空網絡決策支持系統的研究

Preventing Marginalization in Air Passenger and Freight Business - a Global Network Decision Support System



With global business and improving standard of living, the aviation industry performance has significant contribution to the economy of a city. Hong Kong is such a role model; she has risen to the top 9th GDP in the world. The airport has been ranked the top by cargo traffic and the 10th world's busiest airport by passenger traffic in 2013. To maintain HK's competitiveness, effective strategies must be adopted to uphold her strategic hub position in air industry. Recently, the proposal of building of third runway has attracted debates on airport's positioning, strategic relationships among other Asian international airports, airlines, passenger and cargo demand trends, etc. All these issues are inter-related and affected by many external factors, such as economic development, demographic and infrastructure developments of surrounding cities.

The performance of an airport is affected by the global air transport network evolution, as well as the regional economic and social developments. To fully dissect the interrelationship between various airports and cities, passenger and cargo flows, a comprehensive study on the air network is required. In this study, we will apply new research methodologies to identify the, possibly hidden, relationships between airports based on the global passenger and cargo traffic volumes. The traffic volume of an airport is not only related to the independent factors, but also related to global air network changes. Using the information from the network, an accurate air transport forecast can be attained. A decision support system will be established to assist policy makers to understand the effects of different strategies on the air network changes, in order to sustain and expand the city's strategic position and competitiveness by regularly examining current policies on aviation industry, and identifying the new demands, promising new routes and threats.