



**Disclaimer, Limitation of Liability and Terms of Use**

*NUS owns the copyright to the information contained in this report, we are licensed by the copyright owner to reproduce the information or we are authorised to reproduce it.*

*Please note that you are not authorised to distribute, copy, reproduce or display this report, any other pages within this report or any section thereof, in any form or manner, for commercial gain or otherwise, and you may only use the information for your own internal purposes. You are forbidden from collecting information from this report and incorporating it into your own database, products or documents. If you undertake any of these prohibited activities we put you on notice that you are breaching our and our licensors' intellectual property rights in the report and we reserve the right to take action against you to uphold our rights, which may involve pursuing injunctive proceedings.*

*The information contained in this report has been compiled from sources believed to be reliable but no warranty, expressed or implied, is given that the information is complete or accurate nor that it is fit for a particular purpose. All such warranties are expressly disclaimed and excluded.*

*To the full extent permissible by law, NUS shall have no liability for any damage or loss (including, without limitation, financial loss, loss of profits, loss of business or any indirect or consequential loss), however it arises, resulting from the use of or inability to use this report or any material appearing on it or from any action or decision taken or not taken as a result of using the report or any such material.*

The  
Logistics  
Institute  
– Asia  
Pacific



***e-FREIGHT@SINGAPORE:***  
**A COST - BENEFIT ANALYSIS**

**CONTRIBUTING AUTHORS:**

**Dr. Robert de Souza**  
**Dr. Mark Goh**  
**Dr. Albert Tan Wee Kwan**  
**Hafidza Bte Othman**  
**Miti Garg**

A THINK Executive Whitepaper



## EXECUTIVE SUMMARY

*e-freight@Singapore* is a Business Process Reengineering (BPR) initiative aimed at improving the efficiency and productivity of the air cargo and logistics community. It leverages on International Air Transport Association (IATA) *e-freight*, which attempts to make air freight shipments paper free.

The key concepts of *e-freight@Singapore* are *data@source* and *data reuse*. *data@source* is the process of capturing data from source documents and reusing the data (*data reuse*) to generate the subsequent air export documents. By adopting *e-freight@Singapore*, the stakeholders will realise reduced data entry errors as well as increased productivity.

Although aware of the benefits of *e-freight@Singapore*, the stakeholders need to understand the tangible benefits and costs associated with its adoption. Hence, a Cost - Benefit Analysis (CBA) toolkit was developed to enable the stakeholders to estimate the cost savings generated and productivity gained when moving from the current documentation process to *e-freight@Singapore*.

*e-freight@Singapore* can be achieved via two proposed or 'to-be' solutions. Each solution follows a different cost structure. An analysis was done to assist the stakeholders in deciding which option is a better solution for their company. In addition, an analysis of the cost savings and productivity gains generated through *e-freight@Singapore* adoption was done for each stakeholder. *e-freight@Singapore* will bring about benefits even when the number of documents generated is as low as 1,700 House Air Waybills (HAWBs) per month for freight forwarders. It is anticipated that these findings will encourage more companies, especially the Small and Medium Enterprises (SMEs), to adopt *e-freight@Singapore*.

## **THINK Executive**

The only event in the Supply Chain and Logistics industry in Asia with a neutral platform for the highest level of interaction and exclusive knowledge sharing.

A prestigious and unique biannual event that brings together a strategic line up of key senior executives, supply chain thought leaders, academia and government agencies in a collegial environment to best address critical emerging issues in the dynamic industry landscape.

Established by The Logistics Institute – Asia Pacific, THINK Executive is intended for companies interested in a common area of research to engage with economies of scale through a dedicated research team.

For enquiry and participation details please

call: (65) 6516 4842 or

email: [THINKExecutive@nus.edu.sg](mailto:THINKExecutive@nus.edu.sg)



**The Logistics Institute – Asia Pacific**  
National University of Singapore  
21 Heng Mui Keng Terrace, #04-01  
Singapore 119613

Tel: (65) 6516 4842 • Fax: (65) 6775 3391  
E-mail: [tlihead@nus.edu.sg](mailto:tlihead@nus.edu.sg) • Website: [www.tliap.nus.edu.sg](http://www.tliap.nus.edu.sg)