TAMPERE UNIVERSITY
OF APPLIED SCIENCES

DB Schenker Skybridge Downunder

Standard Operating Procedure for Control Tower

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Bachelor's thesis
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Degree Programme in International Business
Green Supply Chain Management

ABSTRACT

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This thesis was written for Schenker Australia Pty Ltd. with the objective of creating a Standard Operating Procedure (SOP) for Product Management Airfreight department for managing Skybridge Downunder rate requests. Skybridge is Schenker's intermodal product solution that combines the advantages of both air and ocean freight. Operationally Product Management Airfreight AU/NZ acts as a control tower and the operations are carried out internationally in collaboration with origin, hub and destination branches.

Skybridge is a rather complicated product and providing a competitive yet profitable rate is a complex process. The aim of the SOP is to document the operating process and provide consistency, increase efficiency and quality by providing a comprehensive step-by-step manual. Qualitative approach was used for data collection and research process was carried out by collecting data from secondary sources, mainly from Schenker's internal sources.

The framework of the thesis consists of Australian trade environment providing facts and figures about imports and exports as well as intermodal transportation, highlighting the principles and economic importance of air and ocean freight as transportation modes, a general overview of the importance of hub operations and characteristics of the main hubs used in the Skybridge shipping process.

As an outcome an SOP with step-by-step instructions was created to support PMA's existing and future employees.

Confidential materials and internal information related to Schenker's business strategies including the detailed SOP instruction have been excluded from the published version of this thesis.

Key words: SOP, product management, intermodal transportation

CONTENTS

ABBREVIATIONS AND TERMS

AF	Air Freight
AWB	Air Waybill
B/L	Bill of Lading
Cbm	Cubic meter
CFS	Container Freight Station
Cwgt	Chargeable weight (Cubic Weight)
DG	Dangerous Goods
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
ex	from (ex US = from US)
ex works	(in this thesis) origin local costs
FCL	Full Container Load
Gwgt	Gross Weight (Actual Weight)
LCL	Less Than Container Load
SDS	Safety Data Sheet
PMA	Product Management Airfreight
POD	Port of Discharge
SOP	Standard Operating Procedure
TEU	Twenty-foot equivalent unit
T/T	Transit Time

1 INTRODUCTION

DB Schenker Skybridge is DB Schenker's intermodal product solution that combines the advantages of both air and ocean freight. It reduces costs up to 50 percent compared to a standard air freight shipment and transit time up to 50 percent compared to a standard ocean freight offering flexibility to shippers and making it a competitive alternative to traditional single modes of transport. (DB Schenker Global 2017.) In practice the product combines not only air and sea freight but also land as trucks are used during transit and in both pre- and end-carriage for pickup and delivery.

This thesis concentrates on inbound DB Schenker Skybridge Downunder to Australia and New Zealand.

1.1 Intended outcome of the thesis

In order to provide consistency in the Skybridge management process the aim of this thesis is to create a Standard Operating Procedure (SOP) for Product Management Airfreight: a clear material with step-by-step instructions for calculating rates for Skybridge rate requests and managing the process. The aim is also to transform the significant amount of tacit knowledge held by Product Manager Skybridge Myat Htun into an explicit form.

Identifying tacit knowledge increases company's intellectual capital, and thus its competitiveness. Keeping knowledge in a documented, durable form can affect labour optimization positively. It is assumed to have a positive impact particularly on new employees in faster integration and learning correct procedures thus acting based on organization rules. Transfer of knowledge from tacit to explicit reduces unnecessary and repetitive actions and frees time for other tasks. (Malgorzata & Patalas-Maliszewska 2015, 27.)

As an outcome the Skybridge rate calculating and managing process will be documented and it becomes more effective and consistent considering all variables and minimising errors. The material will also help future employees to get familiarized with the rate calculating and managing process and the product itself.

1.2 DB Schenker Australia

DB Schenker is one of the world's leading providers of integrated logistics services, offering land, air and ocean transport as well as comprehensive logistics solutions and global supply chain management. Schenker operates in approximately 2000 locations employing more than 68 000 people worldwide. Schenker holds top positions in technology, automotive, consumer goods, trade fair logistics, special transports, and special events logistics. DB Schenker is a part of the Transport and Logistics Division of Deutsche Bahn AG. (DB Schenker 2018.)

Schenker Australia Pty Ltd was established in 1962, currently employs 1200 people in 18 locations and has branches in Sydney, Melbourne, Brisbane, Perth and Adelaide as well as a subsidiary in Auckland in New Zealand. (Schenker Australia Pty Ltd 2014.) The Chief Executive Officer Ron Koehler sits in Sydney headquarters with Country Management teams, as well as other departments including Ocean Freight Import and Export, Air Freight Import and Export, Customs, Sales, Customer Service, Pricing, Major Projects, Fairs and Exhibitions, Sensitive Freight, Finance, Legal/Procurement, Corporate Finance, HR and IT team. Customer base consists of companies of all sizes in various industries including electronics, industrial, automotive, healthcare, consumer, arts and retail. Schenker Australia has also been chosen to be the official logistics provider for major events such as Sydney Olympic Games and Paralympic Games in 2000 and the Gold Coast Commonwealth Games in 2018.

1.3 Product Management Airfreight

Products form the core of all business and whether they are successful or not is dependent on the way the products are managed. Hence product management is a vital part of business operations with its main responsibilities in product planning, product lifecycle, brand management as well as corporate and marketing planning and analysing competition, customers and industry. (Chunawalla, S. 2009, 4.)

Air freight is one of the core products of DB Schenker as a service provider and Product Management Airfreight team (later referred to as PMA) was formed within the company taking a lead in ensuring Australia and New Zealand financial budgets as well as operational volume budgets are met for air freight product each year.

PMA's key role is to ensure smooth business flow, creating new or alternative solutions to attract more customers and supporting other departments. PMA works in close cooperation with Tender Management, Central Pricing Desk, Sales, Customer Service, Operations, Customs, Transport, IT, Legal, Marketing and Finance as well as overseas DB Schenker branches and reports directly to the CEO of Schenker AU/NZ.

The main tasks include budget planning both financially and by volume and continuous monitoring of the results, business development in cooperation with sales and vertical market departments, profit and cost savings initiatives, continuous product development and carrier management and procurement through Preferred Carrier Program.

The team consists of Airfreight Director Johan Sandahl, Special Products Manager Andrew Christie, Product Manager Skybridge Myat Htun and National Business Development Manager Matthew El-Hindi.

1.4 DB Schenker Skybridge Downunder

Skybridge is designed and ideal for single or combination of shipments with chargeable weight over 200kgs. PMA is responsible for managing the product in all aspects including pricing and setting up Skybridge Tariff rates which are provided regularly to support sales. If the cargo differs from standard in any way or requires special handling the rate is individually calculated on request by PMA.

Operationally PMA acts as a control tower and the operations are carried out internationally in collaboration with origin, hub and destination branches. Skybridge is a rather complicated product to operate in a profitable and efficient way and each shipment requires seamless cooperation with different countries, branches and individuals.

PMA has created Standard Operating Procedures to support both origin and destination operations to have a clear understanding on how to operate Skybridge shipments in an efficient way without breaking the chain as it is combination of air and ocean transport. SOP also contains specific invoicing processes related to invoice to client and invoice to origin/destination depending on the freight term. SOPs are uploaded on Schenker Australia intranet under air freight product for easy guide/reference, but in addition PMA team is also assisting by giving training and explaining the product to the colleagues who need further information and assistance to have a clear understanding.

1.5 Standard Operating Procedure (SOP)

Standard Operating Procedure (SOP) is a document that describes a process or function in detail to ensure that everyone performing the described task will perform it in the same way. As an outcome the process becomes consistent and efficient and the expected output of the process is achieved each time. The SOP needs to be simple so that everyone reading it will understand it, as well as easy to access. (Akyar 2012, 368-369.)

After the standard way of operating is achieved it is important to continue developing and updating the SOP when necessary. If new, better, easier, faster and/or more efficient ways of operating are found the instructions should be adjusted accordingly. (Akyar 2012, 368.)

There are plenty of advantages in using SOPs. They reduce the time used for training new employees and gives them more confidence to perform their tasks, make delegating easier, enable business continuity if a staff member is absent and ensure all customers are treated equally and fairly (Vorster 2011).

Another important aspect of SOP is quality control. When the process has been properly documented the number of errors decreases which ensures better quality (Audra n.d.).

At the moment PMA itself does not have an SOP for managing Skybridge requests. The reason for this is that the team is relatively small and the staff turnover is low. A step by step guideline with all relevant information in the same place would however help new interns/employees/substitutes to get an understanding of the price quoting process and

minimise the chance of errors as every Skybridge request is different due to special requirements of the shipments hence every enquiry is handled in a slightly different way.

1.6 Research methods

The research method used in this thesis is of applied nature thus seeks to solve existing problems. Qualitative approach is used for data collection and research process is carried out by collecting data from secondary sources, mainly from Schenker's internal sources (intranet, shared drive, emails). Also relevant publications are used to obtain theoretical information related to Australian trade, intermodal transportation, SOPs and other key concepts to support and give a better understanding of the topic to the reader. In addition to the aforementioned additional information is gathered directly from Myat Htun and the supporting team. The author's own experience is also taken advantage of due to 6 months of internship within the team and working with the product on a daily basis.

Qualitative approach was chosen to gain a deeper understanding and description of the subject. The data is collected from multiple sources rather than relying on single source such as a questionnaire. The initial plan is flexible and leaves space for changes as the research progresses since the idea is to learn from different sources. The findings of the research are always interpreted by the researcher and therefore affected by their personal background. (Ayiro 2012, 19-21.)

1.7 Structure of the thesis

The forthcoming chapters form the theoretical framework and background of the topic. Chapter two provides a brief overview of Australian trade and business environment in addition to statistical information.

Chapter three consists of theoretical background on intermodal transportation, the principles and economic importance of air freight and ocean freight as transportation modes and a general overview of the importance of hub operations as well as insights to main hubs used in the Skybridge shipping process.

In chapter four the reader will get familiarized with Skybridge from a commercial as well as operational point of view. Chapter four has been modified and all classified information has been excluded to protect Schenker's intellectual property.

Chapter five consists of the intended outcome of the thesis, Skybridge Control Tower SOP for calculating and providing rates for Skybridge rate enquiries. The SOP is designed as a tool for a person even with minimum knowledge of the product to be able to use to ensure an accurate and best possible rate calculating process. Detailed step-by-step instructions with screenshots have been excluded from the published version of this thesis as they are confidential information.

Chapter six provides conclusions as well as potential areas for further research and development ideas.

2 AUSTRALIAN TRADE AND BUSINESS ENVIRONMENT

In order to gain a more comprehensive understanding on Skybridge as a logistic inbound product this chapter will provide a brief overview of the business environment it is operating in by introducing key facts and figures about Australian trade, exports and imports.

2.1 Australian trade

Australia has maintained a current account balance deficit for decades with imports exceeding exports. Current account keeps record of a nation's transactions with other countries (Investopedia 2018) and a large part of it consists of trade balance. Having said that it is important to be aware that current account balance not only considers the flow of goods but also foreign direct investment (FDI) and income such as interests and dividends. (Ghosh & Ramakrishnan 2012.)

Below graph shows the recent development of Australia's current account balance from the year 2008 to 2015.

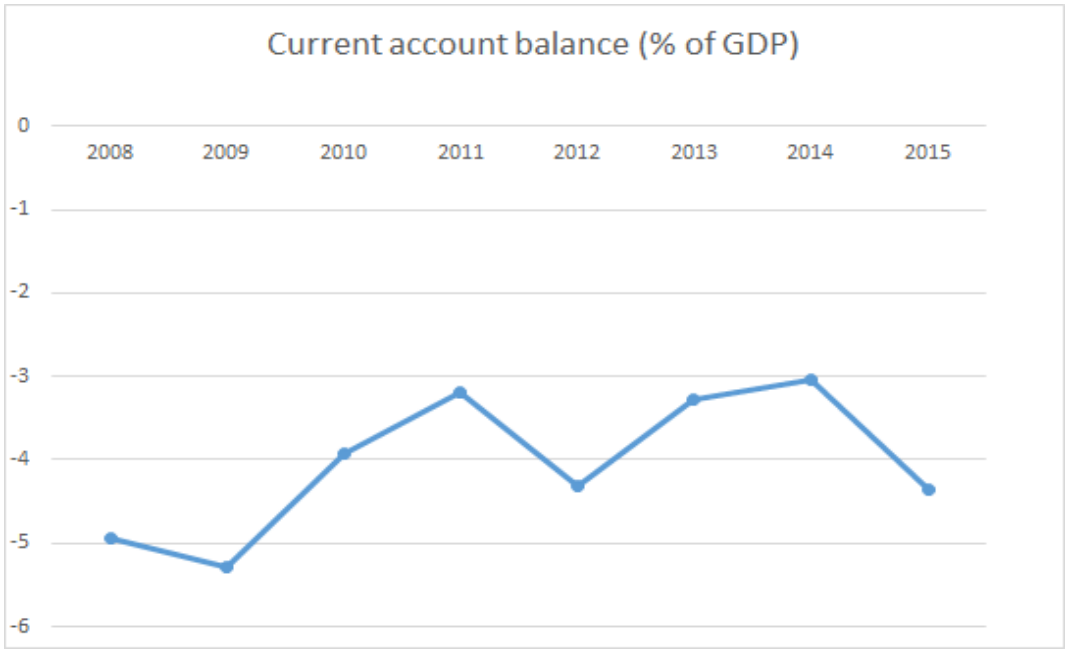

FIGURE 1. Australian Current Account Balance (World Bank 2017)

Current account deficit is not necessarily a bad sign or a problem, it can also be an indication of an excess of investment over savings implying to a highly productive and growing economy. Planned intertemporal trade, imports and exports happening at a different time making the trade flow unbalanced can also lead to a deficit. Australia and New Zealand have been able to successfully maintain current account deficits for decades whereas in some developing countries deficit may indicate competitiveness problems, a low level of national savings and high amount of foreign investment or liability issues. (Ghosh & Ramakrishnan 2012.)

Trade balance is the single largest component of the current account balance and it refers to the relationship between imports and exports, thus deficit current account balance refers to excess in imports over exports. The graph below illustrates Australian trade balance as well as export and imports as a proportion of GDP. The graph also shows how Australia has persistently run a trade deficit for decades.

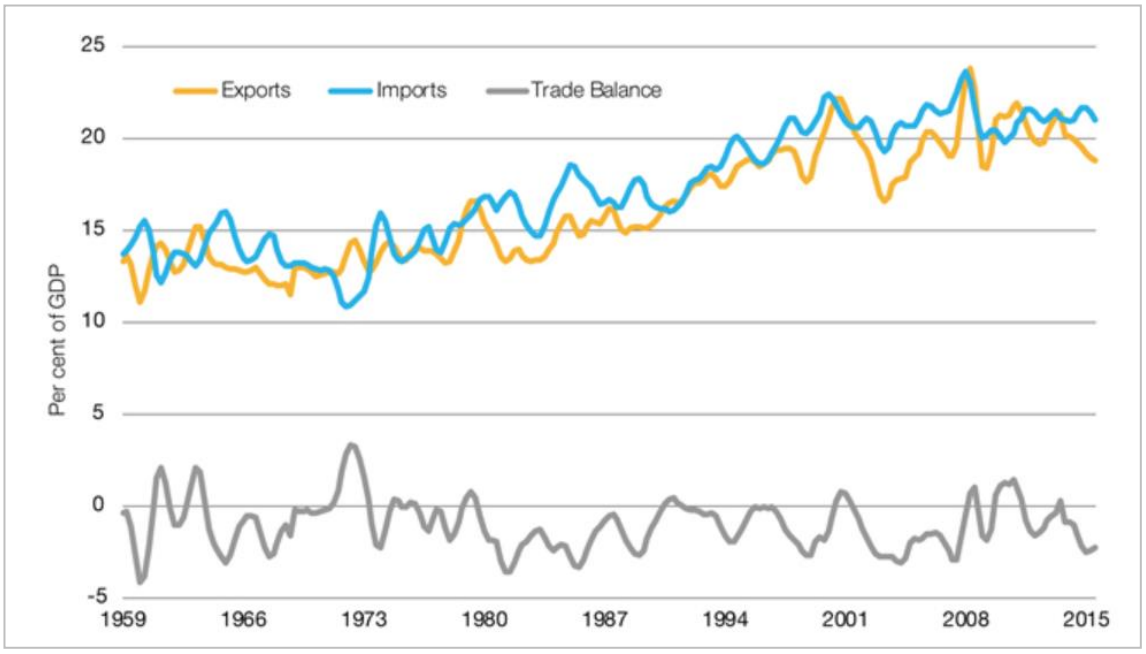

FIGURE 2. Australian exports, imports and trade balance as a proportion of GDP (O'Brien n.d. according to Australian Bureau of Statistics 2018)

The graph below shows export, imports and trade balance as a proportion of GDP in the G20 economies in 2014. Australia's proportion of trade of GDP is lower than most other nations, especially export focused economies such as Germany and other European countries, however the trade deficit of 1.4 per cent is far less than countries such as the United States and Japan that ran a deficit of over 3 per cent.

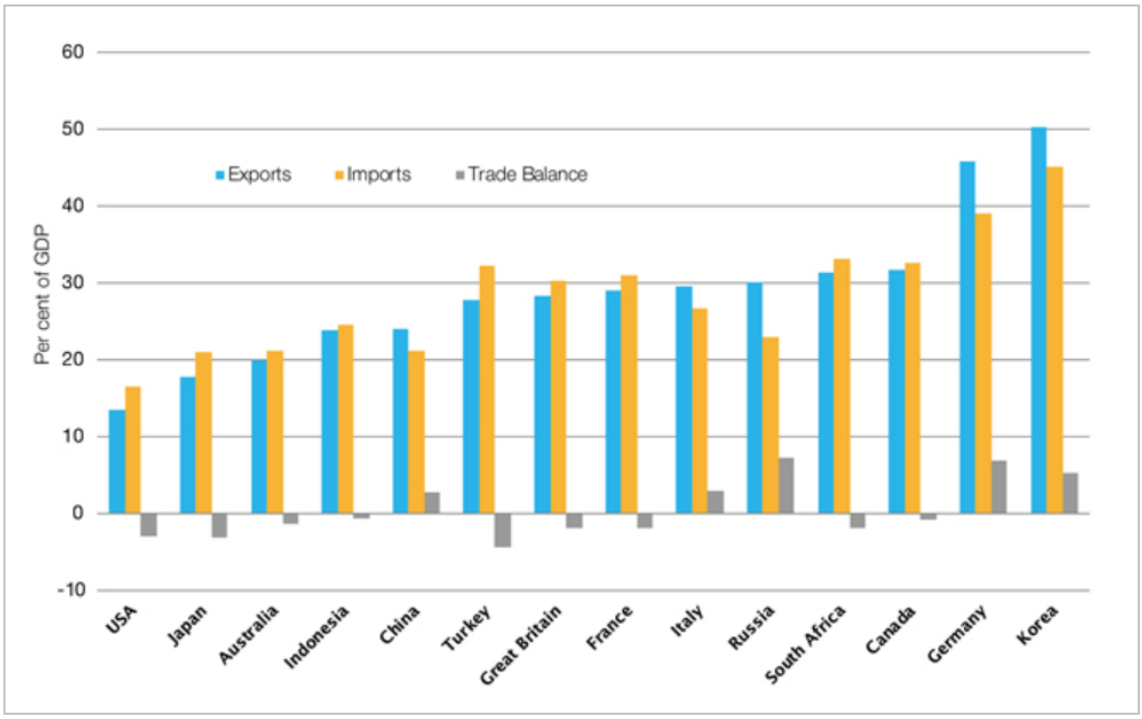

FIGURE 3. Exports, imports and trade balance as a proportion of GDP in select G20 economies (O'Brien n.d. according to OECD, Trade in goods and services 2018)

2.2 Australian exports and imports

In 2016 Australia exported 344,711 in metric tons by air. The equivalent number in imports was 438,685. (Seabury Consulting 2017). Ocean exports from Australia accounted for 2,189,990 twenty foot equivalent units (TEU) in 2016. Ocean imports to Australia in 2016 were 2,759,208 TEUs (Seabury Consulting 2017).

The Australian top five exporting partners in 2016 were China, Japan, Republic of Korea, India and US. The top commodities were iron ores & concentrates, coal, gold, natural gas and beef. (Australian Government 2017.)

The Australian top five imports in 2016 were passenger motor vehicles, refined petroleum, telecom equipment & parts, computers and medicaments (including veterinary). The top five import sources were China, United States, Japan, Thailand and Germany. (Australian Government 2017.)

The value of goods imports in 2015 were 275.8 billion AUD whereas the equivalent number in exports was 250.4 billion AUD (Australian Government 2016).

As seen from both air and ocean freight statistics imports play a greater role in Australian trade and consequently in Schenker operations in terms of volumes as well as percentage. Due to the fact Australia is an importing country, Skybridge Downunder is also focused on the inbound product, rather than outbound originating from Australia.

3 INTERMODAL TRANSPORTATION

Intermodal transportation is the movement of cargo in standardised loading units by at least two transportation modes in one transportation chain.

The route is subdivided into three phases; pre-, main- and end-haulage, pre- and end-haulage also referred to as drayage which are usually handled by trucks unless the shipper's or consignee's premises are located at a port. (Nossack 2013, 1). A key feature in intermodal transportation compared to unimodal transportation is the ability to combine advantages of different transport modes. (Nossack 2013, 2).

The key of intermodal transportation is to see it as a whole instead of series of legs with separate documentation and rates. The most important feature of intermodal transportation is one bill of lading despite the transfer of goods from one mode to another. The core functions of intermodal transportation are data handling, processing and distribution systems to ensure safe, reliable and cost effective movement of cargo by several modes of transportation. (Rodrigue & Slack 2017.)

The driver for intermodal transportation has been containerization which in the form of standardized containers allows easy access and transfer from one transport mode to another. The process is however dependent on adequate technology, infrastructure and management, all required to ensure a smooth process flow. (Rodrigue & Slack 2017.)

Most suitable goods for intermodal transportation are intermediate and finalised goods in load units under 25 tons. The origin and destination play an important role: usually the longer the distance, the more likely intermodal transportation is used. Value of the cargo and frequency of shipments are also to be considered before choosing the modes of transport. (Rodrigue & Slack 2017.)

3.1 Air freight

Air transportation accounts for only 2 per cent of world cargo measured by weight but more than 40 per cent by value. Air transportation is typically used for time-sensitive,

valuable and perishable freight over long distances. Due to the speed air transportation is excellent for just-in-time and similar low inventory distribution methods as well as special cargo such as live animals. A niche market for air transportation are emergency situations where fast delivery is crucial, which is often the case in aerospace. Air cargo usually accounts for only 5 per cent of passenger airlines' revenues, yet approximately 50 per cent of all air cargo is carried in the belly hold of passenger aircrafts. (Rodrigue & Bowen 2017.)

3.2 Ocean freight

The greatest advantage of ocean freight compared to other shipping modes is the low cost. Gigantic container ships such as the currently largest OOCL Hong Kong with an impressive capacity of 21,413 TEUs (Marine Insight 2017) ensure the economies of scale thus affordable rates for long distances. Over 90 per cent of world trade is carried by sea (ICS 2017a), however the value of sea freight is difficult to estimate in monetary terms. According to the United Nations Conference on Trade and Development (UNCTAD) it is approximately 5 per cent of total world trade (ICS 2017b). In 2016 10 billion tons were shipped by ocean freight and 701 million TEUs were handled in container ports globally (UNCTAD 2017, 73).

International trade between Asia and Europe has traditionally been dominated by ocean freight. However the transportation of cargo from Asia via hubs such as Singapore on to Suez Canal can take up to three weeks thus the shippers are looking for alternative ways for Asia-Europe cargo flows. (Millar 2015, 133.)

Another major drawback are the security issues: many long-haul ocean routes are impacted by pirate attacks. Despite global piracy has reached its lowest levels since 1998, in 2016 the ICC International Maritime Bureau (IMB) still recorded 191 incidents of piracy and armed robbery towards vessels on world's seas. (ICC Commercial Crime Services 2017.)

Congestion is also becoming a problem due to globalization. 80 percent of the world's cargo, meaning over 130 million containers only during 2013, is travelling through just

30 seaports causing serious delays and bottlenecks resulting in higher costs. (Millar 2015, 134.)

3.3 Hubs

Integrated logistics hubs are a key feature in intermodal supply chain operations as the change from one transportation mode to another is carried out at transport hubs or terminals. Multi-purpose transportation centres encompass air, ocean, rail and road transportation as well as facilities for warehousing and assembly activities in strategically favourable geographic locations (Millar 2015, 149-152). The clustering of services expands the freight volumes and hence economies of scale creating cost efficiency and smoother flow of cargo (Millar 2015, 152).

Using major transportation hubs also comes with its cons as major airports are having capacity issues due to heavy congestion. Hundreds of key airports around the world are struggling to carry the growing number of passengers and freight volumes (Knowler 2017.) hence freight forwarders and shippers face problems in booking space for cargo in passenger aircrafts as well as freighters. To handle more freight airports need to either use their existing infrastructure more efficiently or build more runways and terminals (Straits Times 2015).

DB Schenker Skybridge Downunder uses specified origin hubs (airports) to optimize cost effectiveness through economies of scale as well as two major strategic Asian hubs, Singapore and Hong Kong, where the cargo is loaded off from the aircraft and loaded into ocean containers for the second phase of the journey. The next sections cover the two strategic Asian hubs in more depth addressing both key competitive advantages as well as issues related to each hub.

3.3.1 Singapore hub

Singapore is strategically located in South-East Asia along the Strait of Malacca and it is currently the world’s largest transhipment port with over 30 million TEUs handled in 2015 (Maritime and Port Authority of Singapore 2018), a massive increase from 1990

when the equivalent number was only 5 million TEUs (Cullinane & Yae-Woo Lee 2015, 14). Maritime accounts for 7 per cent of Singapore's GDP and it has won the "Best Seaport in Asia" multiple times. It has connections to 600 ports in 123 countries. (Maritime and Port Authority of Singapore 2018.)

Singapore's Changi Airport handles 2 million tons of cargo per year and has connections to 280 cities in 60 countries. (Millar 2015, 159.) Being one of the key airports in Asia Changi has struggled with congestion in the recent years. However it has now answered to the increasing demand by developing infrastructure and opened its 4th terminal in the end of October 2017 increasing its capacity from 66 million to 82 million passengers per year (Liao 2017). For further development Changi is now working on a third runway which is planned to be ready early 2020 and a fifth terminal expected to be completed in mid-2020s (Singapore Ministry of Transport 2015).

3.3.2 Hong Kong hub

The port of Hong Kong has been rated 4th busiest in the world with 22.35 million TEUs in 2013 with connections to 500 destinations in the world. Hong Kong airport is the world's largest air cargo hub handling over 4 million tons of cargo per year to over 160 destinations. (Millar 2015, 160-161.)

Hong Kong Airport too has struggled with rapid growth of the air industry. Hong Kong had reached its maximum passenger capacity already in 2015 according to IATA (Straits Times 2015) and squeezes in 7,000 extra flights per year (Lee 2017). Hong Kong Airport has sought aid to the situation by investing in the new air traffic control system and thus more efficient use of its two runways that are currently operating at 98.2 per cent of their annual capacity, but more drastic measures are needed to handle the growing number of air travellers and cargo according to aviation officials (Lee 2017). In 2015 Hong Kong Airport also completed an extension adding 28 parking stands, a cross-runway vehicular tunnel linking the cargo area in the south and other supporting facilities (Hong Kong International Airport 2018a) and construction of a third runway is planned to be completed by 2030 (Hong Kong International Airport 2018b).

4 SKYBRIDGE DOWNUNDER

The majority of Skybridge shipments come from Europe and North America by air freight via Schenker's hubs in Singapore and Hong Kong, where they are further loaded into ocean containers (FCL or LCL) and shipped on to final destinations in Australia or New Zealand (see pictures 1 and 2).

PICTURE 1. Skybridge routing Europe to AU/NZ (Htun 2017)

PICTURE 2. Skybridge routing US to AU/NZ (Htun 2017)

Skybridge rates are calculated using agreed air freight and ocean freight rates and origin charges sourced from the origin countries, destination charges received from destination branches and transit charges from hubs Singapore and Hong Kong. There are four weight

groups, several origin countries in Europe and several origin hubs in United States with multiple origin cities, as well as five destinations in Australia and two in New Zealand. In practise Skybridge rates can be calculated from any origin on request.

Tariff rates are for standard cargo only within metro pickup and delivery area (with the exception of US where outside metro Tariff rates exist too), with small volume and dimensions and weight within agreed range. If the cargo differs from standard in any way or requires special handling the rate is individually calculated on request by PMA.

Skybridge Downunder was launched in 2009, less than a decade ago, making it hard to see a trend or draw conclusions of the shipment volumes or numbers. Skybridge, as all logistics products, is highly dependent on the world economy and demand for goods.

4.1 Skybridge operations

Transfer times differ depending on origin and destination, chosen service level, time and type of shipment. Door-to-Door standard cargo service from Europe to main ports in Australia (Sydney, Melbourne, Brisbane and Perth) vary between 18-26 days. More detailed transit times for each origin + destination combinations are listed on Skybridge Tariff Rates. The transit times mentioned in Tariff Rates however only apply to standard shipments. In case of oversized, big volume, dangerous or temperature controlled cargo PMA calculates the transit time based on the information received from origin for air freight leg and transit hub for vessel schedule and cut-off date.

For both standard shipments and the ones quoted by PMA, it is very important to ensure the shipment makes it to transit hub by cut-off time in order to catch the scheduled vessel. This requires careful planning from origin branch. Flights to Singapore and Hong Kong need to arrive at the latest one day prior to the CFS (Container Freight Station) cut-off date which is one day prior to the vessel's actual departure (ETD). If the cut-off day will be missed major delays will occur.

4.2 Skybridge cost structure

The Tariff rates are calculated using agreed air freight and ocean freight rates, origin-, destination- and transit charges. Tariff rates are for standard cargo only within metropolitan area, with small volume and dimensions and weight within agreed range. PMA is responsible for pricing the product and providing Skybridge Tariff rates. If the cargo differs from standard in any way or requires special handling the rate is individually calculated on request by PMA.

Skybridge rate consists of origin costs, air leg, transit costs, ocean leg, destination costs and a mark-up. The below graph illustrates the cost structure and costs' relation to the service level:

	Door-Door	Door-Port	Airport-Door	Airport-Port
Origin costs	x	x		
AF costs	x	x	x	x
Transit costs	x	x	x	x
Ocean costs	x	x	x	x
Destination costs	x		x	

TABLE 3. Skybridge cost structure

Origin costs include but are not limited to ex works –costs (customs clearance, export documents), pickup costs (from shipper to hub), terminal handling and/or screening fees and handling costs. If shipper is located outside gateway metro area, the shipment is also subject to line haul costs operated by truck.

Air freight rate includes transportation from origin gateway to Asia hub (SIN or HKG). The rate may or may not include fuel and security surcharges, this has always to be mentioned in the quote. Usually the rate is for economy rather than business or first class. Air freight rate may be either back-back or consolidation, depending on if there is only one shipment with one master and house air waybill (back-back) or if the shipment is a part of consolidation with one master air waybill but several house air waybills (consolidation).

Transit costs refer to the costs originated in the Asia hub as the cargo is transferred from air craft to ocean container and onto a vessel. Transit costs cover transfer fee from airport to port, trucking, handling, terminal handling charges, VGM fee (Verified Gross Mass, mandatory weighing of containers), document fees (bill of lading), container seal fees, customs permits, depot fee (fee related to empty container handling), stuffing and loading. There can also be additional charges depending on the cargo and container such as additional crane and forklift fees for oversized or –weight cargo.

Ocean cost relates to ocean freight rate which is either per kilo (LCL) or per container (FCL). The rate depends on the distance i.e. destination and container type. Special containers require special equipment and handling, hence the rate is higher. Special containers often used for oversized (out of gauge) Skybridge shipments include 20’ and 40’FR (Flat Rack, without side walls generally used for oversized cargo) and OT (Open Top, without a roof for over height cargo or special cargo that needs to be loaded on top).

Destination costs include but are not limited to Australian port fees, unloading fees, border security fees, shipping line document fees, delivery order fees, wharf booking fee, customs related fees: Sea Cargo Automation fee (SCA, a fee charged for electronically pre-alerting Australian Customs Service about upcoming arrivals), CMR fee (Customs Management Reengineering, charged for compliance with customs computer systems), customs clearance, AQIS (The Australian Quarantine and Inspections Service) processing fee as AQIS screens all imported cargo, delivery/cartage charges, carrier security fee and fuel levy surcharge.

As can be seen above Skybridge consists of various rate components which also vary depending on the cargo making it a rather complex product for pricing. It is also important to note that only Door to Door option encompasses all charges from consigner to consignee. In case chosen service level is Airport to Port or Airport to Door the rate only includes direct air freight related charges, yet there are compulsory fees to be paid at the airport such as handling fees and possible screening fees. Same applies to Door to Port and Airport to Port options, all port related fees at port of discharge (POD) are to be paid separately as they are not considered in the packaged rate.

5 SKYBRIDGE DOWNUNDER SOP

This Standard Operating Procedure (SOP) is designed to support PMA for managing and processing Skybridge ad hoc rate requests. It can be used as a supportive tool for current employees as well as for new employees during induction process. In this chapter the reader will get familiarised with the Skybridge rate calculating process. The instructions are designed to guide the reader through the rate calculating process from receiving the request to quoting the final rate. Confidential information as well as step-by-step instructions have been excluded from the published version of this thesis.

Below map demonstrates the standard routes of inbound Skybridge Downunder from Europe and United States.

PICTURE 5. Skybridge Standard Routes (Skybridge Downunder 2017, modified)

5.1 After receiving Skybridge request

Skybridge ad hoc rate requests are generally received from destination branches in Australia or New Zealand, from Sales, Account Managers or Customer Service by email. The requests must be acknowledged and assessed as soon as possible to make sure all relevant information is at hand and the rate procurement process can begin. It may take up to several days to get air freight, transhipment and ocean rates so it is crucial to start the process immediately after receiving the request in order for the responsible department requesting the rate to provide a competitive rate for the customer and have the opportunity to win the business.

5.2 Information check

Once a request has been received the content must be checked. All necessary information must be provided, and if not the missing information should be immediately requested in order to start the calculating process.

If the cargo is Dangerous Goods (DG) an SDS (Safety Data Sheet) must be provided by the person requesting the rate. It needs to be sent as an attachment to origin and hub when requesting rates in order for them to be able to provide accurate rates.

It is worth noting that sometimes the enquiries are for small volume standard cargo. Skybridge Tariff rates cover these shipments so the person requesting the rate should be instructed to refer to Skybridge Tariff rates in DB Schenker Intranet.

It is important to assess the correctness of the dimensions at the earliest convenience to avoid errors. After the assessment the volume calculator in PMA drive is used to convert the data to cubic meters and chargeable weight of the shipment.

5.3 Skybridge Opportunities list

PMA keeps a track of the ad hoc requests in Skybridge Opportunities excel list in PMA drive. Every request should be marked in the list with all relevant information. The Opportunities list can also be used as a tool for keeping track of the progress of the rate calculating process. The Opportunities list is also used to gather statistics about won and lost business.

5.4 Requesting air freight rates

In case the cargo is high volume, oversized or of special nature the origin hub needs to be contacted for origin and air freight rates.

5.5 Requesting ocean freight rates

If the shipment is of large volume, oversized, DG or requires special handling transit hub(s) need to be contacted for the rate.

5.6 Requesting destination rates

If the delivery address is outside the metro area or the cargo has to be loaded on something else than a standard ocean container due to oversize/commodity Ocean Imports in the respective branch has to be contacted and quote for the delivery to be asked. Contacts can be found in Intranet.

5.7 Calculation

After all required rates are at hand the instruction sheet found in PMA drive is used to determine which calculator to use for calculating the Skybridge rate for the shipment. Calculation consists of several phases, inserting basic information, origin costs, transit costs and destination costs. The calculation process is slightly different for cargo originating from Europe and United States, as well as for LCL and FCL cargo.

5.8 Quoting the rate

After the rate has been calculated quote the rates in all applicable service levels. When replying to a Skybridge request certain remarks must be added after the quote. This is to avoid any confusion and make the quote as accurate as possible. The remarks can be found in PMA internal drive.

5.9 After winning the business

If the bid is successful and the business is won the account owner will inform PMA. After this PMA's role is to support the parties if needed and supervise the smooth flow of the shipment and provide assistance if required.

6 CONCLUSION

The objective of this thesis was accomplished by creating a Standard Operating Procedure for Skybridge rate calculating process. The SOP is hoped to support PMA team induction process and future employees to get accustomed to the price calculating process as well as provide consistency and increase the quality of the process. It is also a useful tool when delegating tasks and ensuring business continuity in situations where key people are absent. Furthermore the thesis as a whole acts as a guidebook to Skybridge Downunder product itself and gives it a theoretical framework.

In order for the SOP to remain relevant and useful in the future it will require regular updating, however the main principles are assumed to remain the same so updating should not be too overwhelming and time consuming. If new, better, easier, faster and/or more efficient ways of operating are found the instructions should be adjusted accordingly.

This thesis was written based on the author's own experience while working within the PMA team as an intern for six months and working closely with Skybridge Downunder on a daily basis hence the SOP created reflects the view of the actual end user. However it has not yet been tested by anyone outside the team/a new team member which makes it difficult to assess the success and usability of the instruction. The initial goal was to write the SOP for people with little or no previous knowledge of the product yet the author is very familiar with Skybridge thus it was challenging to make the SOP simple enough for everyone to understand. It is however important to note that the user of this manual is assumed to have a basic understanding of freight forwarding from commercial and operational point of view as well as understanding of the common terms used.

Theoretical framework was used to support the actual outcome of this thesis (SOP) with information gathered from variety of sources including books, articles, other publications and web pages in order to provide a comprehensive and solid background. A considerable part of the sources are Schenker's internal hence confidential.

For further study creating an SOP for providing Skybridge Tariff rates is suggested.

The rates are updated regularly and the process is time consuming as it requires lots of background work contacting the overseas branches and procuring rates as well as calculating the rates for each origin and destination combination with different weight groups and service levels.

The original length of this thesis was 52 pages with one appendix page, however due to the nature of the thesis a large part of the content had to be excluded from the published version. This undoubtedly had an effect on the overall flow and balance of the thesis but excluding confidential information was necessary and essential to protect Schenker's intellectual property.

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