



belgian  
foreign trade agency



Logistics Industry

# SINGAPORE

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## 1. INDUSTRY OVERVIEW

Singapore has always been a strong performer in the global logistics scene and is considered one of the world's leading logistics clusters, thanks to its:

- world-class logistics infrastructure
- global connectivity
- efficient customs handling
- liberal taxation policies
- especially the rise of the ASEAN region as a new economic powerhouse, considering its location in the heart of Southeast Asia and at the center of major shipping lanes.

The World Bank has ranked Singapore as the No.5 Logistics Hub amongst 160 economies globally in the 2014 Logistics Performance Index.

### COUNTRY RANKINGS ON LOGISTICS PERFORMANCE INDEX

Economy	2014 LPI			2012 LPI			2010 LPI		
	Rank	Score	% of highest performer	Rank	Score	% of highest performer	Rank	Score	% of highest performer
Germany	1	4.12	100.0	4	4.03	97.0	1	4.11	100.0
Netherlands	2	4.05	97.6	5	4.02	96.7	4	4.07	98.5
Belgium	3	4.04	97.5	7	3.98	95.3	9	3.94	94.5
United Kingdom	4	4.01	96.6	10	3.90	92.7	8	3.95	94.9
Singapore	5	4.00	96.2	1	4.13	100.0	2	4.09	99.2
Sweden	6	3.96	94.9	13	3.85	91.2	3	4.08	98.8
Norway	7	3.96	94.8	22	3.68	85.9	10	3.93	94.2
Luxembourg	8	3.95	94.4	15	3.82	90.3	5	3.98	95.7
United States	9	3.92	93.5	9	3.93	93.7	15	3.86	91.7
Japan	10	3.91	93.4	8	3.93	93.8	7	3.97	95.2

Source: World Bank Report on "Connecting to Compete" 2014

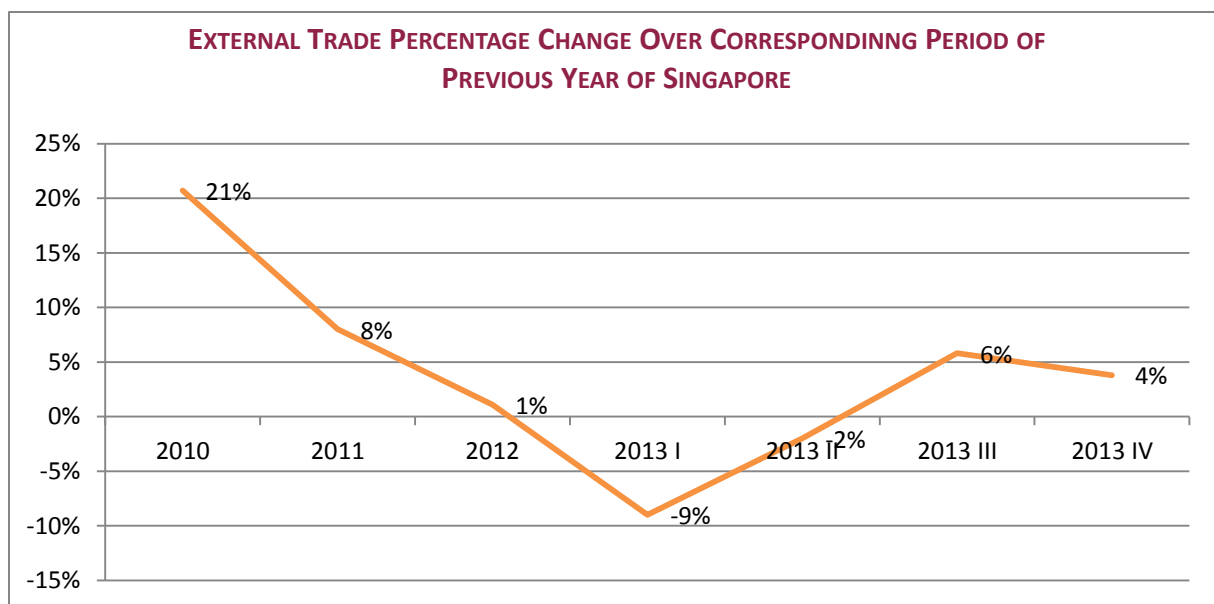
In terms of its Air Logistics Sector, both of its "Quality of Air Transportation" and "Quality of Air Transport Infrastructure" have been ranked as No.1 in IMD<sup>1</sup> «World Competitiveness Yearbook 2013» and in World Economic Forum «Global Competitiveness Report 2013-2014» respectively. On the other hand, its "Quality of Port Infrastructure" has been ranked No.2 by World Economic Forum in «Global Competitiveness Report 2013-2014».

<sup>1</sup> IMD: International Institute for Management Development, a business school located in Lausanne, Switzerland

In addition, Singapore's sea and air ports are easily accessible through its well-planned domestic road network, particularly with ongoing heavy public investment in road and railway infrastructure.

According to the Ministry of Trade and Industry of Singapore, the Logistics (Transportation & Storage) sector contributed to 7% of Singapore's GDP as of 2013, 9% as of 2010 and 9,4% 2007. There are more than 7.000 logistics companies in Singapore, employing over 180.000 people including those in the sub-segment of transportation, postal and courier, contributing to 12,3% of total employment in the country.

Frost & Sullivan, a consultancy, forecasts that Singapore's transportation and logistics market is projected to grow at a Compound Annual Growth Rate, CAGR of 6,2% to reach € 30 billion in 2016, supported by Singapore's growing external trade since the 3<sup>rd</sup> quarter of 2013, following global economic recovery.



Source: *International Enterprise Singapore, Yearbook of Statistiques Singapore*

## 2. GLOBAL LOGISTICS HUB

Singapore's seaport is linked to 600 ports in 123 countries via 200 shipping lines, with daily sailing to every major port of call in the world, while its Changi airport is served by about 6.800 weekly flights connecting to 280 cities in 60 countries.

Singapore has become the preferred logistics and supply chain management hub for leading players across industries such as aerospace, biomedical science, petrochemical, electronics and telecommunications. Singapore is also a global hub for third-party logistics providers (3PLs), providing large scale services ranging from air freight, customs brokerage, ocean freight, local transportation, warehousing and distribution to customized supply chain solutions or other value-added services for products in or transiting Singapore. In addition, Singapore is a logistics hub for leading manufacturers across industries, which include AAvaya, Diageo, Dell, Hewlett Packard, Infineon, LVMH, Novartis, ON Semiconductor, Panasonic as well as Siemens Medical Instruments.

### 2.1 SPECIALISED LOGISTICS HUB

#### 2.1.1 AEROSPACE

Singapore is Asia's leading aviation hub and the leader in the aerospace maintenance, repair and overhaul sector (MRO). Singapore's base of leading global 3PLs offers a wide range of capabilities for aerospace companies and airlines in Asia.

#### 2.1.2 CHEMICALS

Singapore is one of the world's top three integrated petrochemical hubs. Being at the forefront of the industry, it is developing competitive feedstock for petrochemicals, advanced materials as well as specialty chemicals. Numerous chemical logistics companies have set up significant operations in Singapore, such as Katoen Natie, a Belgian logistics service provider that has been developing its activities in Singapore over the last 20 years. In 2013, the company expanded its Jurong Logistics Terminal. The terminal is located on Jurong Island, a significant petrochemical cluster. This expansion represents an investment of about €33 million.

### 2.1.3 ELECTRONICS

The electronics industry forms the largest component driving Singapore's manufacturing economic engine. With Singapore's manufacturing excellence in electronics, DB Schenker, a German logistics firm, set up a global Competence Centre in 2012 to focus on developing Production Vendor Managed Inventory (PVMi) installations for the electronics and industrial manufacturing sectors, which will be the base camp for numerous supply chain experts in Asia and global markets.

### 2.1.4 HEALTHCARE AND COLD CHAIN LOGISTICS

Singapore plays a significant role in handling delicate medical materials for pharmaceutical and medical technology companies. To cater to the growing base of complex biomedical manufacturing, research and clinical trial activities in Asia, 3PLs such as DHL, UPS and TNT have established life-sciences logistics hubs in Singapore that can provide temperature and humidity-controlled shipments to global markets.

### 2.1.5 ART

Singapore has set up the Singapore FreePort which offers 30,000 square meters of storage such as showrooms, photo studios and wine cellars to facilitate the storage and movement of delicate, exclusive cargo. Companies that offer storage and logistics services at FreePort include Christie's Fine Art Storage Services, Fine Art Logistics Natural Le Coultre and Helutrans Group.

## 2.2 LEADING INDUSTRY PLAYERS IN SINGAPORE

21 of the world's top 25 third-party logistics providers are based in Singapore or have set up regional or global headquarter functions, including companies like DHL, FedEx, UPS, TNT, Kuehne, Sankyu, Schenker, Yusen Logistics, Toll Logistics, NYK Logistics, Agility and Nippon Express.

- **Katoen Natie** (Belgium): provide chemical manufacturers with storage and packaging facilities and value-added services such as chemical processing at Jurong Island.
- **Vopak** (Netherlands): a terminal operator providing tank storage, regional distribution, and value-added services for petroleum products, gases, and chemicals from its four terminals in Singapore. From its regional headquarters in Singapore, Vopak also manages operations in many other Asian countries including Malaysia, Indonesia, Japan, Korea and India.
- **DB Schenker** (Germany): set up its regional head office in Singapore, from where it manages 11.000 employees in more than 200 locations across the region. They also have a multifunctional "Logistics Centre" that serves as a regional distribution centre for multinational corporations and the "Integrated Freight & Logistics Mega-Hub", located within the Free Trade Zone in the airport logistics park<sup>2</sup> of Singapore.
- **DHL** (Germany): set up regional and global headquarter in Singapore for its three business units – DHL Global Forwarding, DHL Supply Chain, and DHL Express.
- **FedEx Express** (US): established a €70,7 million FedEx South Pacific Regional Hub within the Air Cargo Express (ACE) Hub at Singapore Changi Airport in 2012. The 28.264 square metres integrated facility serves the Singapore market and is a trans-shipment point for Asia Pacific shipments in and out of Australia, New Zealand, and Southeast Asia countries such as Laos and Cambodia. Since 2004, FedEx has also based its APAC Financial Services Centre (FSC) in Singapore, in charge of handling accounting and revenue operations, including invoices and collection services across Asia Pacific.

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<sup>2</sup> Cfr. IV b

- **UPS (US)**: set-up of UPS' first healthcare facility in Asia – a 3.995 square metres Healthcare Hub located at Changi Logistics Centre. Beyond storage and cold chain transportation, the hub could also provide value adding services such as kitting and secondary repackaging.
- **Toll Group (Australia)**: operates in about 14 locations and owns or occupies about 150.000 square metres of logistics facilities. The company specialises in the consumer goods sector, industrial, retail, mining and resources as well as a specialised logistics facility handling alcoholic beverages in Singapore.
- **Gati (India)**: located its regional headquarters in Singapore in 2008 to manage its internationalisation plans beyond India.
- **KWE-Kintetsu World Express (Japan)**: establish a state-of-the-art warehouse to create a mega logistics hub for customers to locate their Regional Distribution Centers in Singapore for the Asia Pacific region as well as to expand KWE's regional hub service offerings to customers.
- **Yusen Logistics (Japan)**: a leading Japanese third party logistics provider, set up its regional headquarters for South Asia and Oceania where key functions include sales & marketing, IT support, training and financial management. Yusen Logistics operates two dedicated facilities in Changi South and Tuas for mainly electronics goods, automotive and medical equipment.
- **YCH Group (Singapore)**: an end-to-end supply chain management and logistics partner to some of the world's largest companies, including Dell, Motorola, Samsung, LG, ExxonMobil, Unilever, LVMH and Royal FrieslandCampina.



### LEADING INDUSTRY PLAYERS IN SINGAPORE



Source: BFTA research

### 3. SEA LOGISTICS SECTOR

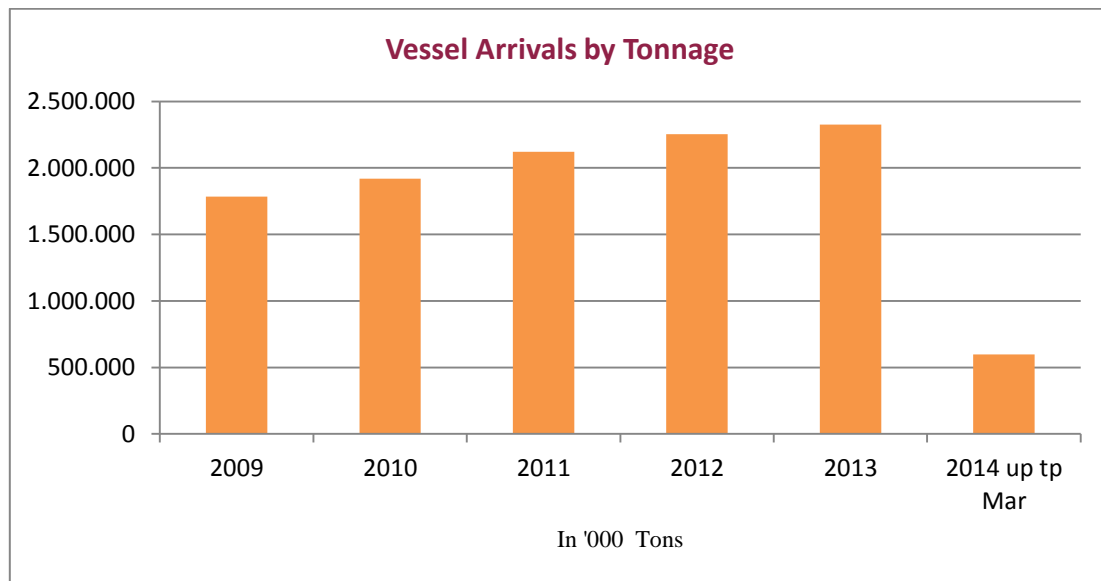
#### 3.1 MARITIME PERFORMANCE

Situated strategically at the crossroads of trade, Singapore boasts the world's busiest transshipment hub, handling 32,6 million TEUs of containers in 2013 and has been ranked as the world's busiest port in terms of shipping tonnage. PSA Singapore Terminals of PSA International<sup>3</sup> alone handles about 1/5 of the world's total container transshipment throughput and 6% of global container throughput. In 2013, Singapore maintained its global lead in bunker sales, and achieved good growth in annual vessel arrival tonnage, container and cargo throughput in carrying more than 2,3 billion tons.

Year	Vessel Arrival Tonnage (billion GT)	Container Throughput (million TEUs)	Cargo Throughput (million tonnes)	Bunker Sale Volume (million tonnes)	Singapore Registry of Ships (million GT)
2009	1.78	25.9	472.3	36.4	45.6
2010	1.92	28.4	503.3	40.9	48.8
2011	2.12	29.9	531.2	43.2	57.4
2012	2.25	31.6	538.0	42.7	65.0
2013*	2.33	32.6	557.5	42.5	73.6

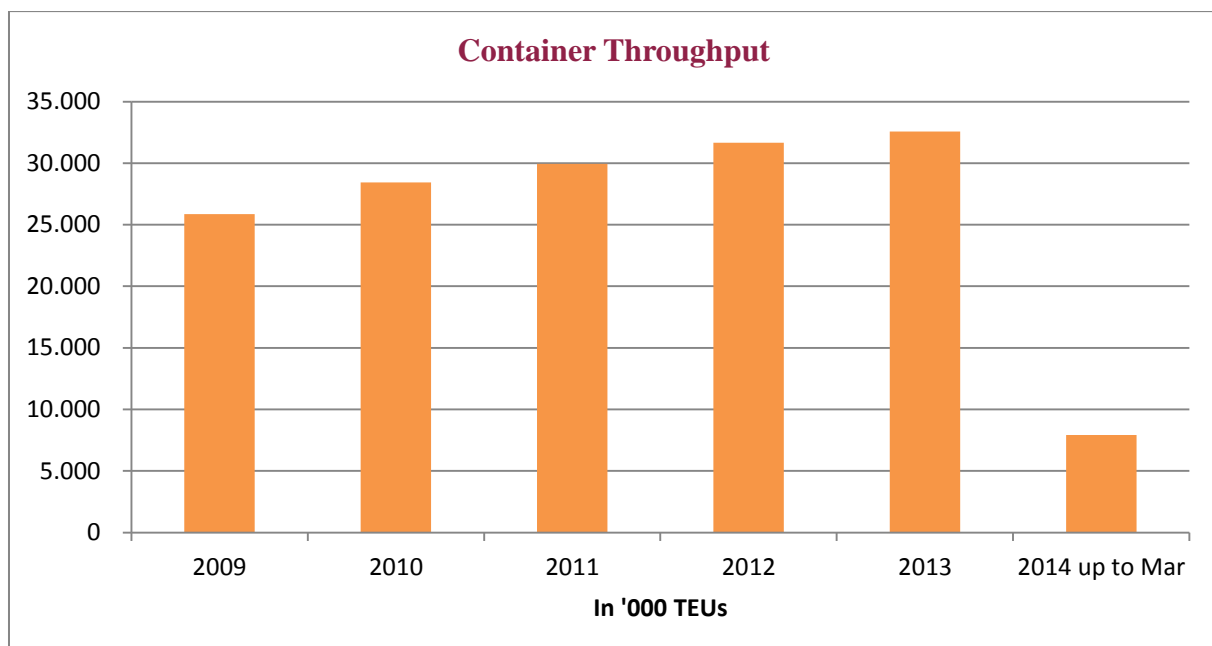
Annual vessel arrival tonnage reached 2,33 billion gross tons (GT) with over 139.000 vessels calling at the port of Singapore in 2013, an increase of 3,2% from the 2,25 billion GT achieved in 2012. Container ships and tankers were the top contributors, each accounting for around 30% of total vessel arrival tonnage.

<sup>3</sup> Singapore's PSA International, one of the leading global port groups, invests in port projects in 16 countries across Asia, Middle East, Europe and the Americas.



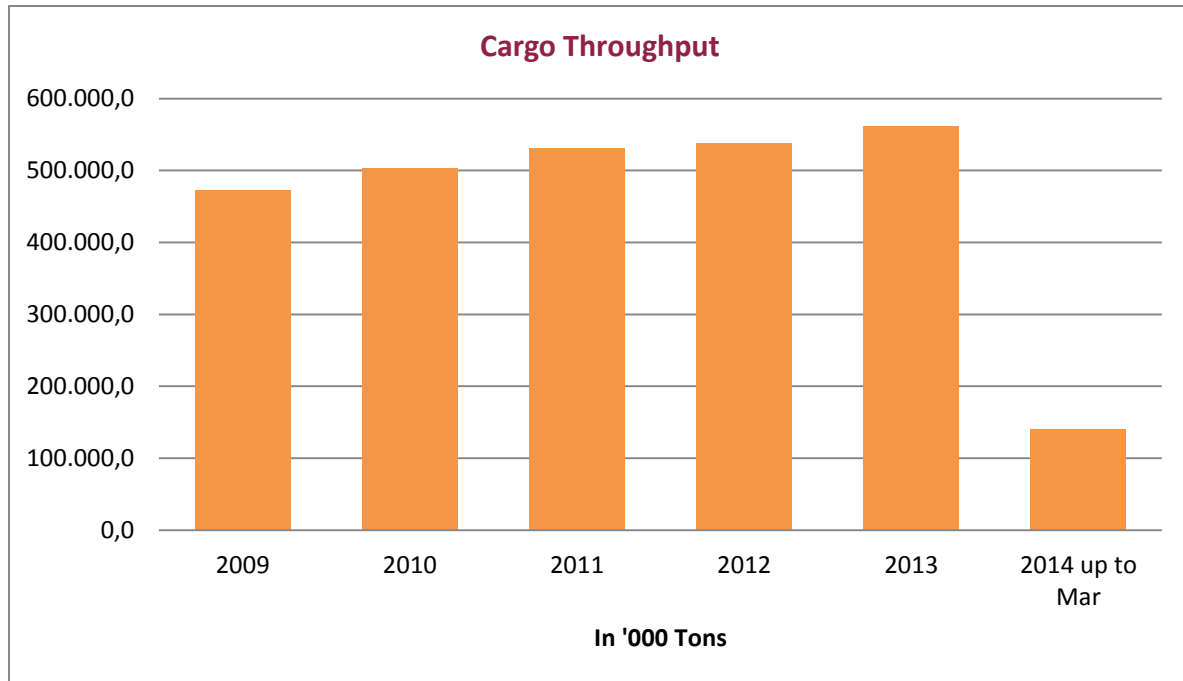
Source: Singapore Maritime and Port Authority

Singapore's maritime container throughput hit 32,6 million TEUs in 2013, a 2,9% increase over the 31,6 million TEUs in 2012.



Source: Singapore Maritime and Port Authority

Singapore's total maritime cargo tonnage handled in 2013 rose 3,6% over 2012 to reach 557,5 million tons.



*Source: Singapore Maritime and Port Authority*

In addition, Singapore remained the world's top bunkering port in 2013. The total volume of bunkers sold in the Port of Singapore in 2013 was 42,5 million tons, compared to 42,7 million tons in 2012.

The total tonnage of ships under the Singapore flag grew by 13,2% or 8.6 million GT in 2013 with a total tonnage of more than 73,6 million GT, putting Singapore among the top 10 ship registries in the world.

### 3.2 INFRASTRUCTURE DEVELOPMENT

The terminals in Singapore are managed by two commercial port operators, namely PSA Corporation Limited which manages the major share of container handling in Singapore and Jurong Port which is Singapore's main bulk and conventional cargo terminal operator.

Two important ports in Singapore are the Port of Singapore and Jurong Port. The former one is located at the southern part of Singapore, an approximately 30-minute drive from Changi Airport. It is connected to 600 ports in more than 120 countries. Over 200 shipping lines call at the Port of Singapore. As for Jurong Port, it is located at western end of Singapore and is connected to more than 80 ports in over 40 countries handling a total of 370 shipping lines.

In order to maintain its global lead in handling maritime cargo and to meet rising Asian market need, Singapore has put in place numerous infrastructure development programs.

### 3.2.1 NEW PORT IN TUAS<sup>4</sup>

In October 2012, the Ministry of Transport of Singapore announced a long term plan to consolidate Singapore's container port activities at Tuas, because of "its sheltered deep waters and proximity to both major industrial areas and international shipping routes", in an attempt to maintain Singapore's hub port leadership. The new Tuas Port will be progressively developed to handle up to 65 million TEUs per annum to meet the long-term needs of the industry. Its first set of berths is expected to be operational in about 10 years' time.

#### **New Tuas Port in concept**



*Source: Singapore Maritime and Port Authority*

### 3.2.2 PASIR PANJANG TERMINAL PHASES 3 AND 4

In Singapore, PSA Singapore Terminals operates six container terminals at Tanjong Pagar, Keppel, Brani, Pasir Panjang Terminal 1, 2 and 3 with a total of 57 container berths, with Pasir Panjang Terminal being PSA's most advanced terminal.

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<sup>4</sup> Tuas is an industrial zone located in the western part of Singapore

## PSA Singapore Terminal Layout



Source: Mitsui O.S.K. Lines, Ltd

The decision to develop Phases 3 and 4 of Pasir Panjang Terminal (PPT) in order to meet future growth in container volume was mooted in 2004. The land reclamation for PPT Phases 3 and 4 are near completion. Remaining works will be completed by 2014. Expansion of Pasir Panjang Terminal will increase PSA's total port capacity by about 50% to 50 million TEUs when fully completed with 15 berths by 2020.

### 3.2.3 LAUNCH OF MARINA BAY CRUISE CENTRE SINGAPORE

According to Singapore Maritime and Port Authority (MPA), Singapore's second cruise terminal, Marina Bay Cruise Centre Singapore, became fully operational in October 2012, which together with the existing International passenger Terminal at HarbourFront, has doubled Singapore's cruise berth capacity.

### 3.2.4 LAUNCH OF MARINA SOUTH WHARVES

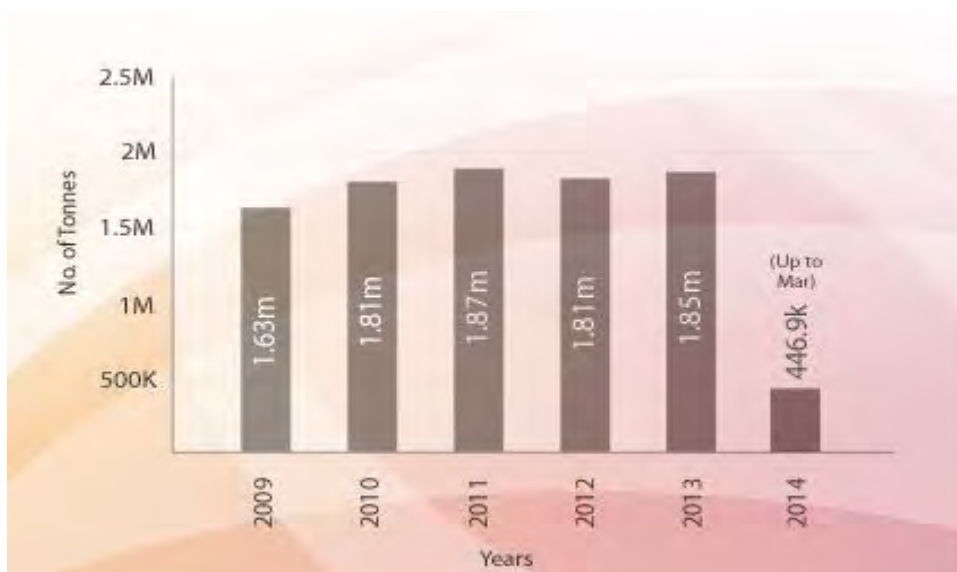
The new Marina South Wharves (MSW) was officially opened in September 2012. Developed by MPA at a cost of €9,33 million and operated by Jurong Port Pte Ltd, MSW complements the existing lighter terminal at Penjuru. MSW has in place a new Lighter Wharf Management System (LWMS) equipped with wireless internet coverage to enable mobile transactions via the LWMS.

## 4. AIR LOGISTICS SECTOR

### 4.1 AIR FREIGHT MOVEMENTS

Singapore is ranked at 7<sup>th</sup> in “International Freight Traffic Monthly Ranking” published by Airports Council International<sup>5</sup> as of May 2014. According to IATA<sup>6</sup>, the Singapore Airlines was ranked 6<sup>th</sup> in terms of international scheduled freight carried out as of 2013.

#### AIR FREIGHT MOVEMENTS AT CHANGI AIRPORT 2009-MAR. 2014

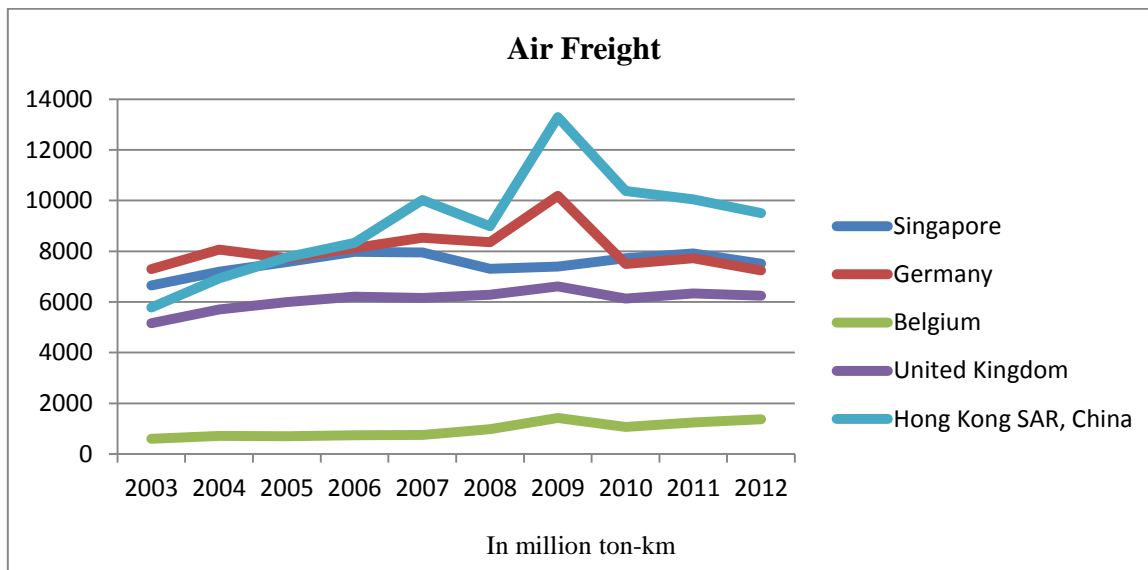


Source: Changi Airport Gr

Air freight carried out by Singapore during the last decade has evolved steadily and holds a significant place compared to other logistics hubs as shown in the following graphics:

<sup>5</sup> Airports Council International is the global trade representative of the world’s airports.

<sup>6</sup> IATA (International Air Transport Association), the trade association for the world’s airlines.



Source: World Bank

## 4.2 AIR INFRASTRUCTURE

- **Changi Airfreight Centre (CAC):** a 24-hour Free Trade Zone (FTZ) where transshipment cargo can be broken down and reconsolidated with minimal customs formalities. Within the 47-hectare facility, there are nine airfreight terminals with a combined handling capacity of three million tons of cargo per annum
- **Airport Logistics Park of Singapore (ALPS):** strategically located within the FTZ, the 26-hectare facility is almost fully occupied by 3rd Party Logistics providers with value-added logistics and regional distribution activities
- **The Singapore FreePort:** encompassing 30.000 square metres of strong rooms, The Singapore FreePort offers modular storage solutions ranging from 10 to 1.000 square metres for showrooms, workshops, photo studios or private offices. The FreePort has direct access to airport terminals and is designed with special accommodations to house valuable assets such as works of fine art, jewellery, antiques, vintage cars, wines, etc
- **Coolport@Changi:** Singapore's first dedicated facility to handle terminal and transit perishables cargo within the FTZ. The facility will also be able to handle urgent medical cargo, strengthening Singapore's position as Asia's leading biomedical hub



- **Air Cargo Express (ACE) Hub:** a specialised facility which provides direct airside access and onsite customs clearance to facilitate the speedy delivery of express cargo. FedEx air express is the first to set up its new regional hub within Singapore's ACE Hub

In addition to its sophisticated air infrastructure, Changi Airport is also well connected. It is not only close to the Port of Singapore and Jurong Port, but also less than one hour's drive from the Woodlands and Tuas checkpoints for cargo coming overland from Malaysia.

## 5. GOVERNMENT'S POSITION TOWARDS THE LOGISTICS INDUSTRY

To strengthen its position as distinctive global city and leading global financial and business hub, Singapore plans to enhance its connectivity to integrate physical trade with related services, among which, supply chain management. The Singapore government has long recognized that logistics continues as a vital growth industry that is critical to the economic growth of the country and aims at developing Singapore into a leading global integrated logistics hub, with robust maritime, aviation, and land transport capabilities.

The development blueprint of the government of Singapore includes:

- Leverage strong physical hub capabilities and integrate these with knowledge intensive supply chain management skills and technologies to build a strong physical -virtual hub value in cargo movement
- Optimise the flow of cargo through information management while maintaining and leveraging on excellence in port handling facilities, ship registry, bunkering, ship repairs and logistics, and transport & logistics IT
- Develop IT for Logistics Nerve Center, including software developers & applications; integrated IT community platform
- Develop logistics ecosystem through knowledge-intensive & high value-added activities like sourcing & procurement, assembly & testing, supply chain configuration & optimization, data hosting, reverse logistics, financial & treasury functions, as well as supply chain management talent and capability development

In 2012, the Singapore Economic Development Board launched the “Logistics and Transportation Productivity Roadmap”. This €31 million roadmap points out that the logistics firms should raise productivity by deepening their supply chain management expertise, and focuses on two key areas and would increase the value-added per worker in select segments of the logistics and transportation industry by about 30% to €76.765 by 2015. These areas are: 1) Enhancing supply chain management expertise and 2) Enhancing innovation and efficiency at enterprise and industry levels.

The Ministry of Transport of Singapore has announced incentive schemes in 2012 such as the Maritime Sector Incentive scheme to attract shipping companies and ancillary maritime service providers to reside in Singapore. There are currently over 5000 maritime companies in Singapore, including more than 120 international shipping companies. Meanwhile, a €72,93 million Maritime Innovation and Technology (MINT) Fund was established to co-fund the development of maritime R&D initiatives.

Furthermore, the Ministry of Transport invested €3,93 billion in public transport and road infrastructure in fiscal year 2012 and another €4,23 billion in the end of 2013.

According to Singapore's Land Transport Authority, Singapore's rail network will double in length to 360km, more than seven times the length of the island, by 2030.

## 6. USEFUL INFORMATION

- [www.edb.gov.sg](http://www.edb.gov.sg)
- [www.changiairport.com](http://www.changiairport.com)
- [www.caas.gov.sg](http://www.caas.gov.sg)
- [www.mpa.gov.sg](http://www.mpa.gov.sg)
- [www.singstat.gov.sg](http://www.singstat.gov.sg)
- [www.mot.gov.sg](http://www.mot.gov.sg)



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**Date of publication :** May 2014

**Responsible editor :** Marc Bogaerts

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Printed on **FSC** & **PEFC** paper.