



CHANGI
airport singapore

DESTINATION
Singapore

TOTAL NUMBER OF PIECES
01

**The Air Cargo Hub that
Takes Your Business Further**



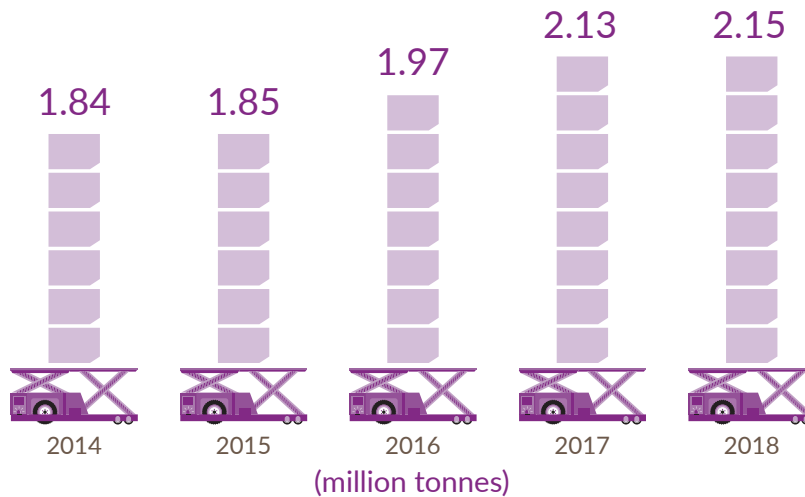
Singapore Changi Airport

The Air Cargo Hub that Takes Your Business Further.

As one of the world's busiest airports for air cargo, Changi Airport is renowned for its extensive air connectivity, as well as high level of service quality and efficiency. Handling over 2 million tonnes annually, it continues to set new standards in operational expertise to meet the changing needs of the air freight industry.



Our International Cargo Throughput



Our International Ranking

8th
Largest
Cargo Hub
in the world for international
cargo throughput

(Source: Airport Council International 2018)

Our Top 10 International Cargo Markets in 2018



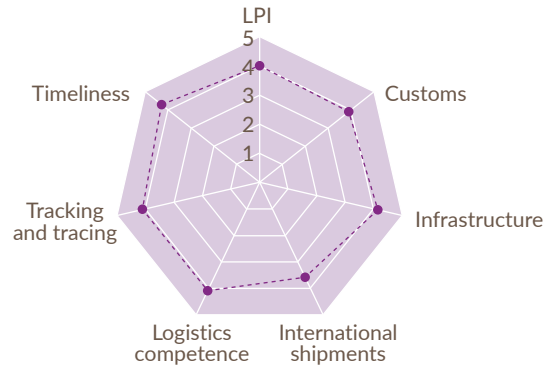
Our Operational Excellence

Singapore is the second most efficient country in Southeast Asia and Southwest Pacific.

2018 LOGISTICS PERFORMANCE INDEX (LPI)

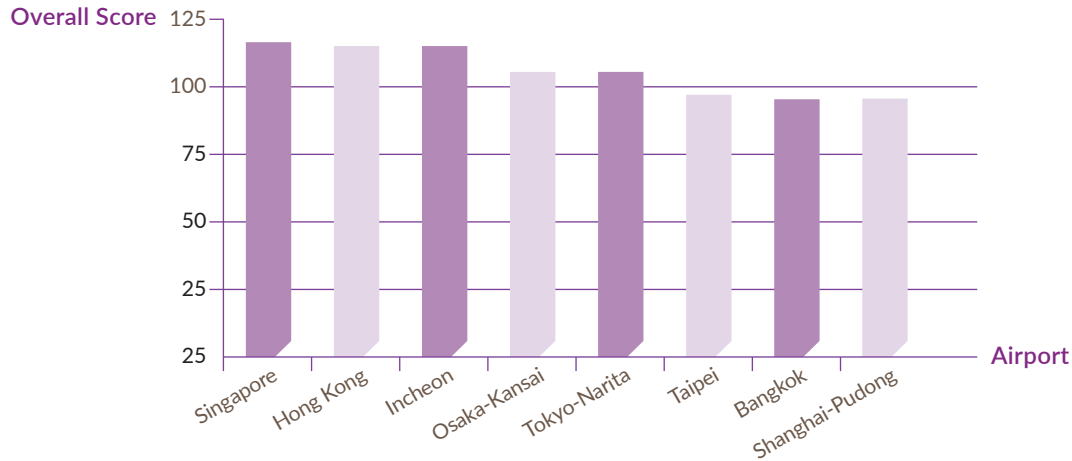
COUNTRY	LPI RANK	LPI SCORE
GERMANY	1	4.20
SWEDEN	2	4.05
BELGIUM	3	4.04
AUSTRIA	4	4.03
JAPAN	5	4.03
NETHERLANDS	6	4.02
SINGAPORE	7	4.00

SINGAPORE LPI 2018



(Source: World Bank 2018)

And ranked Best Global Air Cargo Airport for Performance, Value and Facilities.



(Source: Air Cargo Excellence Report 2018)

An Integrated Logistics Gateway

Designed to move cargo like clockwork round the clock

24 OUT OF **25** of the world's largest airfreight forwarders have established major operations in Singapore.



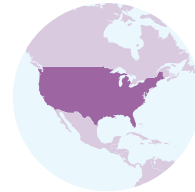
ASIA

APEX Logistics International
Dimerco Express Group
Hitachi Transport System
Kerry Logistics Network
Kintetsu World Express
Nippon Express
NNR Global Logistics
Sinotrans
Yusen Logistics



EUROPE

Agility
Bolloré Logistics
CEVA Logistics
Dachser
DB Schenker
DHL Global Forwarding
DSV
Geodis
Hellmann Worldwide Logistics
Kuehne + Nagel
Panalpina



USA

Crane Worldwide Logistics
Expeditors
FedEx Logistics
UPS Supply Chain Solutions

(Source: Armstrong & Associates, Inc. 2017)

Our International Air Connectivity

* **126** airlines.
411 cities.
99 countries.

All from Changi Airport.

One of the widest networks in Asia:

- 25 cargo airlines operating over 320 weekly freighter flights
- 48 freighter city links
- Regional freighters offering coverage and interline opportunities to emerging Southeast Asian markets
- With more than 7,450 weekly scheduled flights, an aircraft takes off or lands at Changi roughly once every 90 seconds
- Key markets in Asia Pacific within 7-hour flight time



As of January 2019

*Includes both physical and codeshare city links

Our Family of Cargo Airlines

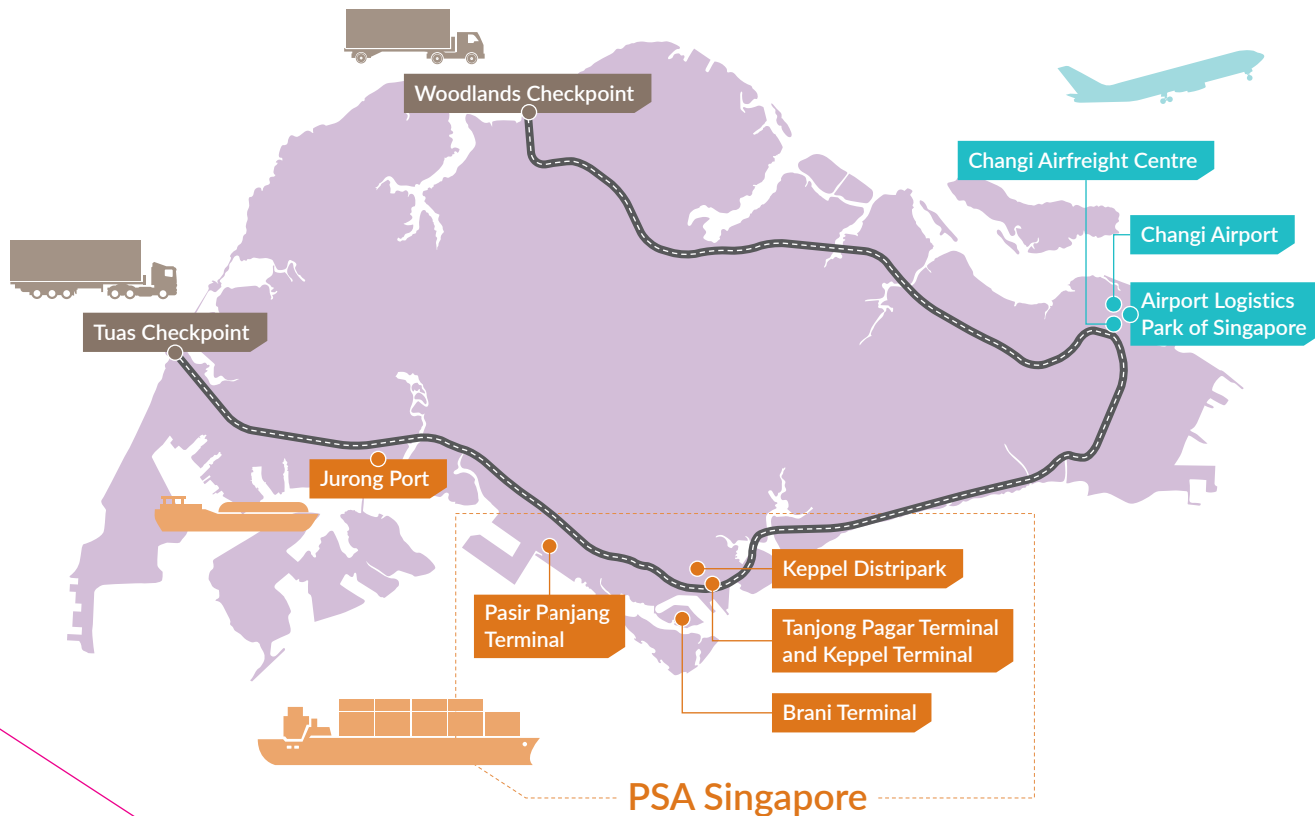
- Aerologic
- Air Hong Kong
- AirBridgeCargo Airlines
- All Nippon Airways
- Asiana Airlines
- Cargolux Airlines
- Cathay Pacific
- China Airlines
- China Cargo Airlines
- Emirates
- EVA Airways
- Federal Express Corporation
- Hong Kong Air Cargo
- K-Mile Air
- Korean Air
- My Indo Airlines
- My Jet Xpress Airlines
- Nippon Cargo Airlines
- Polar Air Cargo
- Raya Airways
- SF Airlines
- Silk Way West Airlines
- Singapore Airlines
- Tri MG Intra Asia Airlines
- United Parcel Service



Our Seamless Multimodal Connectivity

Air. Sea. Road. We've got you covered.

- Dense sea and road networks for multimodal transshipment
- Seamless intermodal connectivity between one of the world's busiest seaport and airport
- Less than an hour's drive from PSA terminals, the world's second largest container port and busiest transshipment hub with connectivity to over 600 ports
- Regional cross-border trucking networks



Our Key Cargo Verticals



Our Operational Expertise: Cold Chain Logistics

World-class cold chain facilities

Deep knowledge on the handling, storage and transportation of temperature sensitive cargo is required to maintain the integrity of pharmaceuticals cargo and the freshness and quality of perishables products. With its dedicated temperature-controlled facilities, Changi Airport is able to provide cold chain solutions to store these delicate cargo for subsequent distribution locally and globally.



Handling capabilities of up to 325,000 tonnes of temperature-sensitive cargo annually



Changi Airport handled over 300,000 tonnes of temperature sensitive cargo in 2018



With its on-tarmac chiller, Changi Airport is able to offer a temperature-controlled environment for the transshipment of perishable and pharmaceutical cargo with a turnaround time of less than three hours



Priority handling for cold chain cargo ensures minimum exposure to weather elements



Storage of perishables and pharmaceuticals within specified temperature zones to ensure the optimum conditions for each product

Asia Pacific's first CEIV Pharma community for pharmaceutical handling

Changi Airport is the first airport in Asia Pacific to establish a community of logistics service providers to attain the certification for the IATA Center of Excellence for Independent Validators for Pharmaceutical Handling (CEIV Pharma).

Under the community approach, at least one company from each segment of the air cargo supply chain would have the facilities, equipment, processes and trained staff to comply with all applicable standards, regulations and guidelines. This is in addition to SATS Coolport being the first facility in the world to attain the IATA CEIV Pharma certification. As of 1 Jan 2019, we are the largest IATA CEIV Pharma community in Asia Pacific.

What is IATA CEIV Pharma

While Good Distribution Practice (GDP) helps raise standards, the IATA CEIV Pharma program is a "GDP+" certification given it encompasses GDPs from around the world, international standards such as WHO Annex 5 and IATA Chapter 17 and national or local regulations as applicable. This ensures excellence in the transportation and handling of pharmaceutical products while at the same time addressing specific air cargo needs.

With Asia poised to account for the largest share of cold chain growth, the IATA CEIV Pharma community in Singapore ensures pharmaceutical manufacturers that they can rely on Singapore's position as the preferred location for the handling, storage and transportation of pharmaceutical cargo.

Our IATA CEIV Pharma Airport Community Approach



Airlines



Ground Handlers



Freight Forwarders



Pharma@Changi and Pharma.Aero



Pharma@Changi was formed, together with our partners, to further enhance our handling capabilities in Changi Airport, by pursuing best practices in pharmaceutical transportation, and assessing emerging pharmaceutical logistics trends and technologies.



Airline

Singapore Airlines

Freight Forwarders

Bolloré Logistics

CEVA Logistics

DB Schenker

DHL Global Forwarding

Expeditors

Global Airfreight International

Ground Handlers

dnata Singapore

SATS



Changi Airport is part of Pharma.Aero, an international association consisting of Pharma shippers, CEIV certified cargo communities, airport operators and other air cargo industry stakeholders to achieve excellence in reliable end-to-end air transportation of pharmaceutical shipments. Its mission is to foster collaboration between CEIV certified airport communities dedicated in developing and leading when it comes to handling pharmaceuticals.

SATS Coolport

SATS Coolport is Asia's first on-airport perishable handling facility dedicated to ensuring cold-chain integrity for a wide range of delicate cargo, including pharmaceuticals. With a well-trained team, quality management system and state-of-the-art facility that adheres to Good Distribution Practice (GDP) guidelines, SATS is proud to be certified by IATA as the world's first CEIV in Pharmaceutical Handling in 2014.

Together with its established air cargo handling and logistics capabilities, SATS provides comprehensive and integrated solutions that meet the most stringent requirements.

Key Features



First facility in the world to be awarded the IATA CEIV Pharma certification since 2014



8,000m² on-airport facility



18 cold rooms of adjustable temperature zones from -28°C to +25°C, with product segregation capability



250,000 tonnes annual handling capacity



200 airline pallet positions catered for different temperature zones



15 temperature-controlled truck docks

Products Handled



Temperature-sensitive pharmaceutical and biomedical products



Fresh cut flowers



Fresh fruits and vegetables



Chilled / frozen meat and meat products



Dairy foods



Live / chilled / frozen seafood



Confectionery, including chocolates



SATS Coolport Certifications

- IATA CEIV Pharma certification
- HSA Good Distribution Practice (GDP) Certified
- TAPA
- Halal-certified
- Hazard Analysis and Critical Control Points (HACCP) certification
- Good Distribution Practice (GDP) for Medical Devices
- ISO 9001, 14001
- OHSAS 18001



HSA GDP Certified
Cert No: MCGD1800001



TAPA Class A Certified
Cert No: SNG6012661



HACCP Certified
Cert Number: H-216-0137



CERT NO.: OHS-2003-0051
BS OHSAS 18001 : 2007



CERT NO.: GDP-2010-0077
HSA TS-01-R2.12012



CERT NO.: 95-2-0403
ISO 9001 : 2015



CERT NO.: 99-0065
ISO 14001 : 2015

Cool chain cargo given priority to be unloaded from and loaded into aircraft



Using on-tarmac chillers for air-air transshipment of cool chain cargo with short turnaround time



Cargo handled and stored in temperature-controlled facility



dnata Coolchain

Built in 2013, dnata Coolchain is designed to handle high value, high yield perishable items within a dedicated, state-of-the-art cargo handling facility. Encompassing the latest cold storage technologies and designs, the dnata Coolchain offers uncompromised storage solutions and cold chain products to a wide range of temperature-sensitive cargo.



Priority release within 2 hours of aircraft landing for perishable cargo



Operational 24 hours a day, all year round



Web-based monitoring system to facilitate real-time management 14 modular cold storage area for loose/pallet cargo, each with its dedicated climate control capability



1,400m² perishable handling facility with an annual handling capacity of 75,000 tonnes



Individual room space ranging from 26m² to 42m² for customised temperature controlled storage



89m² cold room area capable of storing up to 6 LD7s at the same temperature



784m² of temperature-controlled break-and-build area so your cargo is not compromised in the process of handling



Temperature controls in individual room ranging from freezing minus 25°C or cold room conditions of 0°C to 25°C



10 charging stations for Envirotainers and CSafe units and top-up service for dry ice

dnata Coolchain Certifications



CEIV certified



ISO 9001:2008 certified for cargo handling services



GDP certified by the Singapore Health Sciences Authority

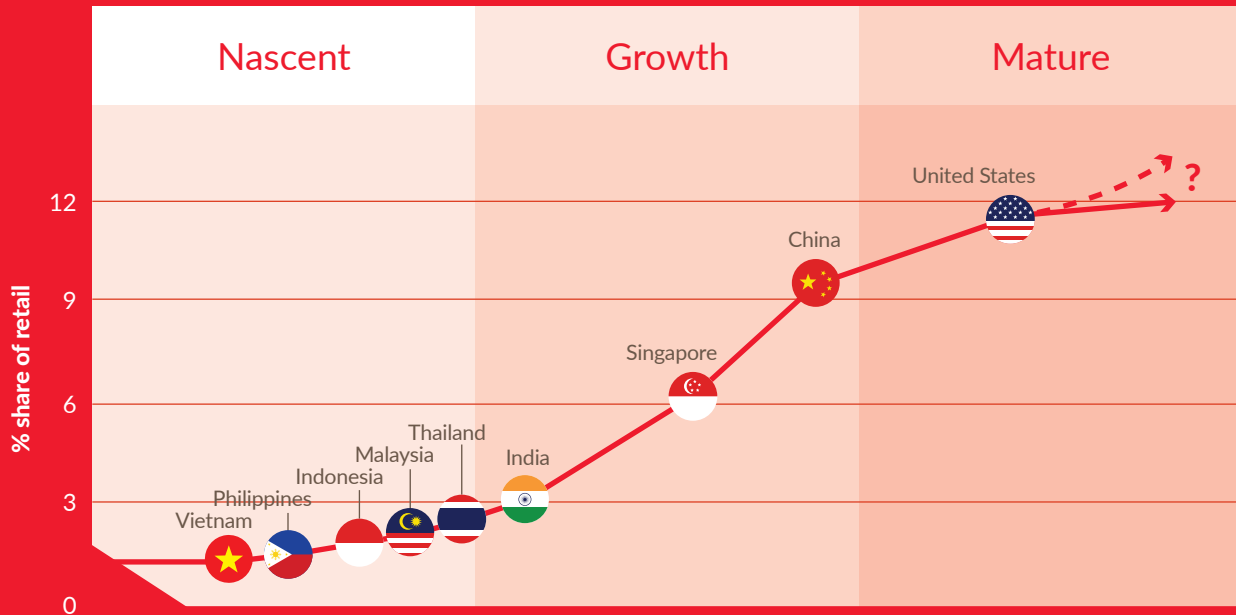


Halal certified with special Halal holding room in Coolchain

Our Operational Expertise: E-Commerce

Based on a report by Google and Temasek Holdings, Southeast Asia's digital market could exceed US\$200 billion by 2025. With 630 million people, a growing middle class and rising internet penetration, Southeast Asia is often considered to be the next gold rush for e-commerce.

Evolution of e-commerce % of total retail in select countries



Sources: Euromonitor, Planet retail, emarketer, iResearch, Technavio; A.T. Kearney analysis

SATS eCommerce AirHub

In April 2017, SATS unveiled a S\$21 million eCommerce AirHub. The 6,000m² facility houses new state-of-the-art innovations and technology aimed to improve productivity. There is a fully automated mail sortation system that increases the mailbag processing capacity of SATS to more than 1,800 an hour – up from 500 previously. With a direct integration with SingPost's airmail consignment operations and the facility's locality within the Free Trade Zone on the airside, mail sortation operation is streamlined to eliminate the need for mailbags to be transported to and from the hub. The combination of these factors has enabled faster mailbag processing – reducing turnaround time by 50 percent, from six hours to three hours. This allows international e-commerce mail to connect to an earlier flight for faster delivery.



SingPost

SingPost has established operations in the Airmail Transit Center (ATC) in Changi Airfreight Centre (CAC) where it houses security screening of mail imports into Singapore and processing of Express Mail Service (EMS), air parcels and registered mails. The four storey ATC building also contains the processing of open transit (mixed shipment) and closed transit (intact mailbags), where SingPost would cut CN38 documents for the transhipped mail.

Our Operational Expertise: Express

Changi Airport is home to the major express players – DHL Express, integrated FedEx Express-TNT and UPS. Features of their on-airport hubs in the Free Trade Zone include:



Direct access to the airside and freighter parking stands for quick sorting and turnaround of goods



Operate own or partner freighter airlines, as well as leverage on the excellent connectivity provided by other commercial airlines operating in Singapore, to extend their reach

With all major players operating regional hubs in Singapore, businesses and consumers have abundant choices to transport their goods and documents quickly, reliably, and predictably to and from destinations across Asia Pacific and the world. By opting for time-definite services, shipments can reach major cities in Asia Pacific, Europe, and the Americas by the morning of the next working day.

DHL South Asia Hub



S\$140 million facility located within Changi Airfreight Centre



Operational since October 2016



Floor area of over 23,500m²



Fully automated express parcel sorting and processing system, capable of processing 14,000 shipments per hour, and up to 628 tonnes of cargo per day



Supports up to 5 times more flights in Singapore



FedEx Express South Pacific Regional Hub (Handles integrated FedEx Express-TNT cargo volumes)



Over 26,000m² integrated facility operational since 2012



Consolidation point for transshipments in and out of Australia, New Zealand, and Southeast Asia



50 weekly FedEx flights in and out of Singapore



S\$97 million facility that houses air, ground, and clearance operations under one roof



2 adjacent freighter parking stands



Fully automated high-speed sorting system that can sort up to 12,000 packages per hour



Accommodate 280 delivery vehicles



UPS Singapore Headquarters



Singapore is home to UPS Asia Pacific Regional Headquarters



UPS' facility in Airport Logistics Park of Singapore (ALPS) stands at almost 400,000ft² and is one of the 6 facilities it has established in Singapore



16 weekly UPS flights in and out of Singapore



UPS expanded its Worldwide Express™ package service at the start of 2018 to provide an earlier delivery option for customers in Asia, which includes Singapore



About Changi Airport

Fundamentally right. Future-ready.



Dedicated cargo developments:
Changi Airfreight Centre (CAC)



3 million tonnes of annual handling capacity



Over 125,000m² of warehouse and office capacity at Changi Airfreight Centre



2 major runways, each 4km long



27 widebody freighter parking bays fronting airfreight terminals, with more in the pipeline



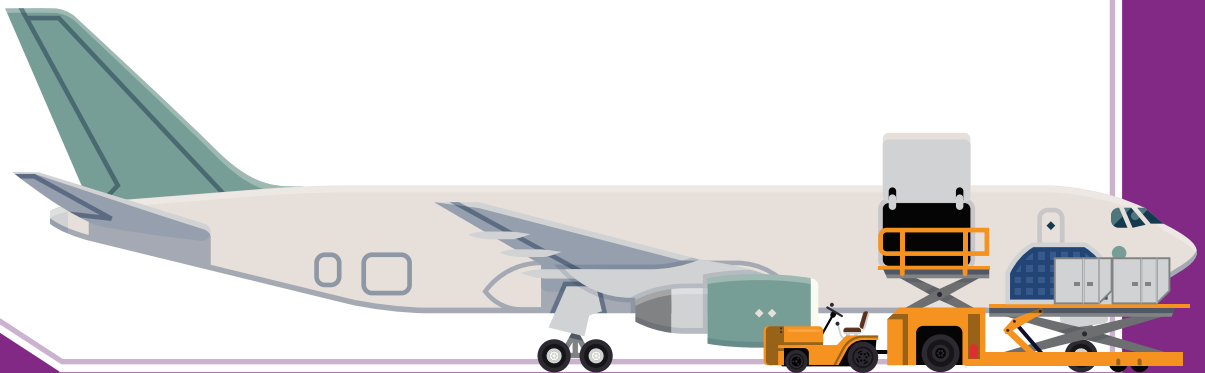
Capabilities for A380 and B747-8 freighter planes



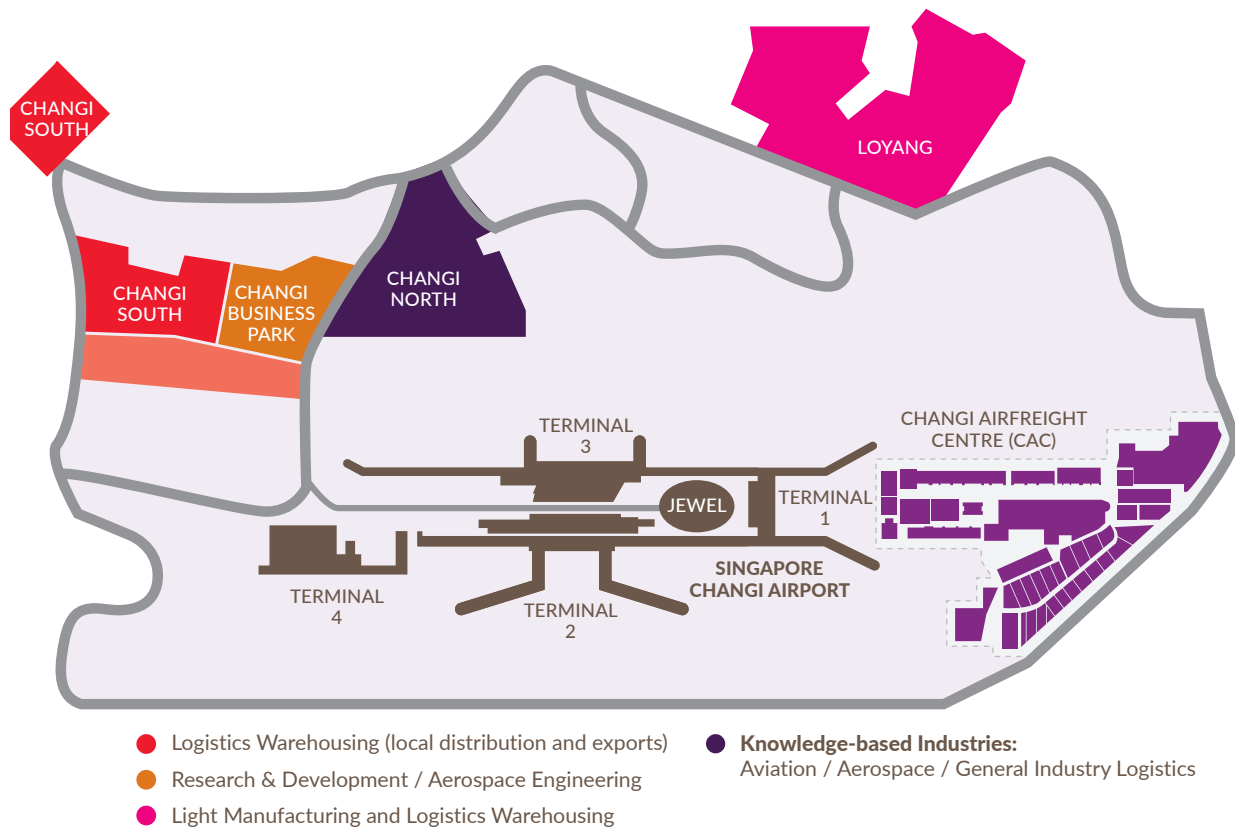
No night flight restrictions



Round-the-clock efficient customs operations



The Air Cargo Hub that Takes Your Business Further

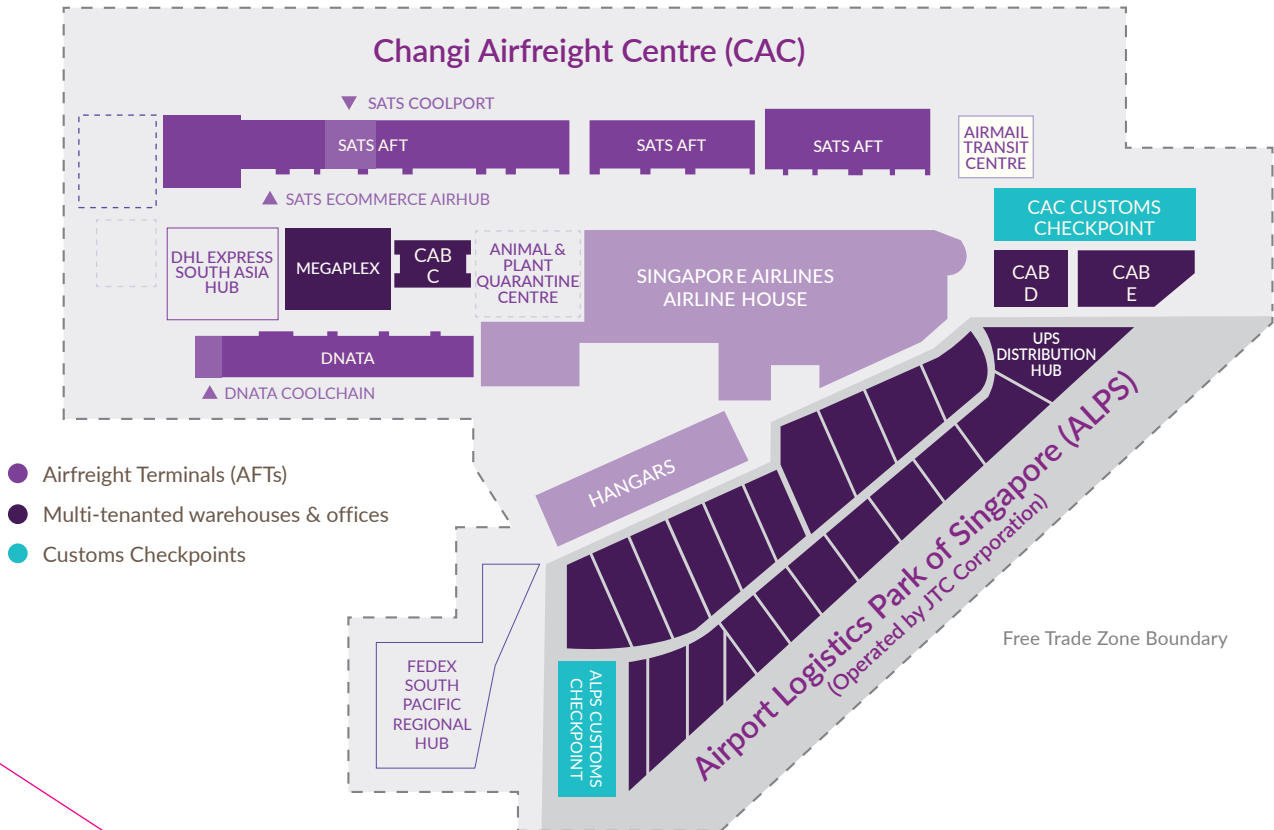


Your success is important to us. Which is why we offer cargo and route development programmes support to help you identify new growth opportunities and sharpen your competitive edge as you serve global clients from Singapore.

An Air Cargo Hub Trusted by the World's Biggest Names

Over 70 hectares of contiguous Free Trade Zone, Changi Airfreight Centre and Airport Logistics Park of Singapore offer shippers and third-party logistics companies a unique opportunity to establish Regional Distribution Centres or Regional Fulfillment Centres.

- Over 350,000m² of warehouse capacity
- Reduction in handling costs and cycle time



Our Future Capacity Development

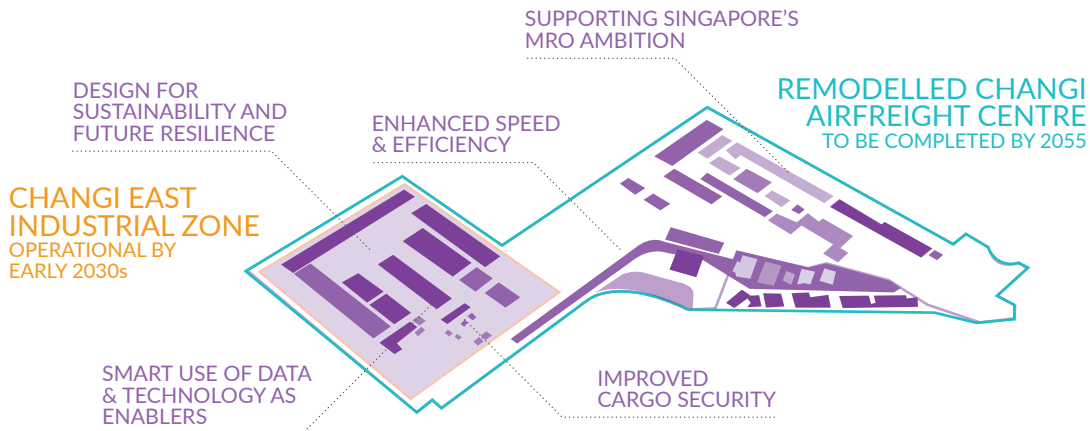
Changi East Industrial Zone (CEIZ) is a dedicated airport industry zone set aside within the Changi East airport development to provide infrastructure for the longer-term development of air cargo, maintenance, repair & overhaul activities (MRO), aviation support facilities and fuel farm at Changi Airport. CEIZ is slated to be operational by early 2030s.

Together with the revamped Changi Airfreight Centre (CAC), both CAC and CEIZ would make up Changi's future air cargo hub spanning over 150 hectares of land. The total annual handling capacity will also increase from the current 3 million tonnes per annum to 5.4 million tonnes per annum. Both sites will be under the same contiguous Free Trade Zone area, with airside access.

Developing The Future Air Cargo Hub

From annual handling capacity of

3 MILLION TONNES TO
5.4 MILLION TONNES



Our Awards

Thank you for making Changi Airport one of the world's top 10 international cargo hubs.







SINGAPORE
AIRLINES
CARGO

sats GATEWAY

MJL 15



CHANGI
airport singapore

Changi Airport Group (Singapore) Pte. Ltd.
changiairport.com/cargo

All information is correct at time of print (March 2019)

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