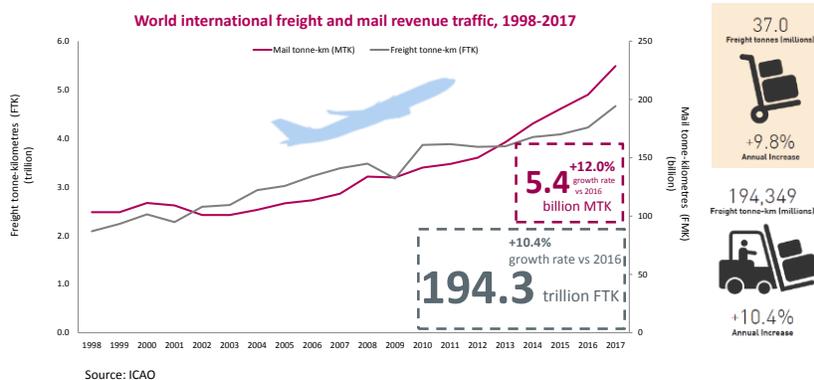


Air cargo or freight refers to any property, other than mail, stores and passenger baggage, carried on an aircraft. The term air cargo is also used in a broader sense by the airline industry to mean any property (freight, express and mail) transported by air except baggage. An all-cargo service is an air service that carries only cargo, whether scheduled or non-scheduled.

Economic growth and globalization drive air cargo demand. Today, air cargo retains its vital role in economic expansion, with emphasis on developing markets. As a trade facilitator, air cargo increases the global reach of businesses, allowing them to bring goods and products to distant markets in a more cost-effective and faster way. 2017 was an exceptional rebound year for air cargo performance, resulting from improved global economic conditions, world trade and increased import and export activity. Over the past two decades, the annual average growth rate of Freight Tonne Kilometer (FTK) was 4.1% while Mail Tonne Kiloemter (MTK) was 4.05%.

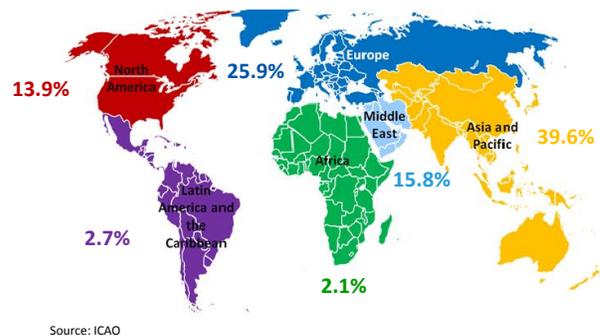


In terms of freight tonnes, there was a growth of 9.8 per cent, with a total load of 37.0 million tonnes during 2017, while there were 33.7 million tonnes loaded in 2016.

In 2017, demand (FTKs) grew 10.4 per cent, totaling 194.3 billion.

Air cargo carries a diversity of goods: high-value, consumer, heavyweighted and outsize goods, live animals, and temperature sensitive. A high proportion of air freight is business-to-business and pre-consumer in the supply chain. Components, machinery and spare parts for products may not be intrinsically of high value, but they are process critical in the supply chain and the air linked assembly line. Air cargo enhances the productivity of several industries by cutting costs for storage, inventory, and production.

Share of International Freight Tonne-Kilometres by region, 2017



Asia-Pacific was the most dynamic region in 2017 in terms of FTK, at 38.8 percent of total global traffic. This represents more than 86.7 billion of FTKs compared to 80.3 billion in 2016, which represents a 2017 growth rate of 7.9 percent in. Air cargo growth rate followed the strong expansion in world trade: 4.7 per cent. This outperformance was a result of strong global demand for manufacturing exports and a re-boost in consumers' confidence.

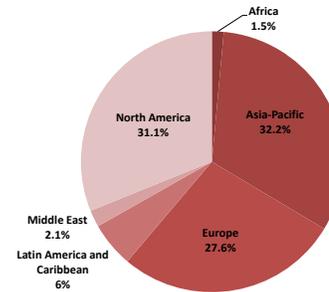
Airport performance in air cargo

Worldwide airports: Total freight
2014-2017



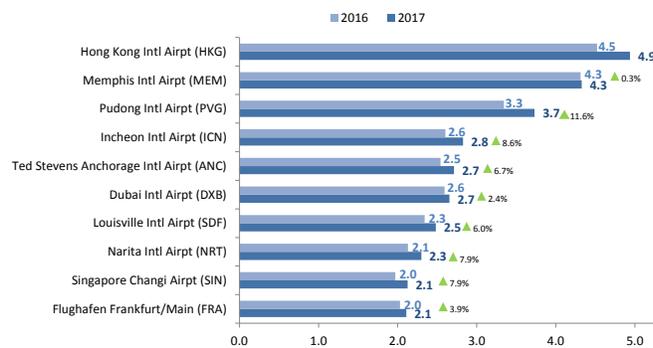
Source: ICAO&ACI, Common Form I.

Share of total mail by region, 2017



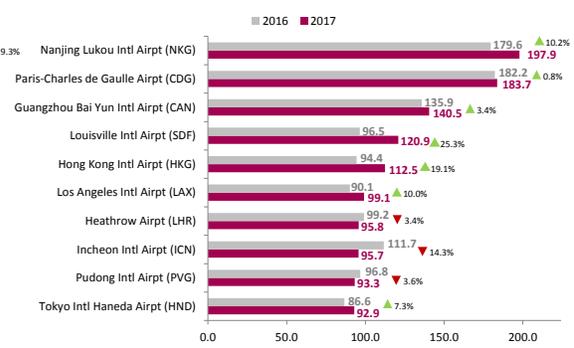
The good 2017 for air cargo is also reflected in airports performance. During 2017, 104.7 million tonnes were transported throughout airports across the world, where 69 per cent represented international freight. Total freight (loaded and unloaded) grew 7.3 per cent in comparison with 2016. During the same period, mail recorded 3.8 million tonnes which represents a growth rate of 6.5 per cent. It is important to underline, that North America and Asia Pacific regions captured 63.3 per cent of the total mail, totaling 2.4 million tonnes. Despite the small share of 1.5 per cent Africa has been the golden star during 2017, this region performed more than double of the mail tonnage from 22.6 thousand tonnes in 2016 to 55.1 thousand tonnes in 2017.

Top ten airport ranking in freight tonnage^{/1}



Source: ICAO&ACI, Common Form I. /1 Freight tonnage is given in million. /2 Mail tonnage is given in thousand.

Top ten airport ranking in mail tonnage^{/2}

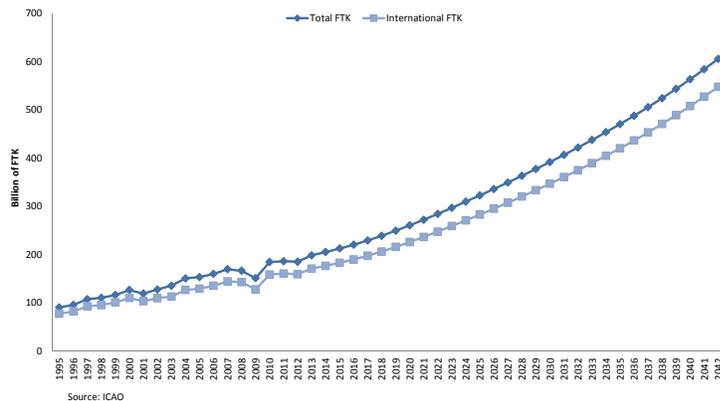


The airport rankings in freight and mail tonnage confirm the performance abovementioned. Related to the airport ranking in freight tonnage, these 10 airports capture the 27 per cent of the worldwide freight tonnage. From these ten airports 5 are located in Asia Pacific, 3 in North America and one in the Middle East and Europe, respectively. Related to airport ranking in mail tonnage, these 10 airport represent the 37 per cent of the total mail tonnage. From these ten airports 5 are located in Asia Pacific, 2 in North America and 3 in Europe. Changi airport growth in cargo flows were for cargo segments such as e-commerce, perishables and pharmaceuticals. Also, Changi is the major pharmaceutical hub in the Asia Pacific region.

Embracing new technologies, new platforms... new ways of thinking

As online retail boosts demand for parcel delivery services worldwide, e-commerce has become one of the main drivers for the air cargo industry,. According to the *Cross-Border E-Commerce Shopper Survey 2017* by the

Forecasting air cargo demand



Air cargo industry battled against the global economic downturn in 2008 and 2009. After an eager comeback in 2010, air cargo fought again, against the standstill from 2011 to 2012. The first signs recovery were in 2013 and 2014, when total FTK grew 0.4 and 4.7 per cent, respectively. These elements were key encouraging signs for expected recovery of the industry. However during 2015 air cargo slowdown the pace as a consequence of the weakness reflected by the trade

growth in Europe and Asia-Pacific. The strong growth rate appeared in 2016, when the total FTK grew at 3.6 per cent, that was nearly double than 2015 growth rate. This result was a positive output from a strong recovery in the export orders. Finally 2017 has been the best year since 2010.

Air cargo traffic gathered strength during 2016 and 2017, and is projected to return to sustainable trend growth by 2018. The development of the air cargo industry depend mainly of the following economic variables: Gross Domestic Product (GDP) growth rate, performance of international trade and the relationship of air freight demand to goods trade. Air cargo also is facing some threats and challenges such as rising interest rates, trade protectionism, and international conflict, along with operational restrictions. However, new opportunities show in the international framework such as: e-commerce and pharmaceuticals. ICAO has forecasted the air cargo demand measured in Freight Tonne Kilometers (FTK). Taking 2017 as the baseline for the estimation of the annual component growth rate, it is estimated that the total FTK may grow at 4.5 per cent in the coming decade and 10.7 per cent in the next 25 years. The International FTK is expected to grow at 2.9 per cent in the next ten years and 6.2 per cent in the next 25 years.

Conclusion

During 2017, air cargo traffic took-off and showed a recovery as a result of the improvement of global economic conditions, strong boost of e-commerce and the robust expansion of the world trade. Even though air cargo moves an average of 0.5 per cent of the total volume of the worldwide international trade, for some economies, the value of the merchandises may represent from 47.5 per cent to 5.0 per cent depending on how use-extensive that economy is from its air transport systems as well as the various geographical, infrastructural and economic factors.

Air cargo plays a vital role in the network economies supporting just-in-time supply chain management that is beneficial to cut storage and inventory costs. Air cargo retains and even expands its vital role because businesses consider it as a crucial link in the supply chain. Security and reliability of air freight as well as the speed are the key decision factors for this choice in mode of transport. ICAO is collaborating with its Member States as well as other International Organizations to enhance security, facilitation and liberalization of air cargo. Its goal is to develop a sustainable, global air cargo network that is a vital component of the global supply chain and complements other modes through appropriate connectivity. ICAO is also showcasing the importance of air cargo as a key element in infrastructure development and the alleviation of poverty, as well as a technology trigger and a means to empower both least developed and developing economies so they might effectively participate in the global marketplace.