

# The Biggest Challenge in Aviation History Awaits Us!

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The entire world is watching as numerous projects strive to develop vaccines against the new type COVID-19 virus. According to the World Health Organization, about 250 different vaccine development programs are currently underway around the world. However, finding a vaccine as well as distributing it worldwide will be a major operational undertaking.

According to a calculation made with the assumption that a single vaccine dose is sufficient for each person, it has been revealed that in order to ensure the worldwide distribution of

vaccines for the world's population of 7.8 billion, it would be necessary to achieve 8,000 Boeing 747-400F equivalent (cargo aircraft) of flight capacity. Such figure would of course show upsurge, if people need more than one dose of vaccine.

If cold chain transportation is required for the vaccines (temperature between 2 to 8 degrees Celsius), some of the existing aircraft would be out of scope. If the vaccines must be transported in frozen form, the number of aircraft

capable of performing this historic task would be far fewer. Considering that the vaccine will be produced in a few developed countries and distributed around the world, it is obvious that this should be planned as a high precision military operation.

The International Air Transport Association (IATA) announced that they are in contact with airlines, airports, healthcare institutions and pharmaceutical companies on this issue. The IATA says the aviation industry faces the biggest transportation

challenge ever, and that governments must plan the "mission of the century" now to ensure that the vaccine reaches every destination in the world.

Air cargo will play a significant role in the supply of vaccines to regions such as South America, Africa and Southeast Asia where road transport is relatively difficult. Almost all cargo normally carried to such emerging markets was being transported in cargo compartments of passenger aircraft. However, in most of these regions,



passenger operations were halted due to a decrease in demand and travel bans placed to prevent the spread of the virus. This situation can make the distribution process far more complex.

Experts think that it is "impossible" to distribute vaccines on the African continent especially considering its size in surface area alone, and compound that with the inadequacy of the transportation infrastructure in the region and the complexity of border crossings as well as capacity problems.

It is thought that vaccine delivery planning should be treated sensitively and that local distribution processes in the hinterland will require cold storage sites where vaccines can be stored to prevent damage. This will improve both the timeliness of the vaccine reaching people as well as reduce the overall cost.

**Action already taken by airlines and airports!**

Fraport, which operates airports in many parts of the world, especially Frankfurt, announced that they have started to work on the processes of vaccine distribution. Air France-KLM Group is also reviewing its flight network in Africa and assessing vaccine supply potential.



Turkish Airlines Cargo Carrier

Air cargo companies taking advantage of the pandemic can significantly increase their profitability, considering their involvement in vaccine distribution operations. For this reason many airlines see a role they can play in vaccine distribution and it will be great opportunity for their recovery.

**Air Cargo Sector in Turkey also to benefit!**

Turkish Cargo, the thriving sub-brand of Turkish Airlines, provides services in the field of air cargo and has made significant progress in recent years. The company, conducting cargo flights to 88 destinations with 23 aircraft in its fleet, has increased the volume of cargo it carries more than 11 times in the last 15 years. Turkish Airlines increased its share in the global market from

2.35% in 2013 to 4.10% in 2019 with the rapid rise in cargo transportation, and achieved US\$ 1.72 billion in cargo revenue in 2019. It ranks 4th in Europe and 7th in the world according to the volume of cargo sold.

Last May, Turkish Cargo became the first air cargo brand to have all three "CEIV Pharma, CEIV Fresh, CEIV Live Animal" certificates granted by the IATA CEIV (Center of Excellence for Independent Validators). With CEIV certificates, Turkish Cargo carries out the transportation of pharmaceuticals / health products, live animals and perishable products in accordance with international and industry standards. The fact that Turkish Cargo holds CEIV certificates, which are valid for three years, symbolizes the company's perfectionist approach in special cargo operations and it seems to

qualify Turkish Cargo to be one of the few airlines that will meet the requirements in the vaccine distribution process, thus increasing its revenues significantly.

Except for Turkish Cargo, other air cargo companies in Turkey such as, MNG, ACT, ULS Airlines are having their moment with the pandemic. Air cargo companies in Turkey are likely to increase their market share during the worldwide vaccine distribution once an approved vaccine is created.

The vaccine distribution operation seems to be a great opportunity for Istanbul as well, one of the most important hubs in the world. There is a firm belief and expectation that cargo traffic both at Ataturk Airport and Istanbul Airport will increase during this process ➡