

# Why Pharmaceutical Manufacturers and Airport Logistics Should Grow Hand in Hand

While the past two years have been very turbulent in many ways, the air cargo industry has seen unprecedented growth levels, providing vital resources globally, whilst under constant pressure. In early 2020 global air cargo volumes collapsed due to the sudden loss of wide body passenger jets, who account for 50% of total air cargo capacity globally. On top of that there was a very high demand ex-Asia for PPE, air cargo capacity was vitally needed to ship COVID-19 vaccines and now the industry is charged with the supply of the COVID-19 antiviral medicines on top of the regular pharmaceutical traffic. Yet the industry has a can-do mentality and offers a solution for any problem.

Of all the products that use air cargo, pharmaceuticals are one of the few that are not affected by regular business cycles. The global medicine market (using invoice price levels by IQVIA) is expected to grow at 3–6% CAGR through 2025, to about \$1.6 trillion. The market remains very stable, whether we see economic growth or decline, pharmaceuticals are a vital commodity, and this market will remain naturally stable within the air cargo supply chain. It's therefore safe to assume that growth within this product segment will continue to flourish in the logistics industry. A segment that needs to grow in parallel with the pharmaceutical industry itself, working closely together, ensuring that logistics can keep up and safely deliver the product to the end user. A key stakeholder and driver in this process are the airport authorities, they should motivate the airport community to modernize infrastructure, invest in quality improvement programs and drive innovation.

However, airport communities cannot do this alone, support is needed from the pharmaceutical industry itself. Improvements in infrastructure, certification, digitization and so on should be looked at from a joint perspective. Workshops should be organised, and partnerships should be signed at conferences. The stakeholder that matters most will reap the benefits, i.e., the patient.



Brussels Airport's latest Real Estate developments, BRUcargo West, which houses three large pharma hubs.

## The Brussels Airport Story – Listening to the Manufacturers

Over the past ten years, the cargo area of Brussels Airport (BRUcargo) has been investing and innovating into the pharmaceutical airport eco-system, not only because of its ideal central location within Europe and its proximity to major pharmaceutical manufacturers, but because of its clear company-strategy on enhancing the pharmaceutical supply chain at its airport premises.

The first gap that needed to be filled over a decade ago, was the clear understanding of the pharmaceutical manufacturer's logistics requirements. Apart from networking and building relationships at pharma conferences, the airport kickstarted a forum that invited pharmaceutical manufacturers in one room, the BRUcargo pharma shipper forum, a bi-annual event. In this setup, the airport was able to identify key weaknesses, listen to essential desires and where it could add innovation.

A key topic that was evident in the BRUcargo pharma shipper forums was the lack of pharma standardization in the air cargo industry. At the time there was no governing body ensuring that pharmaceutical products were handled correctly at the airport. The only existing certification at the time was the Good Distribution Practice (GDP), but this did not really apply to pharmaceuticals moving through an airport. In collaboration with IATA, Brussels Airport and other stakeholders launched a taskforce to compile and create an encompassing program that trains and validates pharmaceutical stakeholders in

the air cargo industry, better known as IATA CEIV. BRUcargo currently holds the largest concentration of CEIV certified companies globally and has implemented this program into its strategy.

Besides working on the CEIV program, investments have been made in modernizing the infrastructure at BRUcargo, again by listening to feedback of the pharmaceutical manufacturers themselves. Currently, over 35,000m<sup>2</sup> of dedicated pharmaceutical cold storage facilities are in operation at the airport, spread across 18 different pharma hubs. Each company has full ownership of their pharma specialization and investments are made on their behalf. By having multiple pharma hubs on site, healthy competition enables innovation. Additionally, feedback was given that the transport of pharmaceuticals towards the aircraft was showing a lot of temperature deviations. As a result, the airport researched and invested in a pooled fleet of airside pharma transporters, ensuring climatized transport at airside.

To push handling quality to a higher level, Brussels Airport offers a digital platform, BRUcloud, as a solution to many inefficiencies. For pharmaceuticals a live dashboard was created along with an extended checklist for the acceptance stage of pharmaceuticals when arriving at the airport. This way the airport ensures all pharmaceutical shipments are correctly handled as per product requirement.

In order to strengthen the cargo community at BRUcargo, a community engagement platform was launched in 2016, Air Cargo



Handling process of COVID-19 vaccines in a pharma hub.

Belgium. The platform consists of an airline, forwarder and handling cluster, linked to nine steering groups who tackle everyday operational issues, launch innovative projects and promote the airport. One of these steering groups, the pharma steering group, acts as a facilitator to bring all pharmaceutical airport stakeholders in one room, and where innovative approaches to optimizing the pharma supply chain at BRUcargo are discussed and launched.

By listening and closely collaborating with the pharmaceutical industry, the recent innovations and investments gave the airport a pole position during the COVID-19 pandemic. Brussels Airport was the first airport to distribute the COVID-19 vaccines globally and has handled over a billion doses within a year. Additionally, the airport also became the first hub to distribute COVID-19 antiviral medicines. With this amazing achievement Brussels Airport has confirmed its position as the preferred European pharma & life sciences gateway. It gives great pleasure and pride that the airport was able to positively impact so many lives around the globe.

But it was not the airport alone who benefitted from this, by working together in the past, the pharmaceutical industry now has access to a well located and highly qualitative global hub for the transport of sensitive pharmaceuticals. It's a win-win.

### A Long Road Ahead, Together

Despite all the positive results and examples given in the previous paragraph, the air cargo industry is not there yet. Brussels Airport is one of the few airport communities who actively work on a close relationship with the pharmaceutical manufacturers, and where the results have paid off, yet with plenty of work still ahead. A push needs to be made on a wider scale to promote closer collaboration between the two industries. There is no point in having a top-notch pharma hub at airport A but having multiple temperature deviations at airport B.

This push is being made by organizations such as Pharma.Aero, where working groups



One billionth vaccine being loaded onto a United flight to ORD, in the background you can see two Airside Pharma Transporters.

are assessing current pharma standards within the air cargo industry and how to be innovative towards the future. A current project of Pharma.Aero, CEIV 2.0, is assessing the current industry sentiment on the CEIV certification and share this feedback with IATA. A clear outlier of the project is the lack of engagement with the pharmaceutical industry within the CEIV program. How can both industries improve this and navigate together to a better future?

With a lack of engagement comes a lack of communication. Looking back at Q4 2020, the air cargo industry had a better understanding how the new Apple MacBook would be boxed and shipped than the shipping requirements of the COVID-19 vaccines. It is obvious which one should receive the higher attention. A call for better communication is being worked on, efforts are being made on local and international level. However, comparable to the days before the CEIV certification, there is no authority centralizing and fact checking the information or encouraging and facilitating the air cargo industry to collaborate closer with the pharmaceutical industry. For example, at the moment Pharma.Aero and a local working group at Brussels Airport are investigating the handling requirements and technicalities of Advanced Therapy Medicinal Products (ATMP), as this will quickly become the next hot topic in healthcare. Unfortunately, the number of pharmaceutical manufacturers present in these projects are very limited, yet the purpose is to ensure a better understanding and improving transport conditions of their product.

Not only should both industries collaborate better on good communication and handling practices, but they should also jointly look at optimizing the supply chain to improve sustainability. Currently single use packaging is the norm, and on many occasions the selected packaging is overkill. By joining forces and doing combined tests on temperature behavior and lane mapping, a more optimized packaging solution can be implemented, eliminating unnecessary



Loading process of an Airside Pharma Transporter with COVID-19 vaccines.

precautions and packaging material. Linking data and control towers can also highlight handling inefficiencies within and outside the airport, thus further reducing the waiting times of pharmaceuticals during transport, improving throughput of the supply chain and reducing unnecessary CO<sub>2</sub> emissions by stationary trucks for example.

With the world opening up again after many lockdowns, now is the time to act. Attend conferences, link up again, talk to your airport or pharmaceutical partners and join forces. It pays off. If you want to join the Brussels Airport collaboration platform and wish to participate in one of the pharma shipper forums, do not hesitate to reach out to the author of this article.



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