

AVIATION FUEL LOGISTIC MODEL RECOMMENDATIONS FOR AIRPORT AUTHORITIES

1. Only one Fuel Farm. Long term commitments in case high investments

- Having only one Fuel Farm **increases overall operation simplicity and efficiency**:
 - Only one interlocutor and responsible which allows direct and fluid communication with the Airport Authority or Operator and relevant Third Parties (Airlines, Fuel Suppliers, Off-site storage facilities and refineries, etc.)
 - Increased operational efficiency as a result of avoiding unnecessary operations between different fuel farms logistics
 - Less complexity in the management and provision of services
 - More efficient customer support
 - Lower overall operational costs
- **Responsibility under one single operator**: the legal responsibility falls under only one company which simplifies the management and the number of future issues. This is particularly significant regarding the allocation of responsibilities in relation with environmental issues and their remediation.
- **In case of high investments** in order to construct a new FF, expand, update or relocate the actual one, a long-term commitment with **an independent logistic operator which also is the constructor is the most suited model to tackle fuel infrastructure projects in airports**:
 - **Fit for purpose facilities**: making the interests of the operator and the construction be the same guarantees that design and construction is aligned to the real operational necessities based on the operator's deeper knowledge about fuel facilities and prevents over-sized facilities reducing the total capital expenditure (CAPEX)
 - **Optimized maintenance works**: making sure the design is the most suited and the equipment is the best quality will result in a decrease in the maintenance expenditure and reliability of the facilities
 - **Improved coordination between operator and constructor** which grants an efficient transition from construction, commissioning works and operation.
 - **Building a well-sized and fully automated fuel farm is always more cost-effective than building more than one** under-sized and manual fuel farms

2. Independent operator without any relation to a supplier (like CLH Aviación and others)

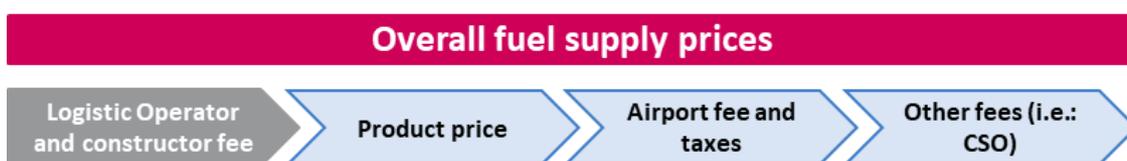
- **Open access**: any fuel supplier can access to the services offered by the company in the airports with no preferential treatment and thus without any entry barriers
- **Absence of conflicts of interest**: the independent operator does not own the molecule which results in no interest in benefiting one customer against another (in

similar service conditions) or blocking the entry of new players on the market by operational, commercial or legal means (common entry barriers to new suppliers). There is demonstrable evidence worldwide that when the aviation fuel logistics is managed by an Oil Company or an integrated company, they build entry barriers for new product suppliers in order to maintain the fuel supply market captive.

- **Generates competency** not only between product suppliers and airlines but **between independent operators**, which may offer efficient and world class services in order to be awarded with the operation and construction concession

3. Clarity and transparency in fees to be charged to Suppliers & Airlines

- **A transparent, fair, no discriminatory and volume-based fuel logistic tariff** for all clients (fuel suppliers or airlines) is key to increase competitiveness and reduce prices
- **Fosters real competency in all the links of the logistic value chain** through a clear identification of the price component for the logistic services and its separation from the overall product price

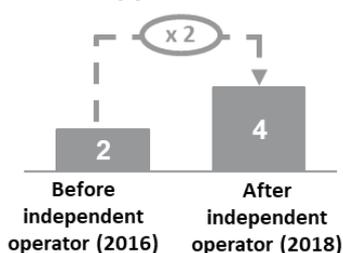


- Volume demand risk is shared with the independent logistic operator reducing the exposure of the airport authority and fuel suppliers or/and airlines

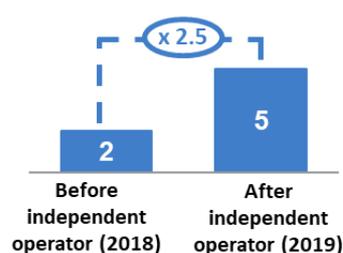
4. Entrance of resellers leading to reduced prices

- **Increase number of product suppliers:** the independent logistic operator model with open access and absence of conflicts of interest fosters the entrance of new product suppliers in the airport in equal conditions

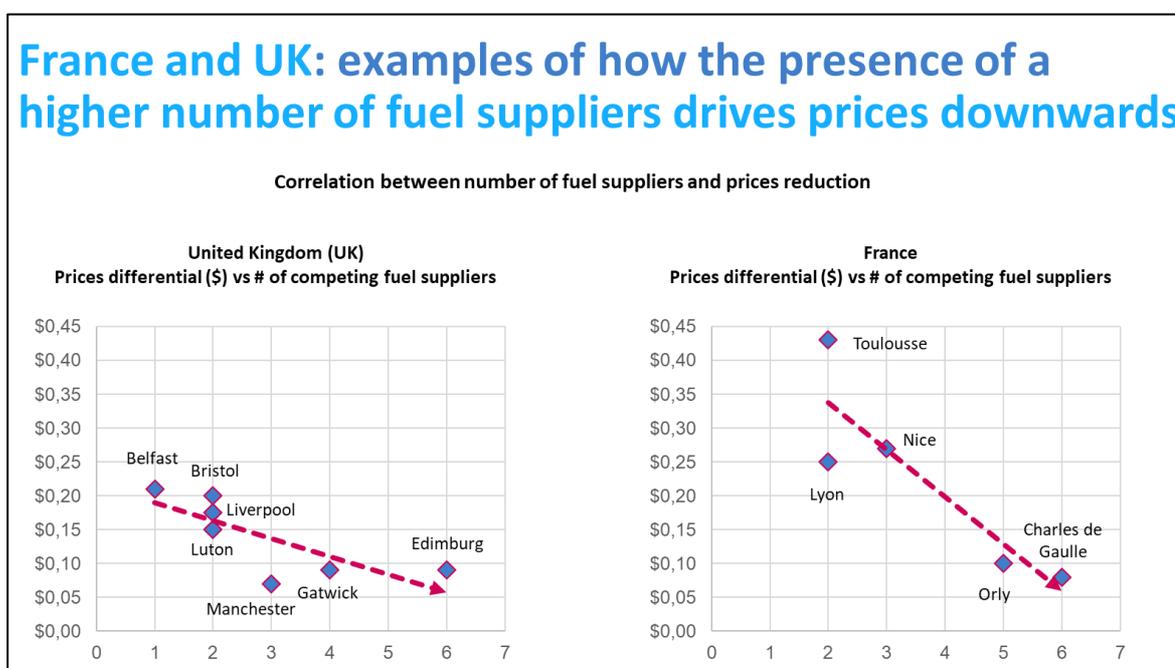
product suppliers Dublin airport



product suppliers Panama airport



- **Supply reliability and industry resilience:** more suppliers with different supply routes can support a more robust and resilient supply chain for the airport.
- **Fuel price reduction:** the increase in the number of suppliers results in a competitiveness escalation as there are more players competing for the same market.
- **Maximization of airline's fuel uplifts and new routes:** lower fuel prices allow airlines to increase their fuel uplifts and open new routes instead of doing tankering.
- **Overall supply prices decrease for airlines and end customers:** the abovementioned decrease in the product prices and the logistic costs have a direct decreasing impact on the overall supply price, promoting air traffic and increasing passenger's volume.



Source: Airport Council International (ACI) – Planning of Aviation Fuel Concessions Study

5. Operator specialized with technical capacity

- **Guarantee of Industry Best Practices:** being a pure logistic operator provides a large expertise and know how in the design, construction, operation and maintenance of fuel farms and provision of into plane services. This allows to operate under the highest industry standard sand best practices following JIG, IATA and Energy Institute (EI) among others
- **Improved operation through innovation and automation:** being a pure logistic operator implies focus in the logistic activities and not in other businesses like the product sale (Oil Companies). That allows the independent logistic operator to

search for greater cost efficiency and implement innovative and automated processes and services, reducing the risk of accidents and non-compliance

- **Expert and high qualified staff:** the specialized operator counts on very experienced and qualified staff to guarantee world class services
- Generally, the specialized logistic operator is a member and actively participates (as CLH Aviación does) in the main international organizations of the aviation fuel sector, which allows the operator to elaborate and have access to the most updated technical manuals and standards in order to implement them in the airports where it operates
- The operator must have **high credentials, international experience and financial strength and solvency** in order to grant the operator is capable to perform outstandingly and reliably avoiding operational disruptions in the operation of the fuel farm and into plane services and guarantee the supply

Given the abovementioned reasons and demonstrable cases worldwide, **CLH Aviacion is strongly convinced**, along with the main international organizations of the aviation sector (i.e.: **IATA, ALTA, ACI**), that the **most operationally efficient, cost-effective and air traffic fostering model for aviation fuel logistic management** is the one with:

- 1) **One single fully automated fuel farm** in the airport.
- 2) **An independent logistic operator providing fuel logistic operation and maintenance services who also has the technical and financial capability to be the constructor** of a new fuel farm or hydrant system or to expand and update the current ones, if needed.
- 3) **A transparent, fair, no discriminatory and volume-based fuel logistic tariff**