Green Inland Ports

Good Practices

Logistic hubs

Logistic hubs

1.1   Description

A logistic hub (or also called as urban logistic hotel) is a logistic facility where packages/products can be temporarily stored and consolidated to ensure more efficient package flows. A logistic hub can be created in multiple ways, such as in the city centre of large cities (where the packages would be closer to recipients and the first/last mile delivery would be more important), near the edge of the city (further away from recipients, consolidating packages and also first/last mile delivery, space is less scarce and cheaper here), but also near important transport hubs such as ports where freight flows are consolidated. They have a multiple advantages, such as (Écocités, 2018, Nabuurs, 2022, Paack, 2022):

- A reduction of environmental health impacts, decrease of particulate matter emissions and GHG emissions.

- Decreased congestion from traffic flows and limited negative impacts on citizens, due to more efficient logistics.

- Consolidation of package flows lead to more efficient use of time, equipment and employees, leading to cost savings.

- Oftentimes, logistic centres are used by multiple companies. Costs are reduced as sharing facilities between business saves energy.

The realisation of logistic hubs can be beneficial for multiple sectors, such as distributors of small packages, suppliers of heavy furniture, garden furniture, office supplies, but also companies within the infrastructure sector or machine rental (Nabuurs, 2022).

A logistic hub can be used by a single company or shared by the subsidiaries of the same company, such as La Poste group unifying the sorting and delivery activities of Colissimo, Chronopost, and DPD on the same site (Écocités, 2018). It can also be shared by multiple different companies that perform tasks related to the flow of goods, mutually benefiting from being in the same place (Paack, 2022).

1.2   The aim of logistic hubs

Because a port is a logistic hub, such facilities can also be applied within ports. By planning package flows more efficiently, we can reduce the distance trucks need to travel and minimise related negative effects on logistics. When a port is located close to an urban area, temporarily storing packages can result in more efficient last mile delivery due to capacity

being used better, and the last mile can be executed using zero-emission or low-emission vehicles.

1.3   Inland ports with logistic hubs

- Compagnie Nationale du Rhône (Port of Lyon)
- Port of Switzerland (Basel)
- DeltaPort Wessel
- Bayernhafen
- Port of Belgrade
- Port of Aalborg
- HAROPA Port
- Port of Seville

1.4   Stakeholders

- The port authority: Space must be available within the port area to create a logistic hub/urban logistic hotel, so companies need to discuss this with the relevant port authority.
- Owner(s) of the logistic hub: In most cases, a logistic hub has several owners, as only very large companies can maintain logistics centres independently (Paack, 2022).

1.5   Voluntary or mandatory

In direct terms, it is not mandatory for a port area to offer space for a logistic hub to be created. At the same time, it is not mandatory for companies to set up a logistic hub. However, a logistic hub can lead to efficiency benefits mentioned in the following paragraphs, reducing the costs of the operations and negative emissions such as GHG and air pollutants. As freight transport continues to grow and road freight transport, for example, is projected to increase by around 40% in 2030 and by over 80% in 2050, it is not unthinkable that EU transport policy could become more stringent over the next years.

1.6   Realised/potential impact

Écocités, (2018) published key statistics about logistic hubs. In the French case of La Poste group invested over €12.5 million, including €1.1 million in State subsidies. The centre includes 15 loading docks, a space of 5,013 m^2 due to the sharing of space and occupation time over 4 organisations, 32 electric vehicles of 5m^2, 55 power outlets for electric vehicles, and 14,500 parcels per day. This has led to the following results: a 46% reduction in transport GHG emissions, 85% reduction in particulate matter emissions, a 24% decrease in distance travelled, and a 27% decrease in roads occupation.

1.7   Possible obstacles

- Ports often have limited space, and a logistics hub requires quite some space.
- Ports can be confronted with large volumes of traffic throughout the day; a logistics hub will further increase the amount of traffic to and from the port.
- A logistic hub incurs significant investment costs. The costs could be limited when a hub is owned by multiple companies. A way to solve this problem is by mapping the social costs and benefits from the current and future logistic system, and to show which parties would be responsible. This way, the advantages of assets sharing and combining logistic flows in suitable vehicles and hubs can be demonstrated (Transport & Logistiek, 2021).

1.8   Key learnings

- Logistic hubs are an effective method for companies that work with a large amount of cargo/goods that need to be transported, as it means a more efficient approach when implementing the transportation process, resulting in different kinds of advantages such as lower GHG and air pollutant emissions, lower costs per logistic flows, and a more effective use of dense urban space.
- Although a logistic hub would lead to lower variable costs in the long run, the initial investment costs are substantial. Sharing a logistic hub allows companies to split the large investment costs and share expenses for equipment and infrastructure, reducing overall costs.

1.9   Sources

Écocités, 2018.Tourville Logistics Hotel-La Post:

Nabuurs.2022. Wat is een logistieke hub?, https://nabuurs.nl/kennisbank/wat-is-een-logistieke-hub/

Paack, 2022. Logistics Hub: What Is It and How It Works, Barcelona:

Transport & Logistiek. 2021. Logistieke hubs: wat zijn de succesfactoren?, https://transportlogistiek.nl/logistiek/logistieke-hubs-wat-zijn-de-succesfactoren/