Logistics services: **10. Logistics objects**

Metodický koncept k efektivní podpoře klíčových odborných kompetencí s využitím cizího jazyka ATCZ62 - CLIL jako výuková strategie na vysoké škole





Europäische Union Evropská unie

Europäischer Fonds für regionale Entwicklung Evropský fond pro regionální rozvoj





Logistics centers

Logistics centers can be characterized as objects in which transport, logistics, forwarding, distribution and other companies operating in the logistics chain operate independently. They associate (consolidate) transport flows and, in some cases, even different modes of freight transport, thus, facilitate cooperation among individual carriers. They are built in places of transport nodes (hubs) and large economic concentrations.

In practice, the term "logistics center" is often confused with the public logistics center (PLC; freight village), however these are not interchangeable. The biggest difference consists mainly in the way of funding. PLCs are conceived as public and thus accessible to the broad business community, and the state is involved in their construction and cares to ensure equal access to offered services and activities.





Logistics centers divisions:

- a.) Depending on the range of operation (geographical range) of LC
- b.) Depending on the connection to transport infrastructure
- c.) Depending on the **function**
- d.) Depending on the purpose
- e.) Depending on their construction funding





LC services:

LCs offer **basic**, **supplementary** and **other** services.

Basic services include transport services, transport providing (acquisition), loading, unloading, reloading (transshipment) goods (cargo) and handling units, goods transportation, goods and handling (transport) units storage (warehousing), commissioning, central parking (for passenger and freight vehicles), pick-up (collection) and delivery (distribution).





Intermodal transport terminals

- <u>Multimodal transport</u> is the transportation of cargo by two or more modes of transport.
- Intermodal transport is the relocation (transportation) of cargo in one and the same transport unit or on a road vehicle while using sequentially two or more modes of transport without handling with the cargo when changing the mode of transport.
- <u>Combined transport (transportation)</u> is a specific type of intermodal transport where the major part of the journey is performed by railway, inland waterway or maritime transport and each initial and final part (section) of the journey, performed by road transport, is as short as possible.





- <u>Combined transport operator</u> is a legal or natural person who, in its own name or through another person acting in his interest, concludes a combined transport contract, issues a single transport document and assumes responsibility for himself.
- <u>Container</u> is a general term for a freight box the **TEU** is the equivalent of a transport unit of the size of a twenty foot container (20').
- Intermodal terminal (or intermodal transport terminal) can be characterized as a specially constructed and equipped area where, using transshipping systems (handling equipment), it is possible to transload (reload) the transport unit of the individual transport systems within intermodal transport.





Conception and basic elements of intermodal terminals:

- Road input infrastructure,
- Internal road network,
- Storage and stacking areas,
- Handling equipment,
- Reloading, handling and stacking railway tracks,
- Connecting railway tracks of a terminal with railway network,
- Repair and service facilities (workshop),
- Administrative areas.





Railway lines and connection of the transshipment area: for intermodal terminal within the Czech Republic, the most important railway lines are listed in the **AGTC** Agreement - European Agreement on Important International Combined Transport Lines and Related Installations.









<u>Framework requirements for an intermodal terminal meeting the criteria</u> <u>of the AGTC agreement:</u>

- Length of railway tracks for loading and unloading: **750 m**,
- Wharf length: min. 110 m,
- Handling equipment capable of handling any standard and established intermodal transport unit,
- 100 percent backup of handling equipment,
- Handling equipment load capacity **40 to 42 t** on hanging equipment,
- The terminal capacity is set so that a combined train (600 to 750 m) can be processed within 1 hour, and road freight delivery trucks do not wait for more than 20 minutes.



