



Public Intermodal Transport Terminal Žilina

ITT ZA

ITT ZA owner	Slovak republic
ITT ZA administrator	Železnice Slovenskej republiky, Bratislava v skrátenej forme „ŽSR“ Klemensova 8 813 61 Bratislava Identification number 31364501 Legal form: sui generis Business register of District Court Bratislava I, Section Po, Insert No.: 312/B



ŽELEZNICE SLOVENSKEJ REPUBLIKY

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- The map illustrates the ITT ZA project area, showing existing and planned railway lines across the borders of the Czech Republic, Slovakia, and Hungary. The map includes a legend for line types and symbols for various types of freight containers.
- Legend:**
- Existing railway lines AGTC (Red line)
 - Planned railway lines AGTC (Green line)
 - Railway lines out of AGTC (Black line)
 - ITT in operation (Red line with white circle)
 - ITT out of service (Red line with red circle)
 - Planned ITT (Red line with red circle)
- Container Symbols:**
- VK – ISO Containers (Red circle)
 - VN – Swap body (Blue circle)
 - RoLa (out of service) (Blue circle with 'X')
 - RoRo (out of service) (Blue circle with 'X')
 - Border crossings (Blue circle with 'X')
- Key Locations and Distances:**
- Česká Republika CD (Czech Republic CD)
 - Slovakia (Slovensko)
 - Hungary (Magyarország MAV)
 - Žilina (VK) (38 km from Čadca)
 - Bratislava (77 km from Bratislava)
 - Košice (VK) (22 km from Veľká Ida (VK))
 - Leopoldov (42 km from Bratislava)
 - Siklavičovo (VK) (42 km from Bratislava)
 - Nové Zámky (29 km from Bratislava)
 - Dunajská Streda (VK) (42 km from Bratislava)
 - Komárno (58 km from Dunaj)
 - Sturovec (42 km from Bratislava)
 - Trstená (RoLa) (56 km from Žilina)
 - Ružomberok (VK) (73 km from Žilina)
 - Kysak (100 km from Trstená)
 - Veľká Ida (VK) (22 km from Košice)
 - Čaňa (95 km from Košice)
 - Dobrá (VK, VN, RoLa) (22 km from Čaňa)
 - Čierna nad Tisou (C-E4)

Železnice Slovenskej republiky, Bratislava (ŽSR) within the Operational Programme Transport 2007-2013, Priority axis no. 3 – Intermodal transport infrastructure, implemented the construction: **„ŽSR Intermodal Transport Terminal Žilina, Construction stage I.“**

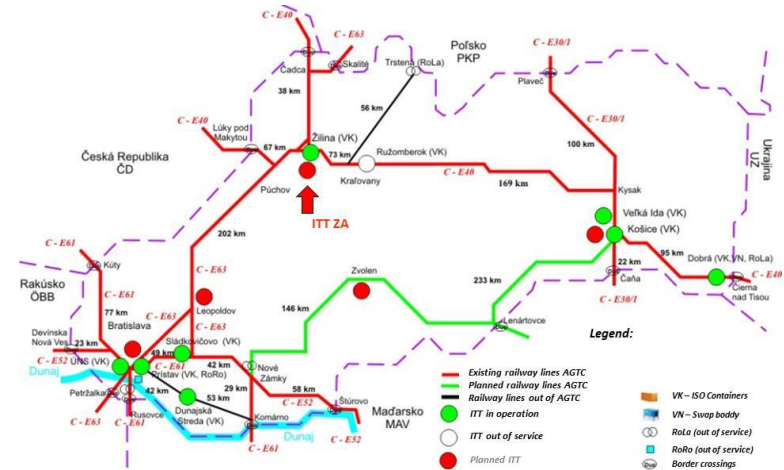
Construction of the terminal is implemented in the district of Žilina, in the municipality of Teplička nad Váhom, near Hydroelectric Power Plant Žilina and in the precinct of Žilina-Teplička marshalling yard. Location for the terminal was selected with regard to its connection **to main rail and road infrastructure.**

Intermodal Transport terminal Žilina is designed **to ensure the most effective unloading, loading, transhipment and storage of intermodal loading units (ILUs).**



Selection of a suitable type was based on conclusions of analysis of existing solutions for combined transport terminals. When looking for a solution it was primarily important to ensure that **the terminal will meet AGTC conditions and have sufficient performance with regard to the result of survey into potential products suitable for combined transport.** When building the terminal it was considered with mentioned conditions and in such circumstances the terminal was also constructed and is ready to commence operations.

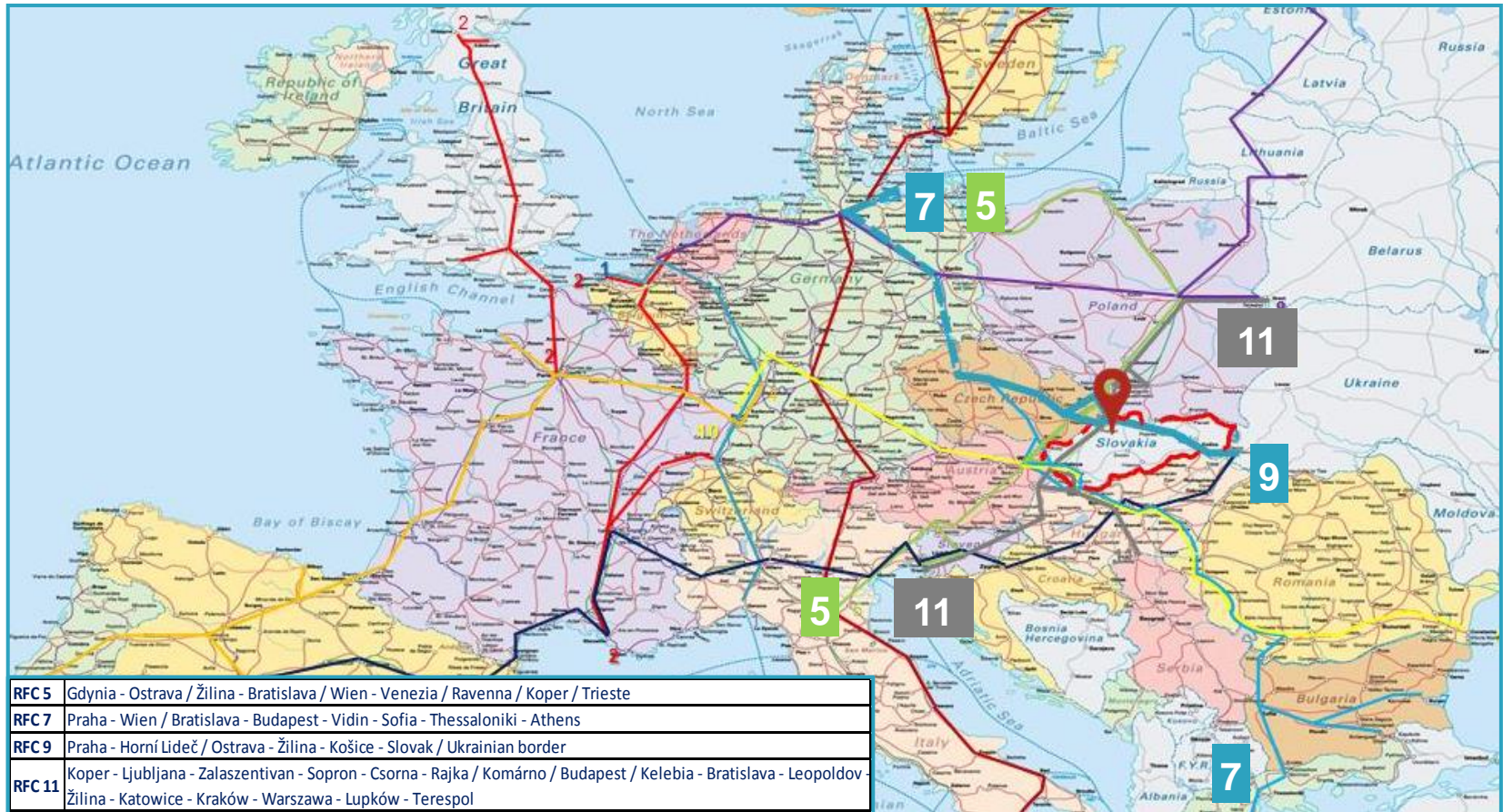
The terminal is a fenced area comprising an office building, which will be used by employees of the terminal and employees of companies in lease. Premises will also be provided to drivers carrying ILUs. Fenced are features parking and storage areas in the range and also out of the range of portal crane. By basic division of areas created parking lot for trucks at the entrance to terminal, parking lot for trucks at the exit from terminal, parking lot for passenger vehicles at the entrance to terminal, area for swap bodies, area under cranes for ILUs storage and handling, handling and infrastructure areas and roads.



ITT ZA – Location according to Rail Freight Corridors

ITT ZA is one of the international importance terminal according to approved Conception of development of combined transport, prepared by Ministry of transport and construction of the Slovak Republic.

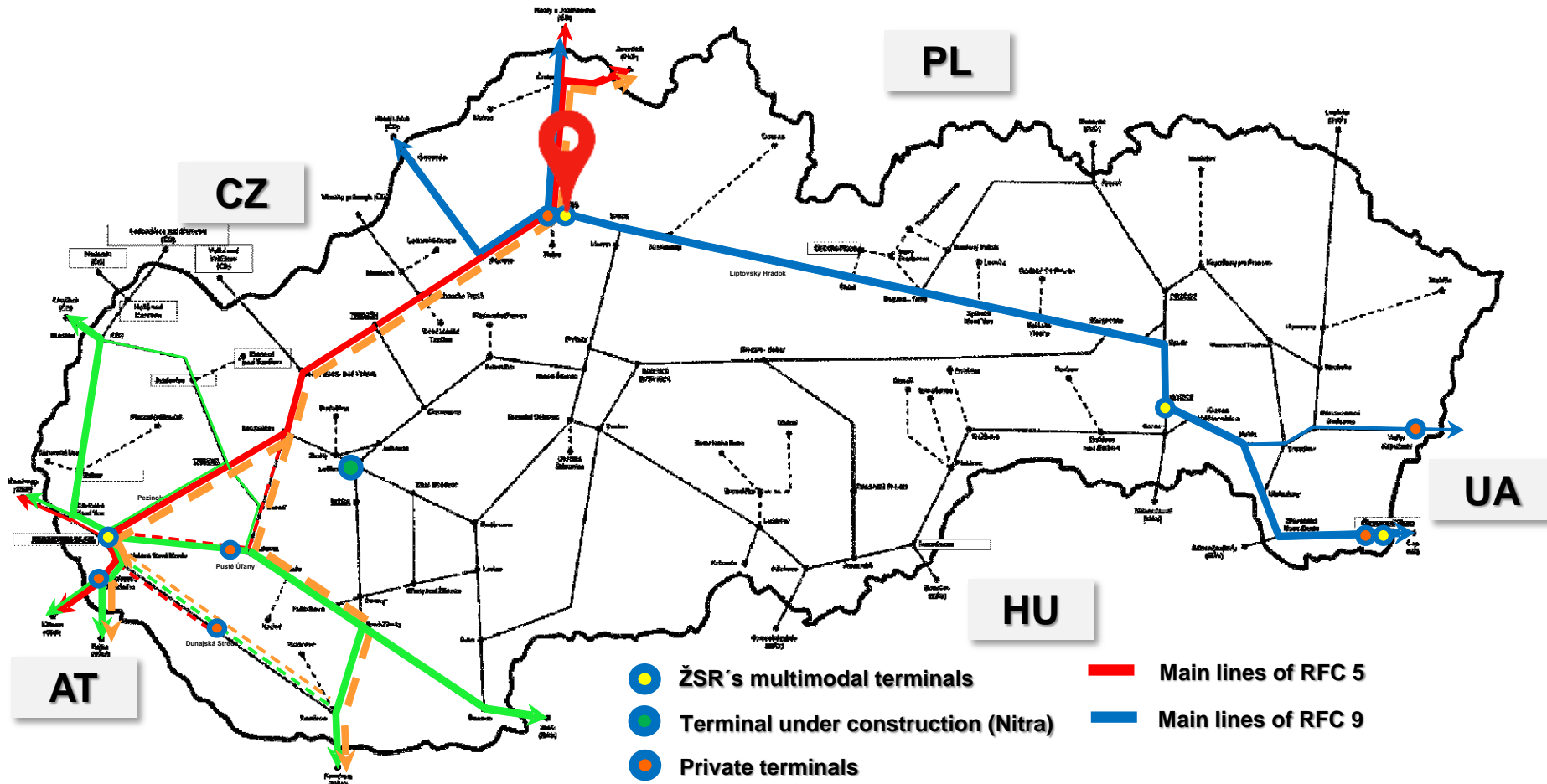
ITT ZA is situated between the railway line Žilina – Vrútky and Hydroelectric Power Plant Žilina, in the immediate vicinity of the marshalling yard Teplička nad Váhom, as part of the European Rail Freight Corridor.



ITT ZA – Part of the Rail Freight Corridors – Railway network in Slovakia

Railway connection

In terms of railroad connection ITT is connected to track 1A2 (direction Žilina) and on the other side connected to railroad of outbound tracks of Žilina-Teplička marshalling yard allowing arrival/departure of trains in direction from/to Košice via track 1B2. This resulted into direct connection of ITT ZA to main double track line Bratislava - Košice. Overall, ITT ZA is integrated into railroad network of Žilina-Teplička marshalling yard. Terminal is situated on the track intersection AGTC C – E40 a C – E63.



Road connection

ITTP ZA connection to main road network is at a distance of 4 km (route E50), which provides connection in direction to the east of Slovakia. In the town of Martin it is possible to continue either to Košice and further to the border with Ukraine, or take other route towards the border with Hungary.

When taking the route E50 in direction to the north of Slovakia and in Žilina continuing in direction Čadca and further to the Czech Republic and Poland, or continuing in direction Bratislava.

In the future, it is planned to connect local road network to motorway currently under construction. Access road to a motorway will present about 15 km, connection is envisaged by an overpass.



DECISIONS

COMMISSION DECISION

of 17 July 2013

on measure/aid scheme/State aid SA.34369 (13/C) (ex 12/N) — Construction and operation of public intermodal transport terminals, which the Slovak Republic is planning to implement

(notified under document C(2013) 4423)

(Only the Slovak text is authentic)

(Text with EEA relevance)

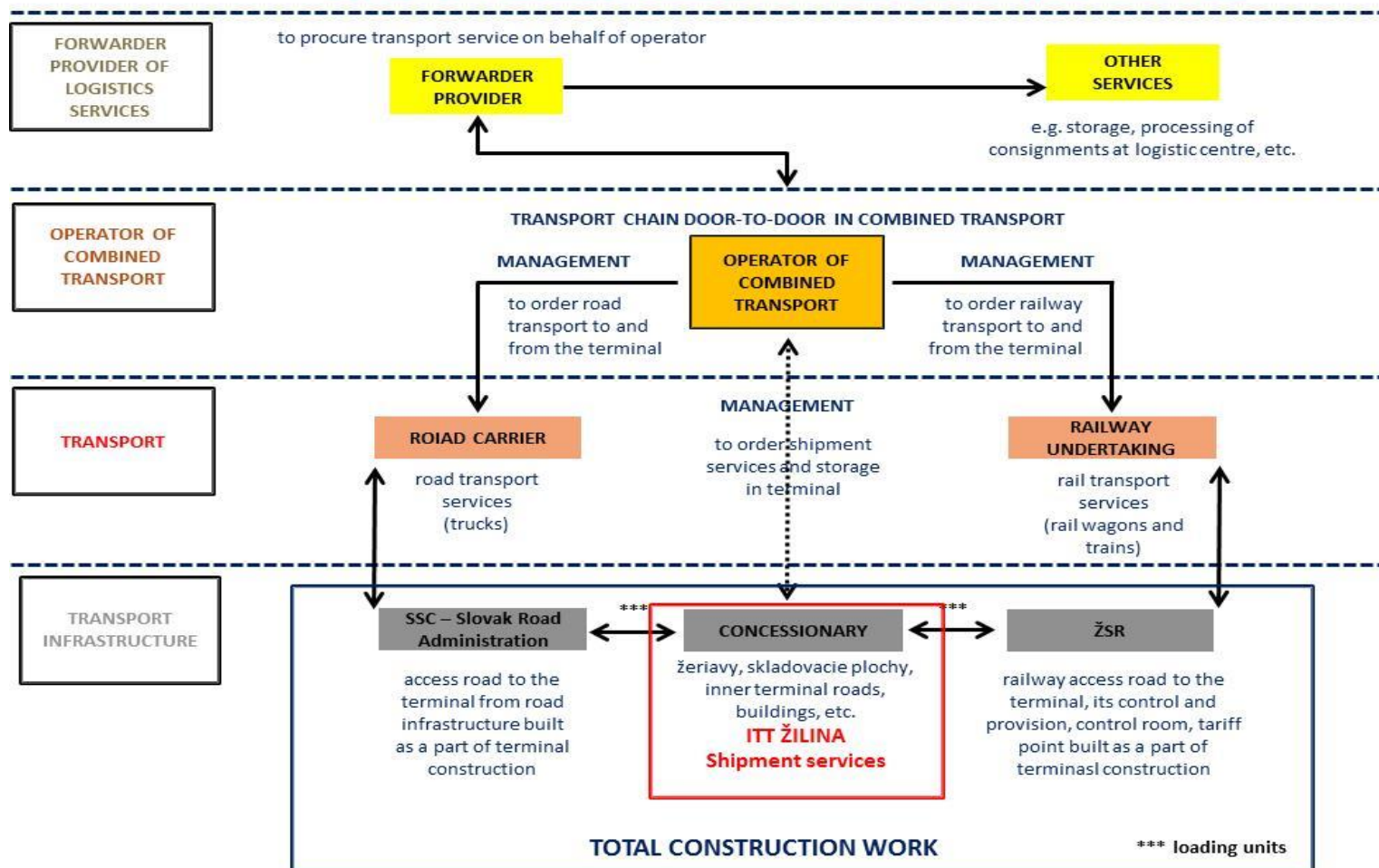
(2014/524/EU)

- *„(27) The operation of the terminal will be contracted out for a period of 30 years to an operator selected on the basis of a non-discriminatory and transparent tendering procedure. So as to ensure non-discriminatory access to the terminal and to prevent a conflict of interests arising between the selected terminal operator and the transport undertakings, the operator of the terminal may not be a transport undertaking using the terminal, so as not to compete with the transport undertakings and combined transport operators which will be making use of the terminal. If the selected operator fails to fulfil the conditions agreed to under the concession agreement, the State may withdraw the concession and put it out to tender again“.*





ILLUSTRATION SCHEME OF RELATIONS AT INTERMODAL TRANSPORT TERMINAL



The using of ITT ZA means:

- **accession** to property forming ITT ZA;
 - **operation of ITT ZA** by providing services supplied in ITT ZA;
 - ensuring proper maintenance **of ITT ZA**;
 - ensuring **repairs of ITT ZA**;
 - **Technical improvement of property in accordance** with the contract.
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- Contract is to be concluded for a period of **thirty years** (operation of terminal in terms of Commission Decision).
 - Operator will operate ITT ZA as a **public ITT**, will ensure compliance with all international rules governing operation of ITT (especially AGTC agreement and EU rules) as well as other legislation (e.g. Act No. 513/2009 Coll. on Railroads and on amendments of some acts).



Prospective operator is obliged to pay fees for the utilization.

In accordance with Commission Decision:

„(30) The operator of the terminal will be required to pay concession fees of at least 15 % of the investment costs over a 15-year period.“

Fee does not cover service as follows:

- Supply and distribution of electricity;
- Water, sewage, rainwater;
- Heating;
- Telecommunication services;
- IT services comprising support SW licences for operation;
- Housing;
- Cleaning services;
- Security services, etc.



General terminal services:

- **Transshipment of ILUs** between different transport modes and short-term and long-term storage areas;
- **Short-term storage** of primarily loaded ILUs on short-term storage areas of intermodal terminal in the radius of stable handling equipment;
- **Long term storage** of primarily empty, temporarily unnecessary ILUs;
- **Register of receipt, issue and storage of ILUs** including checking their integrity, transport documents and overall responsibility for ILUs during their presence in the terminal;
- **Control of transshipment** between different transport modes and storage areas in the radius of handling equipment;
- **Additional cooling** of refrigerated and freezer ILUs and **pre-heating** of isothermal ILUs.



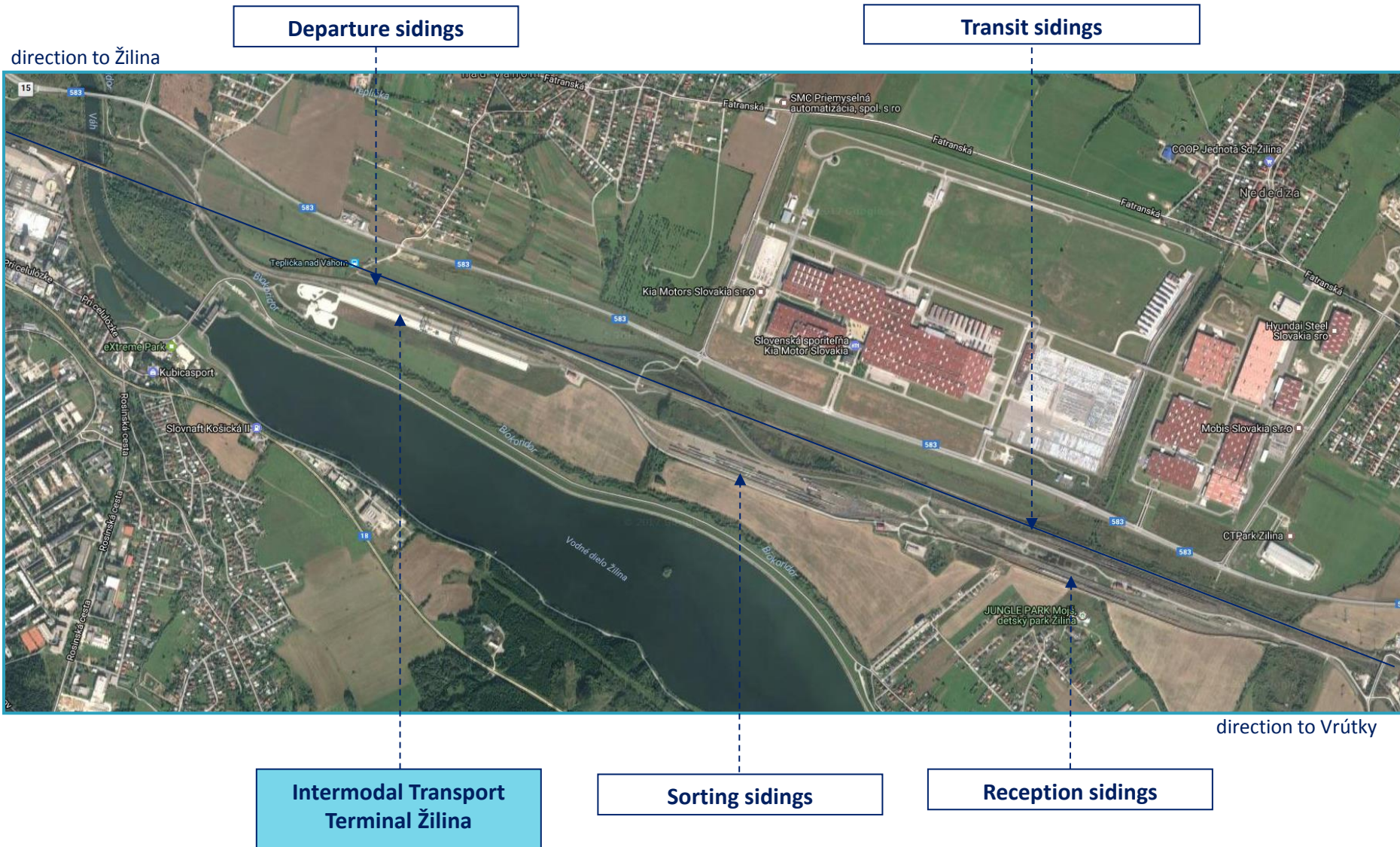
- Placement in this location was considered since 1986 (reserve for logistics centre).
- ŽSR ensured preparation for the construction under Yellow FIDIC (Design – Construction).
- Contracting of implementation 20.01.2012.

Explanatory notes:

- Main line
- ITT ZA line
- ITT ZA border



ITT ZA – Circuit configuration of the marshalling yard



General parameters of the ITT ZA:

Capacity of storage area in the radius of cranes (TEU)	1 755
Duration of a single ILU handling (in minutes)	3
Surface of storage areas under portal cranes (m ²) – stage 1	10 000
Surface of storage areas for swap bodies – number of swap bodies (pc)	32
Total length of sliding rail of crane (m)	750
Number of portal cranes (m)	2
Number of service tracks in the radius of cranes (pc)	2
Length of loading/unloading tracks in the radius of cranes (m)	750
Number of stacking layers ILU in the radius of cranes	3
Parking lot for truck on the terminal entrance (number of spaces)	20
Parking lot for truck on the terminal exit (number of spaces)	21
Parking lot for truck on the in front of terminal entrance (number of spaces)	22
Office building – total surface of the rooms (m ²)	685,40
Office building – built up area (m ²)	528
Total land take for stage 1 and 2 of terminal construction (m ²)	176 252
Rail-road vehicle (including snow shovelling and sweeping)	1



Technical data of the RMG:

- **lifting capacity of spreader 46 t;**
- **rail gauge 37,17 m;**
- **working speeds:**
 - hoist rated load 0-20 m/min;
 - hoist partial load 0-40 m/min;
 - gantry drive 0-120 m/min;
 - trolley drive 0-100 m/min;
 - slewing 1,25 U/min;
- **rotation area 305°;**
- **lifting height 14,6 m.**

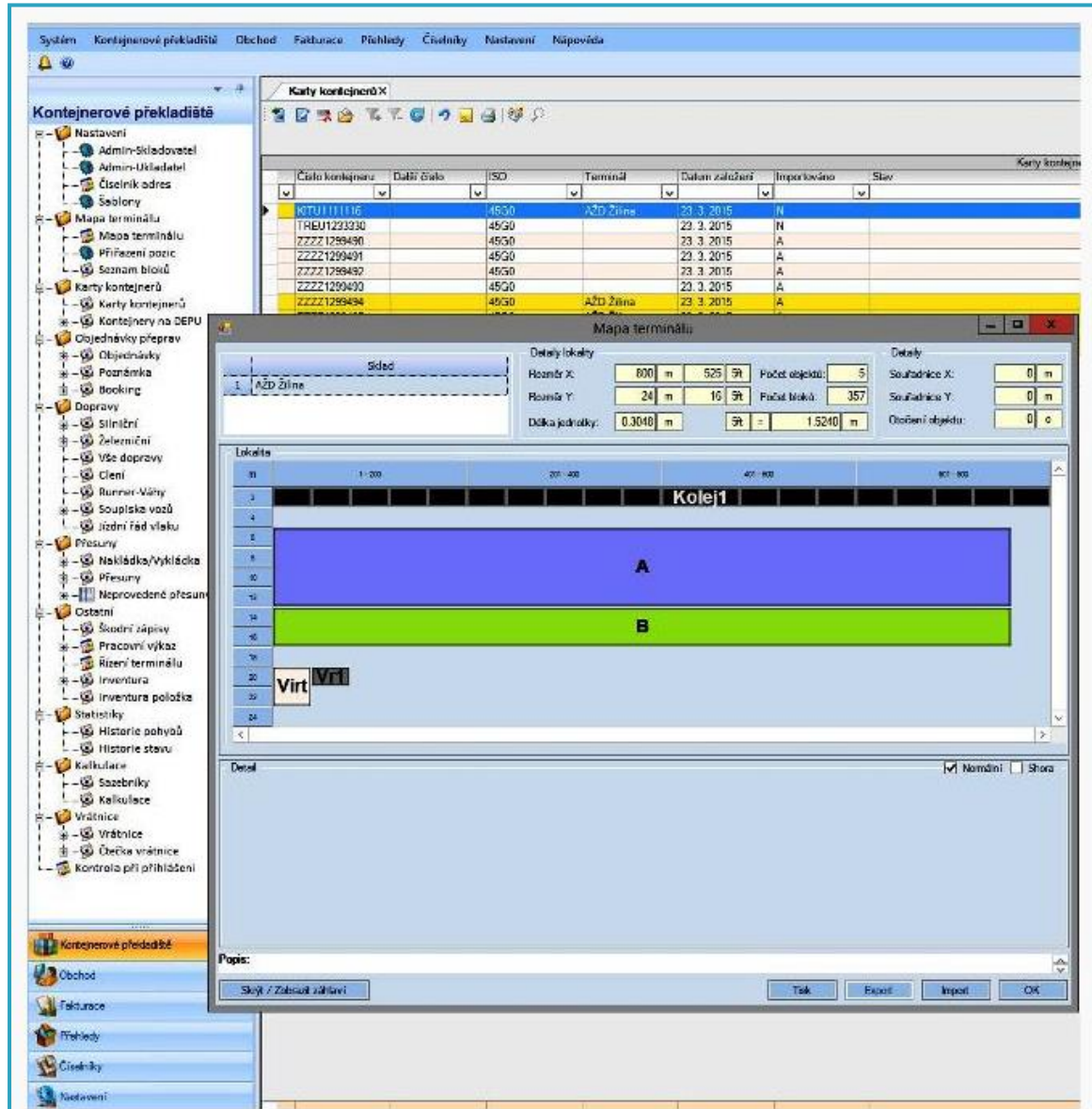


TIP ZA – IS support for handling with ILUs

IS KONTI

Monitoring of movement, routing and storage of ILUs:

- Control of container transshipment yards;
- Control of ILU transshipment and storage ;
- Coordination of different transport modes– coordinating road/rail to and from ITT ZA;
- Economy of operation;
- dynamic websites for customers.

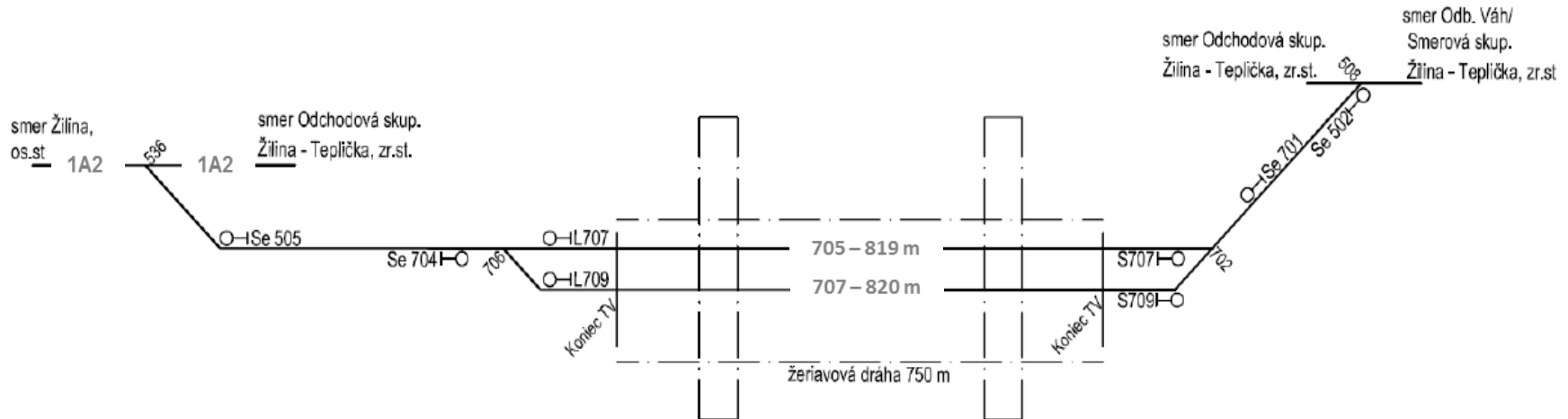
The screenshot displays the IS KONTI software interface, which is used for monitoring and managing container movements and storage. The interface is divided into several sections:

- System Menu:** Located at the top, it includes options like Systém, Kontejnerové překladiště, Obchod, Fakturace, Přehledy, Číselníky, Nastavení, and nápověda.
- Left Sidebar:** A tree view showing the hierarchy of the system, including Kontejnerové překladiště, Nastavení, and various operational modules like Mapa terminálu, Objednávky, and Přesuny.
- Main Window:**
 - Karty kontejnerů X:** A table displaying container data with columns for Číslo kontejneru, Dabí číslo, ISO, Terminál, Datum zajištění, Importováno, and Stav. The table lists several containers, including 1REU1233330 and 22221299491.
 - Mapa terminálu:** A map showing the layout of the terminal. It includes a legend for 'Kolej1' (Track 1) and a detailed view of the terminal area with labels like 'A' and 'B'. The map also shows the location of the terminal relative to the city of Zlín.
 - Detaily lokality:** A section providing specific data for the terminal, including dimensions (Rozměr X: 800 m, Rozměr Y: 24 m), area (Plocha: 19200 m²), and other parameters.
 - Detaily:** A section providing additional information about the terminal, including the number of containers (Počet objektů: 5) and the number of containers (Počet kontejnerů: 357).



ITT ZA

Traffic technology



Structure of the terminal in stage 1

- **Inbound – outbound tracks with two running railway lines** of effective length rail no. 707 – 820 m and rail no. 705 – 819 m (main signal distance);
- **Partial overhead contact line (OCL)** with length 30m on both rail-end sides;
- **Service length of rail portal cranes 750 m** (effective range of portal cranes, i.e. trainset length served without shunting);
- **Paved areas at the ends of the tracks**, intended to put on rail a shunting equipment DAF CF85 DUO;
- Roads and parking areas;
- **Consignation areas** with stands with socket for connecting refrigerated containers;
- Other facilities, e.g. office building, lighting towers, etc.

From direction RST Žilina:

- **Via connecting rail 1A2** with possibility of use drawing power of locomotive of electric traction up to „Signal 140, Pull-out collector“;
- **Beyond this point train ride with electrical traction will continue by persistence**, as local conditions – from switch no. 536 descent 8.041‰ over length 40 m, descent 10.220 ‰ over the length 580 m and gradient 1 ‰ 772 m over effective rail length – allows train ride by persistence.

From direction Branching-off Váh:

- **Via connecting rail 1B2;**
 - Directly from railroad tracks;
 - via Transit tracks of Žilina – Teplička marshalling yard.
- On inbound will be enabled to use drawing power of locomotive of electric traction up to „Signal 140, Pull out collector“;
- **Beyond this point train ride with electrical traction will continue by a persistence**, as local conditions – from Branching-off Váh gradient 19,0 ‰ over the length of 135 m, descent 5,373 ‰ over 210 m, descent 15 ‰ over 217 m and descent over effective rail length 1 ‰ in the length of 772 m – allows train ride by persistence;
- To ensure train getting by persistence up to the end of effective rail length of the terminal, so that a train is prevented from stucking at Varín head of outbound tracks of Žilina – Teplička marshalling yard, when considering 650 m long train, vehicle resistance of locomotive series 363, running resistance of train set U2 and track resistances required speed at Signal pull-out collector minimum 20 km/h.

Loading operations

- **Transshipment of ILUs directly on running track in the radius of rail cranes:**
 - First wagon after a locomotive can be used as a safeguard and will not be used for transportation due to when locomotive stops under OCL this wagon will also be partly under OCL;
 - or additional shunting will be needed after handling of this wagon.
- **Additional shunting of train set will also be necessary in case locomotive will not stop on track section under OCL,** in case of drive around trainset and necessity to put on locomotive from the other side as train arrival;
 - For this cases proposed rail/road vehicle DAF CF85 DUO will be used;
- **Shunting itself will be carried out only within the effective track length without exceeding counter of axles** (signals), and therefore no need to construe shunting paths by signalling.



Train departures

- Both directions also with locomotive of electric traction;
- Given only part of running tracks is under trolley equipped track section push operation will not be possible during train acceleration until reaching OCL at the other end in travel direction;
- Given the relatively complicated slope conditions of track connection to ITT, especially for the direction to RST Žilina via connecting track 1A2, it is necessary to **pay attention to compliance with train weight norms when accelerating from ITT**;
- For composition of train locomotive series 363, T2, 650 m weight normative at train acceleration to connecting track represents value 1,200 t (1,390 t decreased by 15%), for locomotive series 381 weight normative at train acceleration has value 1,500 t (1,780 t decreased by 15%).

Thank you for attention