



POLICY LEARNING IN INFORMATION TECHNOLOGIES
FOR PUBLIC TRANSPORT ENHANCEMENT

GOOD PRACTICES – PUBLIC TRANSPORT FLEET MANAGEMENT SYSTEMS

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UNIFIED INTERMODAL CARGO SERVICE

General information

Description

LDz Cargo Ltd., a subsidiary company of SJSC «Latvijas dzelzceļš» (in English «Latvian Railways») provides freight carriage by rail. APOVS is automated system for operative management of carriages. The service is offered to carriers only. Component parts of APOVS are the following: upkeep of container and wagon data base according their numbers; administration of technological documents, control of formation plan and train condition, control of dislocation of locomotives; mutual payments for the use of freight wagons; inventory of wagon acceptance/delivery, processing of delivery list; control of freight loading and discharging; prognosis of freight arrival; upkeep of freight wagon "Archive" since 1995.

Access to the central data base is provided with data teleprocessing system, which allows clients to connect with the mainframe computer, to receive notifications and to send responses, to process information and real-time dialogue.

Client can receive information on operations with the freight wagon. Information on dislocation of freight wagons is received from railways of Latvia, Lithuania, Estonia, Belarus, Ukraine, Moldavia, Kazakhstan, Uzbekistan, Kirghizia and Russia (except Far East and Transbaikalia region). The results of tracking are offered to clients twice a day, using e-mail or telephone. Client receives the following information on each wagon: index of the train; station where the last operation with the train was carried out; railway of dislocation; date and time of the operation; type of the operation; weight of freight; code of freight; code of freight receiver; terminal of the wagon.

Five times a day client receives information on operations with freight private wagons on Latvian, Lithuanian and Estonian railways. Inventory of controlled wagons can be corrected each month.

Client receives information on the expected freight arrival in terminal (VCOS): location of wagons in Latvia and Russia. The system allows client to track the

movement of its wagons in the territory of Latvian, Lithuanian, Estonian railways, and on the railways of CIS countries.

After entering into a contract, the client is registered in database, and the client receives a password, which allows him to access the wagon tracking. Information in database is updated every two hours.

Client receives information on kilometrage of private wagons, as well as on the repairs to be carried out.

Background and Context

Latvijas dzelzceļš (LDz) was reclassified according to the requirements of the European Union, resulting in gradual establishment of a concern with five subsidiaries. Each of the companies has its own management and governance system which is closely connected to the parent company as far as strategic decisions are concerned, yet retains autonomy in branch-specific decision making, budget planning and management.

In Latvia, LDz oversees 1884.2 km of rail lines, 729 bridges, 6126 rail carriages, 209 locomotives, 152 stations (70 of those open for freight operations) and 557 level crossings.

LDz Cargo Ltd. – domestic and international freight transport, loading and unloading, storage, warehousing and international passenger services.

LDz Cargo Logistika Ltd. a subsidiary of LDz Cargo Ltd. – works on organisation of new traffic flows and promotes rail freight services between the European and Asian countries.

Indicators (2011):

- Freight turnover (million tonnes-km) – 21340;
- Total carried freight (thousand tonnes) – 59385;
- Train-kilometres of freight traffic (thousand) – 12631;
- Railway stations with freight activities – 70;
- Freight wagon fleet available total – 6126;
- Basic activities personal – 11665.

Freight diesel locomotives:

- 2TE10 type – 23 units;
- M62, 2M62 type – 102 units.

Policy design details

Policy Design Steps and Timing

Regularly introduced in legislative amendments to the following documents:

- Railway law;
- Railway transport law;
- Rules of transportation of dangerous goods;
- State Joint Stock Company "Latvian Railway" principal service policy;
- Railway principal service policies available;
- Amendments to the principal service policies available;
- Freight harmonized nomenclature.

Actors Involved

The communications policy of LDz is closely linked to the company's business strategy and objectives. The company carries out internal and external communication using a single communications platform. Importance of maintaining constant communication in international business environment, cooperation, integration of company perspective, strategic future visions and development into nationwide conception and processes, active participation in the development of EU

regulatory norms governing and addressing creation of a single European rail environment and development of mechanisms for continuous information exchange flow within the company employing almost 12,000 employees are among the core development values of LDz.

Decision Making Process

The decision making process is divided into three parts:

- On-line Analysis Level (minutes → few hours) - which is a group of professionals (database administrators, operators and managers);
- Decisions Support Level (day → few weeks) – which is a group of middle management specialist;
- Strategic Level of Management (week → few months) - headed by the executive director.

Implementation details

Implementation Steps and Timing

The railway in Latvia originated in the early 19th century. At the time, Latvia was the most distant section of Tsarist Russia's railway lines. Subsequently it became a state company of the Republic of Latvia, then a part of the Baltic railways during Soviet rule and has been the railway company of independent Latvia. From 2005 to 2007, the activities of LDz were reclassified according to the requirements of the European Union, resulting in gradual establishment of a concern with five subsidiaries. Each of the companies has its own management and governance system which is closely connected to the parent company as far as strategic decisions are concerned, yet retains autonomy in branch-specific decision making, budget planning and management.

ICT/Infrastructures needed

Today, each country has its own, different railway communication and management system, which complicates and adds extra cost to international train traffic. According to the European Union system interoperability requirements, any changes in the EU Member States rail systems must be result in mutually compatible and accessible systems.

Preparation works for implementation of electronic empty private carriage declaration system in Latvia took place during 2011 in collaboration with Russian Railways.

LDz manages expansive and varied infrastructure including rail tracks, engineering structures, rail traffic management systems, rail telecommunications network, radio communication, power supply and contact lines. LDz is in charge of maintaining the infrastructure in a good technical condition, timely repairs and upgrades to ensure uninterrupted and safe train traffic.

Human Resources

In 2011, LDz employed 11,660 persons in 528 different positions.

- LDz Cargo Ltd. employed 2,637 persons;
- LDz Cargo Loģistika Ltd. employed 4 persons.

The most widely represented professions in LDz:

- Track fitters: 8.34%;
- Diesel locomotives operators and operator assistants: 7,09%;
- Station attendants: 4,47%;
- Rolling stock mechanics: 3,95%;
- Carriage inspectors (repairers): 3,70%.

Monitoring Procedures

Monitoring is divided into several parts:

- Upkeep of container and wagon data base according their numbers;
- Administration of technological documents, control of formation plan and train condition, control of dislocation of locomotives;
- Mutual payments for the use of freight wagons;
- Inventory of wagon acceptance/delivery, processing of delivery list;
- Control of freight loading and discharging. Prognosis of freight arrival.

All parts are automated and occur in the form indicators and of alerts individual operators. Access to the central data base is provided with data teleprocessing system.

Supporting Mechanism

Awareness/Information Campaigns

LDz constantly maintains and provides information about the concern on the company website and in informative and promotion publications about the concern, its activities and current events, gets involved and participates in strategically important international and national rail unions and task forces. LDz cooperates with local and foreign media, maintains active presence on social networks and ensures information circulation within the company with daily updates to the company intranet concerning the latest current events in the industry and in the concern. The newspaper “Latvijas dzelzceļnieks” is published once a week. The company organises regular joint events for the employees: collective cleanups, sports games, participation in national amateur sporting events and celebration of national holidays and dates important to the concern.

Partnerships/Key Supporting Stakeholders

Most of the strategic cooperation takes place with Russian, Belarus, Ukraine and other Eurasian and central Asian countries that amount to nearly 95% of the volume of goods carried on Latvian railways. These countries also have the same track gauge as Latvia - 1520 mm.

Results

Expected vs Actual Benefits

A record amount of freight was carried in 2011 – almost 60 million tons. This ranks Latvia as the fourth busiest rail freight carrier in Europe after Germany, Poland and the Czech Republic.

Quantitative Results Achieved

Measured by track loading (tons carried per track km), LDz with 28.1 million ton/km is in the third place behind major European railways – Germany and Poland, where the figures are 84.9 and 28.2 ton/km respectively.

LDz is a long-term leader in freight transport volumes in the Baltic States. The amount of freight carried in Lithuania in 2011 was 52.3 million tons and in Estonia 30.5 million tons.

Qualitative Results Achieved

According to the strategic goals of LDz and the company mission, this leading position has been achieved with hard, focused and consistent work. An increase of 20% in freight volume was achieved in 2011 compared with 2010. It is a more positive trend than in Europe as a whole, where, according to the consolidated statistics of the Community of European Railway (CER), the average growth of rail freight volume in 2011 was 4%.

Key Considerations

Lessons Learned

Pursuant to the company mission and vision, the amount of freight carried grows with each year: a record 60 million tonnes were carried in 2011, continuing to increase the concern's contribution to the national economy and maximising the use of the company resources.

Primary Obstacles

Today, each country has its own, different railway communication and management system, which complicates and adds extra cost to international train traffic. According to the European Union system interoperability requirements, any changes in the EU Member States rail systems must be result in mutually compatible and accessible systems.

Critical Success Factors

Over the years of professional business, LDz has formulated and is adhering to the values of the company that have helped consolidate and create a company nucleus and at the same time serve as a point of reference and the key principle in contacts with cooperation partners, in business environment, participation in numerous professional rail organisations and also in the daily activities of the company employees.

Transferability Considerations

- To ensure rail infrastructure throughput capacity according to medium-term demand (by 2015) of up to 85 million tons per year;
- To ensure competitive rates of rail infrastructure service charges;
- To ensure the level of rail infrastructure services according to the carrier's expectations.

By achieving these goals, LDz will not only stimulate the Latvian economy, but also contribute to the regional development, that will undoubtedly benefit other European countries as well.

Up-scaling Considerations

- Skīrotava stationsorting hill renovations. The project cost is LVL 27.3 million.
- Construction of the second track in the Skrīveri–Krustpils section. The total project cost is EUR 93,412,308.
- Track renovation in the RailBaltica corridor. RailBaltica Stage renovation costs are LVL 43.5 million.

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