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Evaluation of Localisation of the Public Logistic Centres in the Usti Region

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1 Executive summary

The aim of the presented study is twofold: the first and most evident is the creation of a catalogue of the areas within the Usti Region which are potentially suitable for the creation of intermodal public logistic centers (PLC). This catalogue shall work as a base for the public relevant authorities, government bodies or self governments (being responsible for preparation of the spatial planning documentation and transport infrastructure development conception) when making decisions and discussing with the private subjects, which would be interested in entering the Usti Region with an intention to build such project. In this manner, the study reveals its second and main objective: to provide a sort of “road map” which any relevant authority or state administrative body should follow when locating potential sites for the transport facilities of the PLC type.

The basic conditions for the selection of a suitable site is the connection of the locality to at least two kinds of freight transport, be it water, railway or road transport in a sufficient quality and a low possibility of any conflict with the present spatial planning documentation (SPD).

By the intersection of the three systems mentioned above, 9 localities were found, which were further judged according to the present SPD and discussion with the authorities of villages and cities, which govern over the chosen locality. In seven cases, the discussion brought a straight approval with the conditions given by the cities and villages (conditioned in a different rate by the adaptation of the present, especially road infrastructure, which is focused on the elimination of the after-effects, the potential PLC could bring to its surrounding areas). In one case, a conflict was found between the intention of the PLC realization and the valid SPD, in one case the local authorities gave a strict disapproval with the project.

After an additional demand of the submitter two more localities were examined, where a similar intention to build such a center already existed.

On the practical side, the outcome of the study showed that seven localities were found having no conflict with the spatial planning documentation and the conditions given for which an interested subject has to fulfil in order to build the PLC; furthermore, general recommendations are provided, which can be a useful guideline for any state body willing to locate this kind of facility in its territory.

2 Introduction

Nine localities were proposed, which answer the condition of an access to at least two kinds of freight transport and are situated in a region with a potential demand for the services of PLC.

These are:

- 1) harbour Děčín – Loubí,
- 2) harbour Ústí nad Labem – Krásné Březno,
- 3) locality of the railway station Chabařovice,
- 4) locality of the existing logistic center Lovosice and harbour Lovosice – Prosmky,
- 5) part of an industrial zone Triangle,
- 6) locality of the railway station Žatec západ,
- 7) locality of the railway station Kadaň – Pruněřov,
- 8) locality of the railway station Chomutov and
- 9) locality of the railway station Rumburk.

These nine localities were discussed with the representants of the competent local governments (magistrates), which govern over the chosen locality.

3 Analysis of the transport network in Usti Region, relation to the SoNorA project

The basis for giving a network of localities suitable for the potential PLC is the existing transport network in Usti Region, modified by the intentions in different stadium of preparation or realization. In the following chapter, an analysis will be done, concerning its present state and planned intentions according to particular kinds of transport, which are the water transport, railway transport and road transport.

3.1 Labe waterway on the territory of the Usti Region

Labe waterway provides a connection of the Usti Region to the European waterways network.

River Labe is a part of the IV. Trans -European Corridor and the international route E20 (according to the AGN agreement). It goes through the territory of the Usti Region approximately in the south-north direction between Štětí (Central Bohemia Region/Usti Region border) and Hřensko (Usti Region/Free State of Saxony border). The crucial aim of the adaptation of the Labe waterway is the improvement of the sailing conditions on Labe from Hřensko to the point Ústí nad Labem – Střekov to unify the parameters of Labe in the Czech Republic and the parameters in Germany.

3.1.1 Infrastructure characterization

An overview of the harbours on Labe waterway in Usti Region is presented in the following table:

TABLE 1 : PUBLIC FREIGHT HARBOURS IN THE USTI REGION

Harbour – locality	Operator	Characteristics of the harbour
Děčín - Loubí	<i>Česko-saské přístavy s.r.o. (Czech – saxonian harbours Ltd.).</i>	<ul style="list-style-type: none"> ▪ Central location with the immediate connection to the state road (I/62, I/13) and to the main railway network ▪ Trimodal terminal of the combined transport. ▪ Transloading machine for lump, loose, heavy and abnormal loads. ▪ Customs clearance. ▪ Lifting capacity up to 80 t. ▪ Transloading of the heavy freights by the mobile cranes (up to 250t). ▪ Container terminal and container depot. ▪ Harbour of the container line Labe [ECL 2000] and line ETS-Labe [Ecological Transport Service Labe]. ▪ Free areas for storing. ▪ Measuring (railway and road freight vehicles).
Děčín – Rozbělesy	<i>ČSPL, a.s. (ČSPL, joint stock company)</i>	<ul style="list-style-type: none"> ▪ Flood-protective harbour ▪ Offices and ground areas to lease. ▪ Services of the sailing dock for reparations of the boats ▪ Connection to the state road I/62 and a possibility of connection to the railway network ▪ New modern tranship point for loose substrates and heavy freights

Harbour – locality	Operator	Characteristics of the harbour
Ústí nad Labem (Central harbour)	<i>T-PORT, spol. s r. o.</i> (<i>T-PORT Ltd.</i>)	<ul style="list-style-type: none"> ▪ Transhipment of the goods from the boats to road carriages by cranes of the lifting capacity 3,2 t and 6,3 t. ▪ Transload and storage of the heavy and abnormal loads up to 35 t. ▪ Transhipment of the loose substrates through the filling hopper by harbour cranes, transport tandem conveyers and a delivery chute. ▪ Packing of the containers, a container terminal. ▪ Storage of goods with help of the high-lift trucks with the lifting capacity up to 18 t in a sheltered stock. ▪ Packing and re-packing of the goods including its further distribution. ▪ Storage of the loose substrates on the braced areas and in the sheltered stock including its further distribution. ▪ Braced and unbraced grounds, offices and stocks to lease. ▪ Protection of the forwarding for the water, naval, road and railway transport. ▪ Services of the customs declaration, public customs stock. ▪ Interlocking of the wire ropes. ▪ Weighing on the weighbridge. ▪ Tap line in the area of the harbour.
Ústí nad Labem (<i>Krásné Březno</i>)	<i>Agropol Port, a.s.</i> (<i>Agropol Port, joint stock company</i>)	<ul style="list-style-type: none"> ▪ Flood-protective harbour ▪ Protection of the international naval transport, tranship and unloading of the river boats in its own modern tranship point for the agricultural products ▪ Storage of the agricultural products
Ústí nad Labem (<i>Vaňov</i>)	<i>LUNA, a.s. (LUNA, joint stock company)</i>	<ul style="list-style-type: none"> ▪ Transhipment of the loose goods between railway, road and water. ▪ Sheltered tranship point. ▪ Parking. ▪ Logistic services (manipulation, storage, expedition).
Lovosice	<i>Česko-saské přístavy s.r.o (Czech – saxonian harbours Ltd.)</i>	<ul style="list-style-type: none"> ▪ Central situating of the harbour with the immediate connection to the state road (I/8, I/55), motorway (D8), and also to the main railway network. ▪ Trimodal terminal of the combined transport. ▪ Transloading machine for the lump, loose, liquid and heavy freights. ▪ Lifting capacity up to 180 t. ▪ Transload of the heavy and abnormal loads up to 300 t. ▪ Container terminal and container depot. ▪ Harbour of the container line Labe [ECL 2000] and line ETS-Labe [Ecological Transport Service Labe]. ▪ Free areas for storage.

Source: Prepared by the author

The particular harbours are connected with the important industrial centers of the Usti Region, such as Děčín, Ústí nad Labem and Lovosice.

Except for the public harbours there are also the ports of the particular industrial companies on the waterway. Among these the most important are the localities of Olšinky (Ústí nad Labem, Setuza a. s. – Setuza, joint stock company), Lovosice – silo, Roudnice nad Labem (Nestlé) a Štětí (Mondi a. s. – Mondi, joint stock company).

3.1.1.1 Scheduled works on inland waterways transport network

The unstable sailing conditions on Labe have an influence on the port equipment development. The impossibility of planning the future economic results, which are dependent on the volume of the transhipped goods and so on the water traffic, retards the investments to the port equipment. The most demanding part of the harbours is the basic infrastructure of the reloading edge. In the Schedule of the transportation infrastructure development in 2008 – 2013, which was ratified by the Czech Republic Government decree n. 1064 of 19th September 2007 more effective subvention of the transhipping is expected due to building and modernization of the harbour walls, which will be owned by the state.

The finances will be given from the State Fund for Transport Infrastructure budget, including the co-financing from the EU funds through the Operační program (Operational Programme for Transport). As a condition is the guarantee of the public use of the infrastructure.

As another form of the harbour maintenance is a building-up of the new harbours through the investments of Directorate of Waterways Czech Republic, while using the financial funds from State Fund for Transport Infrastructure and EU funds. These harbours are the state property, managed and run by Directorate of Waterways Czech Republic. As an example we can mention the tranship point in the downstream sailing channel Lovosice.

Until 2015 the program of investments up to 4,7 milliard Kč (Czech Crowns) is prepared on the Labe – Vltava waterways, which are defined in the Schedule of the transportation infrastructure development in 2008 – 2013, which was ratified by the Czech Republic Government decree n. 1064 of 19th September 2007. The aim of these building actions is to reach navigability of Labe to Pardubice, prolonging of the Vltava waterway to České Budějovice, reaching of the higher parameters and reliability of the waterways, development of the harbours and infrastructure for the recreational sailing. Realization of the sluice Děčín can remarkably help the economic return of these investments.

Sluice Děčín

The project of the sluice Děčín solves the unfavourable sailing conditions on downstream Labe. Operation of the water transport in the Czech Republic is on a minimal level. The transporters, who run the water transport, have existential problems. Water transport is not competitive in comparison with

the road and railway transport, especially because of the impossibility to guarantee its continuum. To change this state, it is necessary to provide stable sailing conditions.

The aim of the project is to improve the sailing conditions on the downstream Labe. The focused section of Labe is a critical part on the only usable waterway, which connects the inland Czech Republic with the world oceans (Harbour Hamburg – the North sea).

The objective of the project fulfils the engagement of the Czech Republic to build and evolve the network of TEN-T.

The realization of the project means to build up the new sluice on the river Labe in Děčín. The proposed project provides the sailing condition for the depth of channel 140 cm for the water transport from Boletice to the state borders for 345 days a year and the depth of channel 220 cm for 180 days a year. The sluice will be situated on the edge of the city Děčín down the stream, near to the Loubí harbour. The main object will be the weir with a lock chamber. Also a little water power station producing 8 MW will be a part of the waterworks. As a part of the project, the fish sluice and equipment for minimalization of the after-effects of the waterworks on the environment will be realised.

The aim of the waterworks development is to eliminate limited sailing. It brings ensuring of the sailing conditions on Labe from the state borders Czech Republic/Germany on the sailing km 109,00 to the terminus of backwater of the sluice Děčín on the sailing km 90,00 by Boletice according to the conditions on the following part of Labe in Germany from the borders to Magdeburg. In the given part of Labe it aims stabilization of the basic channel parameters according to the required standards, which are as follows:

To reach the depth of channel 140 cm for 345 days a year with the discharge Q_{345d} , i.e. with $110 \text{ m}^3/\text{s}$ in the water gage profile of Labe in Ústí nad Labem (bed clearance 50 cm navigation water depth 190 cm), which will enable the economic running of the sailing in the given section.

To reach the depth of channel 220 cm for 180 days a year with the discharge Q_{180d} , i.e. with $236 \text{ m}^3/\text{s}$ in the water gage profile of Labe in Ústí nad Labem (bed clearance 50 cm navigation water depth 270 cm), i.e. the full navigability of the section. To aim the state, which will enable to create and preserve the transport stream as an indispensable condition of the further development of the water transport in the Czech Republic.

Providing of the minimal latitude of the sailing corridor in the direct line of the depth channel is 50m.

While providing the main aim of the project means also the possibility to reach another very important global aim, which is elimination of the greenhouse gases emissions and a support of the electric power production with use of the renewable sources. Project of the Sluice Děčín will use the hydroelectric potential of the river Labe in the given section of the stream for building of a little water power station producing 8 MW with the year production of 46,9 GWh.

The building of the little water power station is in accordance with the intentions given in the Directive of the European parliament and the European Council n. 77/2001/ES from the 27th September 2001, about the electric power production from the renewable sources on the inter market of the EU and will help with the fulfilment of the CR engagement, which promised to produce 15% of electricity for the home consumption in CR from the renewable sources until 2030.

Development of the harbours on Labe waterway

Arrangement for improvement of the water transport connection to other kinds of transport, to existing and prepared industrial zones and to the attractive localities from the transport point of view are planned, the flood protection of the boats and arrangements for improvement of the services for the boats in the harbours are included.

These are for example building up of the harbour walls in the harbours of Ústí nad Labem – Vaňov and in Děčín – Loubí.

3.2 The railway route on the Usti Region territory

Railway transport provides the connection of the Usti Region to other regions in the CR and to the European railroad network. It plays an indispensable role also in providing transport within the territory of Usti Region, in the freight transport, especially in the transport of mass substrates.

Railway route is on the territory of the Usti Region richly structured both technically and from the point of view of the importance for transport servicing of the region and of the whole state. These factors influence the division into particular categories of lines.

Except for the public railroads in the region, there are also private lines. Most often these lines are technological railroads or tap lines (especially in the plants of the fuel-energetic complex and in other big industrial complexes).

3.2.1 Infrastructure characterization

The overview of the public railroads in Usti Region is presented in the following tables and figures:

TABLE 4.1 : PUBLIC STATEWIDE RAILROADS ON THE USTI REGION TERRITORY, REGISTERED INTO THE EUROPEAN RAILROAD NETWORK

Name of the starting point of the line	On the UR territory	Name of the ending point of the line	On the UR territory	km location of the starting point of the line	On the UR territory	km location of the ending point of the line	On the UR territory	constructional length of the line (km)	On the UR territory	max. ground speed (km/h)	Normative freight train length (m)	Maximal gradient of the line (%)	Category of the permitted load	other stations on the UR territory
(Nymburk hl. n.)	Štětí	Ústí nad Labem západ		323,297	381,500	3,628	3,628	111,614	53,411	120	600	17,98	D4	Štětí, Hoštka, Litoměřice dol. n., Velké Žernoseky, Sebuzín, Ústí n. L. Střekov
Ústí nad Labem - Střekov		Děčín hl. n. (main station)		431,297	431,297	3,689	3,689	27,267	27,267	100	650	12,42	D4	Velké Březno, Boletice n. L., Děčín východ
Ústí nad Labem hl. n. (main station)		Most		517,155	517,155	45,574	45,574	48,853	48,853	120	650	17,96	D4	Ústí n. L. západ, Chabařovice, Bohosudov. Teplice, Řetenice, Oldřichov u D., Bílina, branch line Č. Zlatníky
Ústí nad Labem západ		Bílina		3,500	3,500	34,829	34,829	27,084	27,084	60	600	10,56	D4	Trmice, Řehlovice, Úpořiny, Ohníč, Světec
Praha Holešovice - Stromovka	Hněvice	Děčín hl. n. (main station)		413,605	465,200	540,209	540,209	126,534	75,009	160	600	4,53	D4	Roudnice n. L. (main station), Hrobce, Bohušovice nad Ohří, Lovosice, Prackovice nad Labem, Ústí nad Labem hl. n. (main station), Povrly
Ústí n. L. hl. n. (main station) - Jih		Ústí nad Labem západ		515,588	515,588	1,323	1,323	1,824	1,824	40	650	0,00	D4	-
Most		Chomutov os. n. (passenger station)		45,574	45,574	65,712	65,712	24,171	24,171	100	650	12,87	C4	Třebošice, Kyjice, branch line Dolní Rybník, branch line Chomutov město
Děčín hl. n. (main station)		Dolní Žleb state border		1,074	1,074	11,859	11,859	10,784	10,784	120	600	3,60	D4	Děčín Prostřední Žleb, Dolní Žleb
Děčín východ		Děčín Prostřední Žleb		456,065	456,065	4,481	4,481	3,985	3,985	50	600	18,15	D4	-
Chomutov	Cheb	Perštejn		126,192	126,192	236,297	154,000	112,030	27,808	100	605	13,28	D4	branch line Dubina, Kadaň Pruněfov, Klášterec nad Ohří
overall state-wide lines, registered into the European railroad network									300,196					

Source: Prepared by the author

TABLE 4.2 : OTHER PUBLIC STATEWIDE RAILROADS ON THE USTI REGION TERRITORY

Name of the starting point of the line	On the UR territory	Name of the ending point of the line	On the UR territory	km location of the starting point of the line	On the UR territory	km location of the ending point of the line	On the UR territory	constructional length of the line (km)	On the UR territory	max. ground speed (km/h)	Normative freight train length (m)	Maximal gradient of the line (%)	Category of the permitted load	other stations on the UR territory
Ústí nad Labem západ		Ústí nad Labem západ - Hrbovice		3,670	3,670	2,074	2,074	2,028	2,028	60	600	18,10	D4	-
branch line Č. Zlatníky		Obrnice		42,323	42,323	233,037	233,037	1,927	1,927	70	650	4,93	D4	-
Praha Bubny	Deštnice	Chomutov os. n. (passenger station)		411,718	74,500	64,488	64,488	125,265	50,765	100	550	24,66	C3	Sádek u Žatce, Měcholupy, Žatec, branch line Velichov, Hořetice, Březno u Chomutova, turnout Droužkovice
Žatec západ		branch line Velichov		202,047	202,047	1,062	1,062	1,312	1,312	60	550	10,00	D4	-
Kralupy nad Vltavou	Telce	Most		436,129	74,000	45,827	45,827	87,307	48,696	70	450	22,03	C3	Peruc, Vrbno nad Lesy, Chlumčany u Loun, Louny, Lenešice, Břvany, Bečov u Mostu, Obrnice
Louny předměstí		Rakovník	Domoušice	44,414	44,414	41,946	24,900	44,174	24,900	70	500	17,96	C3	Hřivice, Konětopy, Solopysky
Louny		Postoloprty		95,803	95,803	215,262	215,262	11,346	11,346	70	450	19,86	C3	Louny předměstí, Březno u Loun, odbočka Bažantnice
branch line Bažantnice		branch line Vrbka		0,795	0,795	216,200	216,200	0,795	0,795	70	450	20,00	C2	-
Žatec západ		Obrnice		102,086	102,086	232,891	232,891	29,311	29,311	70	600	10,35	C3	Žatec, Lišany u Žatce, Postoloprty, branch line Vrbka, Počerady
b. I. Chomutov město		Chomutov seř. n. (shunting station)		63,097	63,097	2,564	2,564	2,530	2,530	50	650	9,00	C4	-
Most		Most nové n. (new railway station)		47,228	47,228	125,294	125,294	2,766	2,766	60	650	5,66	C4	-
Třebošice		Most nové n. (new railway station)		48,273	48,273	1,782	1,782	4,013	4,013	100	650	5,31	C4	-
Chomutov		Vejprty state border		64,159	64,159	35,391	35,391	57,904	57,904	90	290	21,29	C3/A	Černovice u Chomutova, Křimov, Vejprty
Oldřichov u Duchcova		Louka u Litvínova		23,291	23,291	131,971	131,971	11,517	11,517	80	600	16,63	B2	Osek

Most nové n. (new railway station)		Louka u Litvínova	2,030	2,030	133,137	133,137	10,688	10,688	60	60	45,70	C4	-	
Česká Lípa hl. n. (main station)	Jedlová	Rumburk	44,242	70,300	91,277	91,277	47,036	20,977	80	570	22,00	C3	Chřibská, Rybníště, Krásná Lípa	
Děčín východ horní nádraží		Česká Lípa	Starý Šachov	3,265	3,256	44,359	7,000	31,448	15,718	70	570	12,45	C3	Benešov nad Ploučnicí, Františkov nad Ploučnicí
Benešov nad Ploučnicí		Jedlová		11,983	11,983	71,141	71,141	28,739	28,739	70	400	21,00	C2	Česká Kamenice
Rybníště		Varnsdorf state border		79,777	79,777	11,459	11,459	12,040	12,040	80	340	15,10	C3	Varnsdorf
Rumburk		Jiříkov state border		91,277	91,277	98,033	98,033	6,927	6,927	60	400	19,90	C3	Jiříkov
Plzeň	Blatno u Jesenic e	Žatec západ		0,079	154,500	202,652	202,652	106,270	48,152	70	510	19,50	C3	Petrohrad, Vroutek, Podbořany, Kaštice, Žabokliky
turnout Droužkovice		branch line Dubina		3,732	3,732	5,811	5,811	2,168	2,168	100	550	11,70	C4	-
branch line Dolní Rybník		Jirkov		0,038	0,038	2,099	2,099	2,062	2,062	50	300	23,50	B2	-
Varnsdorf		Varnsdorf st. n. st. hr.		10,549	10,549	13,706	13,706	3,303	3,303	50		11,00	C3	Varnsdorf staré n. (old railway station)
Oldřichov u Duchcova		Duchcov nákl. n.		22,256	2,256	28,482	28,482	6,138	6,138	40	180	15,53	D4	-
Bohosudov		Chabařovice st. n.		12,351	12,351	9,475	9,475	3,731	3,731	40	180	8,64	C3	-
overall other state-wide lines								410,453						

Source: Prepared by the author

TABULKA 4.3 : PUBLIC REGIONAL RAILROADS IN THE USTI REGION

Name of the starting point of the line	On the UR territory	Name of the ending point of the line	On the UR territory	km location of the starting point of the line	On the UR territory	km location of the ending point of the line	On the UR territory	constructional length of the line (km)	On the UR territory	max. ground speed (km/h)	Normative freight train length (m)	Maximal gradient of the line (‰)	Category of the permitted load	other technical stations on the UR territory
Libochovice		Vraňany	Horní Bečkovice	0,580	0,580	36,790	35,100	34,442	32,752	60	240	17,65	C2/B2/C3	Budyně n. O., Straškov
Roudnice nad Labem		Zlonice	Bříza	1,782	1,782	31,998	17,900	30,216	16,118	60	250	19,90	C2/C3	Straškov
Rumburk		Dolní Poustevna		0,303	0,303	26,271	26,271	25,971	25,971	60	260	28,60	C2	Šluknov, Velký Šenov, Mikulášovice dol. n.
Mikulášovice dol. n.		Rumburk		0,245	0,245	17,049	17,049	16,804	16,804	50	260	27,00	B2/C3	Panský
Panský		Krásná Lípa		0,307	0,307	4,826	4,826	4,518	4,518	50	150	20,70	C3	-
Lovosice		Česká Lípa	Dubičná	39,871	39,871	84,070	67,900	46,250	28,029	60	600	29,36	B2	Žalhostice, Litoměřice horní nádraží, Liběšice, Ústěk
Žalhostice		Velké Žernoseky		0,000	0,000	0,890	0,890	0,890	0,890	40	180	25,00	C3	-
Řetenice		Lovosice		0,900	0,900	35,465	35,465	33,043	33,043	60	450	28,00	C3/D3	Teplíce zámecká zahrada, Úpořiny, Žalany, Chotiměř
Čížkovice		Obrnice		0,500	0,500	35,717	35,717	34,817	34,817	50	155	24,06	B2	Třebenice, Třebívlice, Libčeves
Lovosice		Louny		0,820	0,820	0,788	0,788	32,548	32,548	60	190	18,31	C2	Čížkovice, Chotěšov pod Hazmburkem, Libochovice, Koštice
Děčín hl. n. (main station)		Oldřichov u Duchcova		1,528	1,528	39,300	39,300	37,772	37,772	100	600	29,25	B2	Jílové u Duchcova, Malé Chvojno, Telnice, Krupka, Teplíce lesní brána
Louka u Litvínova		Litvínov		54,220	54,220	55,803	55,803	1,302	1,302	50	600	8,00	B2	-
Louka u Litvínova		Moldava v Kr. horách		133,285	133,285	158,810	158,810	25,525	25,525	60	300	35,00	A	Hrob, Dubí
Kaštice		Kadaň Pruněřov		0,240	0,240	32,083	32,083	31,858	31,858	75	145	28,00	C2/A/C3	Vilémov u Kadaně, Kadaň
Kadaňský Rohozec		Vilémov u Kadaně		8,925	8,925	17,490	17,490	8,565	8,565	40	150	25,00	B2	Radonice u Kadaně
Rakovník	Blatno u Jesenice	Bečov n. Teplou	Libkovice	0,888	26,000	86,826	39,900	84,468	13,900	60	315	30,00	B2/C3	-
overall regional lines									344,412					

Source: Prepared by the author

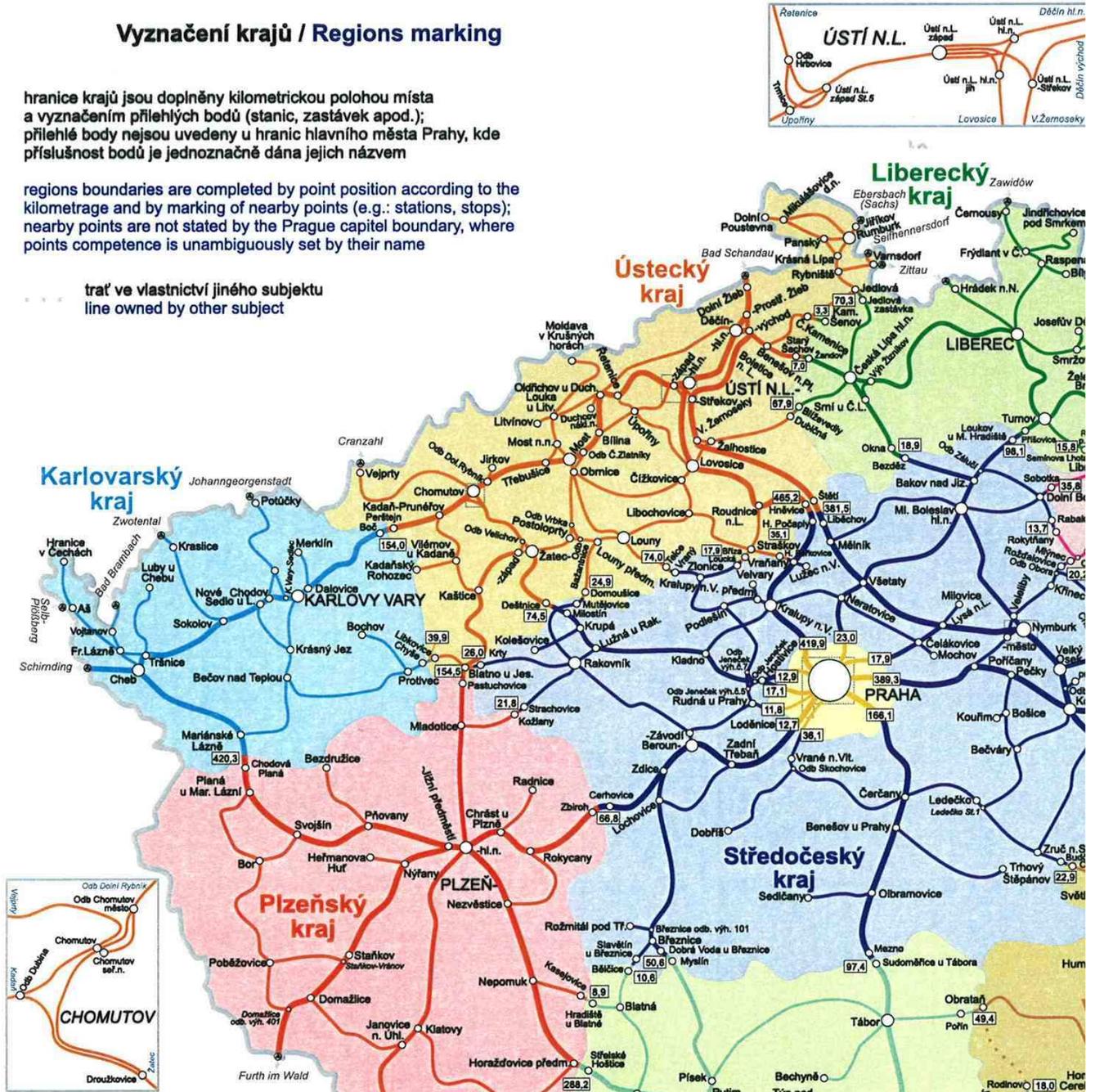
Figure1: Public railroad network on the Usti Region territory

Vyznačení krajů / Regions marking

hranice krajů jsou doplněny kilometrickou polohou místa a vyznačením přilehlých bodů (stanic, zastávek apod.); přilehlé body nejsou uvedeny u hranic hlavního města Prahy, kde příslušnost bodů je jednoznačně dána jejich názvem

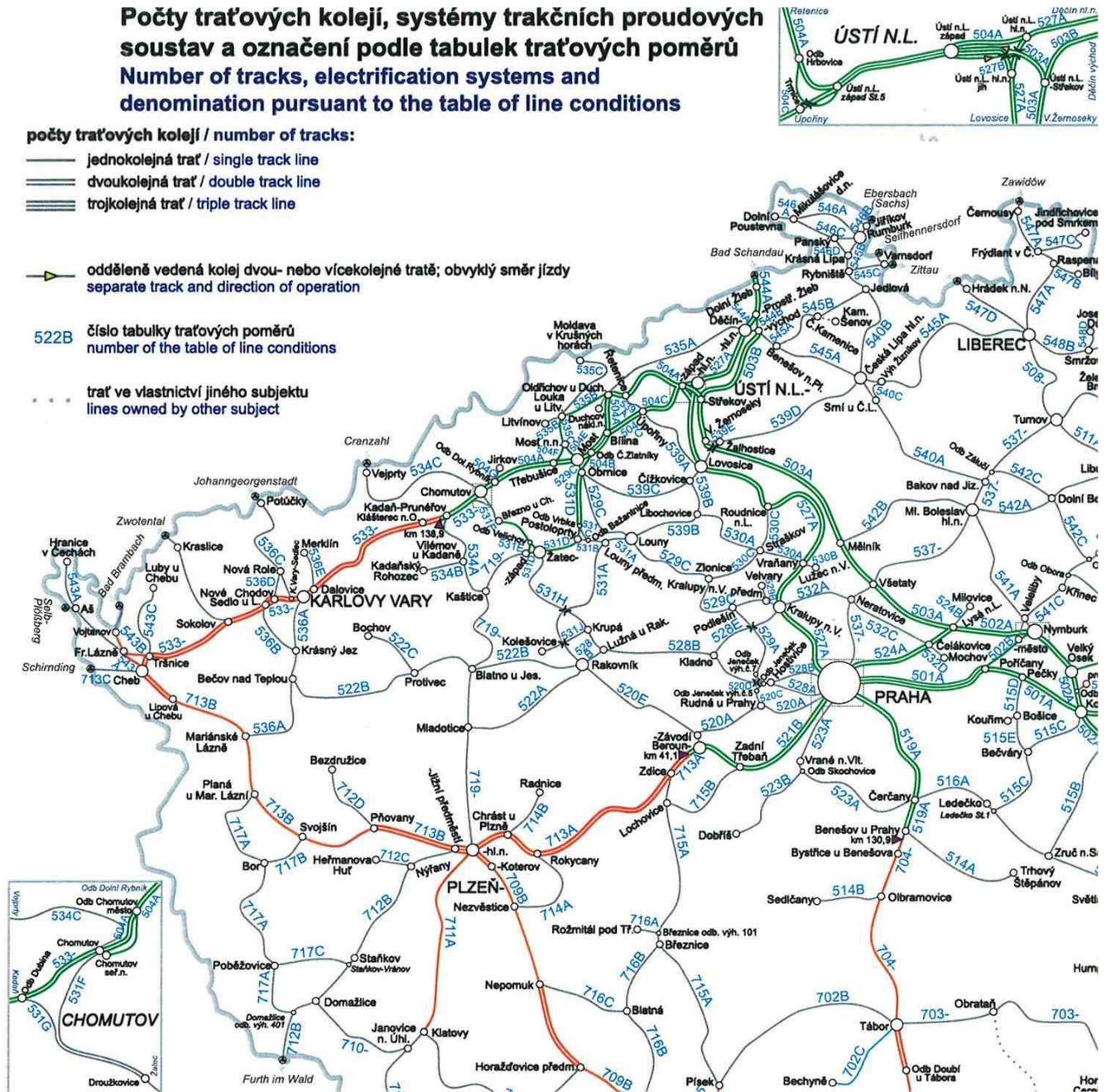
regions boundaries are completed by point position according to the kilometrage and by marking of nearby points (e.g.: stations, stops); nearby points are not stated by the Prague capital boundary, where points competence is unambiguously set by their name

trať ve vlastnictví jiného subjektu
line owned by other subject



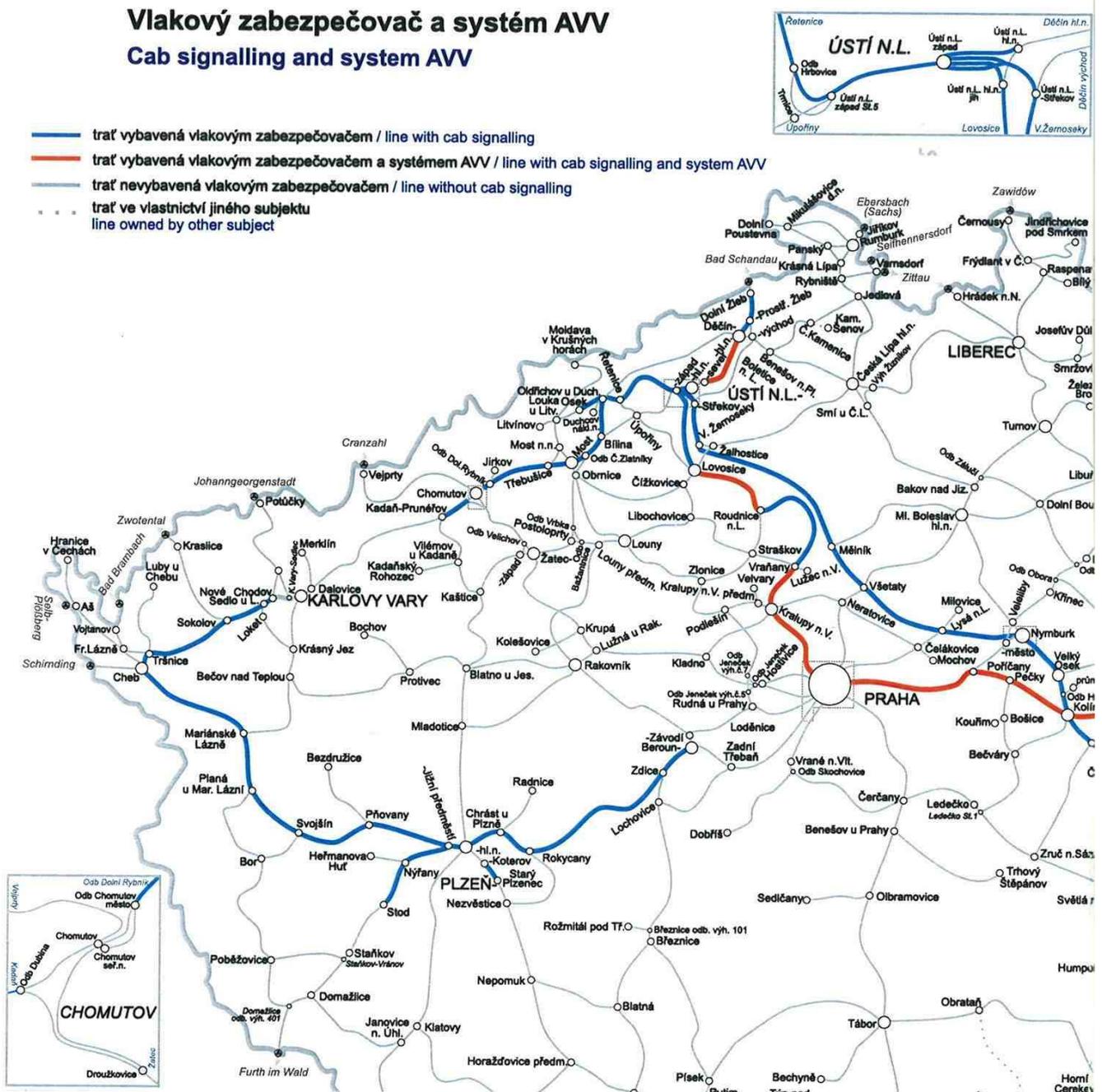
Source: web sites Railway Infrastructure Administration, state organization (SŽDC, s.o.)

Figure 2: Basic information about the public railroad infrastructure on the Usti Region territory



Source: web sites Railway Infrastructure Administration, state organization (SŽDC, s.o.)

Figure 3: Basic information about the line signalling and the security systems of the public railroad infrastructure on the Usti Region territory



Source: web sites Railway Infrastructure Administration, state organization (SŽDC, s.o.)

The public railroad network in the Usti Region reaches 1055 km. Out of that 28,5 % make state-wide railroads included in the European railway system, almost 39 % other state-wide railroads, and less than 33 % regional railroads.

Except for the public railway infrastructure, there exist also railroads owned by the mining and industrial plants in the Usti Region. Apart from many relatively short tap lines, these are large systems in:

- Chemical plants in Záluží u Litvínova,
- Chemical plants and harbour in Lovosice,
- Mining and power plants in Tušimice and Pruněšov (line Pruněšov – Březno u Chomutova).

3.2.2 Scheduled works on railroad transport network

After finishing the works at the 1st transit railway corridor (state borders Austria/CR at Břeclav - Brno – Česká Třebová – Praha – state borders CR/Germany at Dečín, in Usti Region Dolní Beřkovice – Děčín hl. n. – state borders CR/Germany) no other project of the same demand of investments is planned on railroad networks in Usti Region. Apart from the ideas about the foundation of a high-speed railway connection between Praha and Berlin, which will influence rather a public transport, on other railroads some actions come into consideration, which should lead to a lesser personnel demandingness of the railway operation (modernization of the protecting device), removing local speed and capacity limitations and so on. The concrete list shall depend on the amount of the financial support given to administration and servicing of the railroad network from the public resources.

Public road and motorway system is on the territory of Usti Region richly structured both technically and from the point of view of the importance for transport servicing of the region and of the whole state. These factors influence the division into particular categories of roads.

3.3.1 Infrastructure characterization

A general overview of public road and motorway system in Usti Region is presented in the following table:

TABLE 5: OVERVIEW OF THE ROAD AND MOTORWAY LENGTH ON THE USTI REGION TERRITORY

	Motorways	Fast highways	Primary roads	Second-class roads	Third-class roads	Roads and motorways altogether
km	52,568	7,043	484,187	901,318	2753,794	4198,910
i.e. % out of the total length	1,25	0,17	11,53	21,47	65,58	100,00

Source: Road and Motorway Directorate of Czech Republic, to 1. 1. 2009

Apart from the listed roads and motorways the road network is also made up of local and private roads. The following motorways, fast highways and primary roads cross the Usti Region (parts in the brackets lay outside the Usti Region territory):

- motorway D8 (Praha – Nová Ves) – Roudnice nad Labem – Lovosice – Řehlovice – Ústí nad Labem – Žďárek – Krásný Les state boundaries CR/Germany, section Lovosice – Řehlovice is in construction
- road R7-I/7 (Praha – Hořešovičky) – Panenský Týnec – Louny – Chomutov – Hora sv. Šebestiána state boundaries CR/Germany, reconstruction to fast highway takes place in the section Louny – Chomutov

- road R63 Řehlovice – Nové Dvory
- road I/6 (Praha – crossroads with I/27) – Petrohrad – Lubenec – (Bošov – Karlovy Vary – Cheb)
- road I/8 Lovosice – Nové Dvory – Teplice – Dubí – Cínovec state boundaries CR/Germany
- road I/9 (Praha – Svor) – Jedlová – Rumburk state boundaries CR/Germany
- road I/13 (Karlovy Vary – Boč) – Perštejn – Chomutov – Most – Teplice – Chlumeč – Žďárek – Děčín – Česká Kamenice – (Kamenický Šenov – Nový Bor – Chrastava – Frýdlant – Habartice state boundaries CR/Poland)
- road I/15 Most – Kozly – Lovosice – Ústěč – (Kravaře – Zahrádky)
- road I/27 Dubí – Litvínov – Most – Žatec – Strojetic – (crossroads with I/6 – Plzeň – Železná Ruda state boundaries CR/Germany)
- road I/28 Louny – Kozly
- road I/30 Lovosice – Ústí nad Labem – Chlumeč
- road I/62 Ústí nad Labem – Děčín – Hřensko state boundaries CR/Germany

Apart from motorways and primary roads, also the non-primary routes play an important role as they directly connect residential areas with industrial zones and centers of inhabitation, producing and services. With regard to their longlasting underfunding, their parameters are usually deep below the needs of traffic standards (orbitals of residential areas are missing, unsatisfying bearing capacity of the bridges, directional and inclinational ratio).

3.3.2 Scheduled works on road transport network

The first-rate task for improvements of the road network in the region is a completion of motorway D8 (part Lovosice – Řehlovice), originally planned to the end of 2010. Alteration of road I/7 to fast highway is in progress. Realization of other projects depends on the possibilities of public financial resources (especially State Fund for Transport Infrastructure).

With regard to the PLC building in the proposed localities, the needed modifications will be specified in their road connections.

4 Importance to the SoNorA Network

The SoNorA project seeks to bring forward the deployment of a South-North (S-N) Intermodal Network as a basis for the regional development in Central Europe. One of the aims is to obviate the impediments which debase the capacity of the infrastructure, that should be a part of this connection. Building the PLC (or at least a development of the now only existing center of this type in Lovosice) in the area of the Usti Region would open a possibility to shift part of the road transport to waterways and railways and so lessen the pressure on the backbone network of the road and motorway network in the respective regions.

Using of the PLC services would mean also an optimal form of connection of the developing industrial areas to the transport network, as these are expected to be equipped by a railway connection (tap line).

Further, and of equal importance, the recommendations provided within this document could be used by any relevant public authority or state administrative body as a sort of “road map” when locating potential sites for the transport facilities of the PLC type.

5 Methodology and approach

The first aim of the presented study is to create a catalogue of the areas within the Usti Region, which are potentially suitable for intermodal public logistic centers (PLC) creation.

The basic conditions for the selection of a suitable site is the connection of the locality to at least two kinds of freight transport, be it water – railway – road transport in a sufficient quality and a low possibility of any conflict with the present spatial planning documentation (SPD).

The territory of the Usti Region was judged according to the connection to:

- Labe waterways as the only relevant water freight transport infrastructure,
- State-wide railway network,
- Motorways and primary roads network.

By the intersection of the three systems mentioned above, 9 localities were found, which were further judged according to the present SPD and discussion with the authorities of villages and cities, which govern over the chosen locality.

After an additional demand of the submitter two more areas were examined, where a similar intention to build such a center already existed. By these additional localities ran no discussions with the local government.

The second and main aim, which is to provide a guideline with recommendations to interested public authorities is based on the findings made in this document as well as from other relevant experiences of the author. The creation of the catalogue is thus intended as a tool to indicate a more practical and comprehensive procedure to use for this sort of infrastructure development

6 Potential localities of the Public logistic centers in the Usti Region

It is possible to localize the Public logistic centers (PLC) according to several criteria:

- Connection to transport network: advantage is a good accessibility of the locality by as many kinds of transports as possible: navigable waterway, state-wide railroad and a road network of at least primary roads

- Sources and directions of the freight transport: it would be an advantage to have a mining, producing or similar plants in the near surrounding of a centre, especially those, which generate qualified transport and logistic services
- Effect on surrounding inhabitation and nature: the centers are planned to minimize any after-effects on residential zones, occupation of the agriculture and forest areas and to provide a conflictless relations with the area from the point of view of nature and countryside protection.

As criteria to qualify the PLC their capacity and utilization can be used. According to the premises of the Ministry of Transport the big full-product PLC are to be built approximately one per each region. This, of course does not negate the building of smaller centers oriented to the specific needs of each region.

According to the conditions of the Usti Region, the following areas seem to be answering the criteria:

- Děčín (railway station Děčín východ – harbour Děčín Loubí – road I/13),
- Ústí nad Labem (railway station Ústí nad Labem sever – harbour Krásné Březno – road I/62),
- Chabařovice (railway station Chabařovice, road I/13),
- Lovosice (railway station Lovosice – harbour Lovosice – road I/15 – motorway D8),
- Postoloprty – Bitozveves (railway station Postoloprty – road R7),
- Žatec (railway station Žatec západ – road I/27),
- Kadaň Pruněrov (railway station Kadaň Pruněrov – road I/13),
- Chomutov (railway station Chomutov – road R7 and I/13),
- Rumburk (railway station Rumburk – road I/9).

6.1 Děčín – Loubí

The first proposed locality for placing of the PLC is the area of harbour Děčín – Loubí. This would be a local PLC. Reasons for this proposal are as follows:

- Connection of the locality to the state-wide railway network (railroad Děčín východ – Děčín Prostřední Žleb) in a satisfactory quality,
- Connection to the road network (I/62),
- Reachability of the industrial zones in Děčín and the surrounding areas.

The situation in Děčín is similar to the neighbouring Ústí nad Labem. The industrial areas are prevailingly equipped by the tap lines, which enable their direct servicing by trains. The new users of these areas could profit from a conversion of brownfields, which are not rare in Děčín.

Quality of the connection to the particular kinds of transport

Connection of the locality to the transport infrastructure is far from the optimum. It has to be remarkably improved to reach it. The locality today is connected with three kinds of freight transport:

Railway transport

Into the harbour, there comes a public railroad Děčín východ – Děčín Loubí in administration of SŽDC s. o. It is a single-track non-electrified railway secured by the telephonic communication among train dispatcher in the railway station Děčín východ and the operator of the tap line.

Also in case of the optimal road transport connection (vide infra), the railway transport connection could be solved by the existing line Děčín východ – Děčín Loubí.

Optimization of the connection to the road transport would mean rather serious adaptation of the Žleb-Loubí station gridiron in Děčín východ, which enables opening of the area under the new bridge for building-up of the crossroads.

Road transport

Connection of the harbour area to the road network is provided by road I/62. It is a two-lane road, crossing the residential area of the city Děčín. The connecting points are solved like the joining

intersections, regulated only by the traffic signs. Crucial traffic impediment is a crossing through the city center approximately 1,75 km long (between I/13, crossroads Staré Město and the edge of the residential area by Střelnice). Residential area surrounding this sector suffers from noise and air pollution, produced by the road transport.

The straight connection with the road I/13 should solve the transport servicing of the area from road I/13, which should go from the Benešovská street (future trace of I/13) through the corridor of the railway roads Děčín východ – Děčín Prostřední Žleb and Děčín východ – Děčín Loubí. It enables to build two-lane road by the Loubský tunnel, while maintaining the full current capacity of the railway transport, (out of five running tracks, which were going through this section, only three are in operation, one is demounted, one is permanently out of service). It would overpass the deep trench and the following tunnel, through which the railroad is going to Prostřední Žleb now, and then connect to the existing road I/62 in the area of the current crossroads with the street by Střelnice.

Connection from Benešovská street would demand modification of the Benešovská – Kamenická crossroads (slip run from the new bridge).

Use of the corridor of current railroads would enable not only to solve the carriageway of the road transport into the area of the harbour, but also through-flow of the road I/62 towards the state border in a routing, which enables remarkably eliminate deep load of the city center (the anti-noise screens common for the road and the railway traffic) and because of the elimination of some crossroads also the pollution would decrease. Solution for the new connection of Loubská street would demand crucial constructional works in the prize of hundreds of millions Kč (Czech Crowns).

The proposed road connection would be sufficient for ordinary freights of a normal car contour (width to 2,5 m, height to 4,0 m). For the larger freights it is necessary to provide the carriageway from the Labská street.

Water transport

Infrastructure of the water transport is sufficient as for the capacity, but it suffers from the uncertain sailing conditions on the most downstream part of Labe in CR.

Demands of the PLC for the employees transport protection

Locality of the harbour Loubí is reachable by the public transport of Děčín and by the suburban service in the direction to Hřensko by bus. Parking for the employees could be established on the neighbouring Loubská street(road I/62).

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located just in the city of Děčín. These are the traditional industrial areas: in the locality of the railway station Děčín východ (cca 4 km), in Rozběšely (cca 6 km), in Boletice (cca 8 km) and in the valley of the Jílovský stream (cca 8 km, the distance is measured according to the road way, after the realization of the proposed connection).

Within 10 – 20 km from the proposed PLC are many more producing capacities. Thanks to the connection to the water transport the PLC could be attractive also for the further regions (Šluknov District, Česká Lípa District, Liberec District).

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

PLC is proposed to be located into the area of the harbour Děčín – Loubí, which is owned by Česko – saské přístavy s. r. o. (Czech – saxonian harbours Ltd.).In its south-west part, the zone touches the residential area of the city Děčín, conflict with ALR is impossible. The zone lies on the edge of the extensive protected territory, Labské pískovce PLA.

Part of the area of the proposed PLC lies in the protective zone of the road I/62.

The engineering systems are in a sufficient range available right on the place, the area is not touched by any protective zones of the higher-rank systems.

With regard to the location of the PLC in Labské pískovce PLA it will be necessary to plan any future development in cooperation with the nature protection authorities. Also operating of the PLC may be regulated by certain restrictions (e.g. lightening, night work).

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the city Děčín.

TABLE 5: LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	owner	Way of protection
2859/1	2 212	Děčín 624926	manipulation ground	Other ground	Česko - saské přístavy s. r. o., Loubská 704/9, 405 01 Děčín I	extensive protected territory
2859/2	1 536	Děčín 624926	built-up area and a courtyard	Building without the house number / other building		
2860	452	Děčín 624926	built-up area and a courtyard	Building without the house number / other building		
2863/1	53 261	Děčín 624926	manipulation ground	Other ground		
Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	owner	Way of protection
2863/2	33	Děčín 624926	built-up area and a courtyard	Building without the house number / other building		
105	1 668	Loubí u Děčína 625 311	built-up area and a courtyard	Building without the house number/ other building		
127	36	Loubí u Děčína 625 311	built-up area and a courtyard	Building without the house number / other building		
428/1	8 362	Loubí u Děčína 625 311	barren ground	Other ground		

Source: Prepared by the author

6.2 Ústí nad Labem – Krásné Březno

Potentially acceptable area for the PLC building could be the harbour in Ústí nad Labem – Krásné Březno. It would bring better conditions for the needs of the industrial zones in the city and an optimization of the traffic infrastructure in the surrounding area. Reasons for this choice are as follows:

- Connection of the locality to the state-wide railway network (line Praha – Děčín) in the satisfying quality,
- Connection to the road network (I/62),
- Accessibility of the traditional industrial zones in Ústí nad Labem.

Pressure on the building of the PLC in Ústí nad Labem agglomeration is lesser than in the localities with new industrial zones. The reason for this lies especially in the fact, that most of the industrial plants in the city have their own tap lines, which enables their direct servicing by the train. The new users of these areas could profit from a conversion of brown fields, which are not rare in Ústí nad Labem.

Quality of the connection to the particular kinds of transport

Connection of the locality to the transport infrastructure is far from the optimum. It has to be remarkably improved to reach it. The locality today is connected with three kinds of freight transport:

Railway transport

Into the harbour, there comes a tap line from the railway station Ústí nad Labem hlavní nádraží, district Sever. It is situated on the double-line electrified railway secured by the automatic block.

It could be seen as a little defect that there is a level crossing of the tap line with the road I/62 (Přístavní street), which is today equipped by the light signal box with no barriers.

Road transport

Connection of the harbour area to the road network is provided by road I/62. It is a two-lane road, which crosses the residential area of the city of Ústí nad Labem (Přístavní street). The connecting point is solved as a T-junction, regulated only by the traffic signs. Transport malfunction is the passageway on Labe and Bílina embankment with several underpasses under the railway lines and bridges with a restricted height (to 4,1 m), which in the direction from the motorway D8 importantly limits the possibilities for the larger freights transport.

Partial improvement of the road connection brings the finalization of the progressing building-up of the flood tank on the embankment between the estuary of Bílina into Labe and the Mariánská rock, which will bring the improvement of the clearance height under the Beneš bridge in times of the normal water mark. Other remarkable improvements are hardly to be expected, because of the surrounding urban area of the wider city center.

Water transport

Infrastructure of the water transport is sufficient as for the capacity, but it suffers from the uncertain sailing conditions on the most downstream part of Labe in CR.

Demands of the PLC for the employees transport protection

Locality of the harbour Krásné Březno is directly reachable by the bus line of public transport of Ústí nad Labem and in the walking distance is the trolleybus stop and the passenger section of the railway station Ústí nad Labem - North. Parking for the employees could be established right in the area and on the neighbouring Přístavní street (road I/62).

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located right in the city of Ústí nad Labem. These are several traditional industrial zones: the area of Krásné Březno and Neštětice (cca 1 – 3 km), industrial zone between the city center and Předlice (cca 4 km), in Střekov (cca 3 km, distances measured by the road way). New industrial zone in Předlice is approximately 5 km far.

Within 10 – 20 km from the proposed PLC, there are many more producing capacities including the developing industrial area in Krupka. Thanks to the connection to the water transport the PLC could be attractive also for the further regions.

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

PLC is proposed to be located into the area of the harbour Krásné Březno, which is owned by České přístavy a. s. (Czech harbours joint stock company). In its south-east part, the zone touches the residential area of the so called Nový svět, conflict with ALR is impossible. The area is not in any contact with the nature protecting territory (border of the České středohoří PLA is on the opposite bank of the river Labe).

The location of proposed PLC has no conflict with conditions of valid City of Ústí nad Labem spatial plan.

Part of the area of the proposed PLC lies in the protective zone of the road I/62.

The engineering systems are in a sufficient range available right on the place, the area is not touched by any protective zones of the higher-rank systems.

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the city Ústí nad Labem.

TABLE 6:LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	owner	Way of protection
1169/8	1 827	Krásné Březno 775266	manipulation ground	Other ground	České přístavy a. s., Jankovcova 1057/6, 170 00 Praha	none
1660/3	21		built-up area and a courtyard	Building without the house number		none
1660/4	9 500		manipulation ground	Other ground		none

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	owner	Way of protection
1695/1	36 270		manipulation ground	Other ground		none
1695/7	952		manipulation ground	Other ground		none
1695/8	335		manipulation ground	Other ground		none
1713/2	421		other road	Other ground		none
342/10	779		built-up area and a courtyard	Building without the house number		none
342/11	3 962		other road	Other ground		none
342/40	2 318		built-up area and a courtyard	Building without the house number		none
342/41	4 261		built-up area and a courtyard	Building without the house number		none
342/42	3 120		built-up area and a courtyard	Building without the house number		none
342/43	1 239		other road	Other ground		none
342/8	12 556		other road	Other ground		none
342/9	117		built-up area and a courtyard	Building without the house number		none

Source: Prepared by the author

6.3 Chabařovice

Another possible locality for the PLC in the Usti Region territory is in the neighbourhood of the railway station Chabařovice. The reasons are following:

- Connection of the locality to the state-wide railway network (line Ústí nad Labem - Most) in the satisfying quality,
- Connection to the road network (I/13), near is also motorway D8 (junction Chlumec),
- Accessibility of the traditional industrial zones in Ústí nad Labem, Teplice, new industrial area in Krupka.

The railway station Chabařovice was built in the 1980s in connection with the shifting of tracks because of the opencast coal-mining. Its wide rail yard is now used almost exclusively for the unused trucks depositing.

Quality of the connection to the particular kinds of transport

Connection of the locality to the transport infrastructure is close to optimum. The locality is connected with two kinds of freight transport:

Railway transport

PLC would be in touch with the rail yard of the railway station Chabařovice. The station lies on the double-line electrified railway secured by the automatic block. PLC is planned to the south from the station gridiron to Bohosudov where the currently unused service tracks with ramps are located.

Road transport

Connection of the PLC area to the road network is provided by a private road, branching from the road II/253. It is a two-lane road, going alongside the rail yard and the station building. The connecting point is solved as a T-junction, regulated only by the traffic signs.

Road II/253 is crossing the road I/13 in Přestanov, not far from the potential locality of the PLC. Also this one is in this section a two-lane road, the crossroads is transversal controlled only by light signals. Crossroads in Přestanov belongs to the dangerous points in the Usti Region road network and its adaptation to the ring crossroad is expected (together with improving of the road I/13 capacity).

Demands of the PLC for the employees transport protection

Locality of the potential PLC is not ordinarily reachable by the public transport. The attendance distance from the nearest bus stop (Besta) of Ústí nad Labem public transport bus line is approximately 1 300 m, in the railway station Chabařovice the passenger trains do not stop.

Parking for the employees could be established right in the area in the satisfactory number.

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located in the developing industrial area in Krupka (approx 5 km). Within 10 – 20 km from the proposed PLC there are many more producing capacities (Teplice, Ústí nad Labem, Krupka, Dubí) and potential developing areas (e.g. area of the former gasworks in Užín).

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

PLC is proposed to be located into the area southwards from the western part of the railway station Chabařovice, which is owned by 2 subjects - České dráhy a. s. (Czech railways, joint stock company) and Správa železniční dopravní cesty s. o. (Administration of the railway transport lines, state organization). The zone touches no residential area, conflict with ALR is impossible. The area is not in any contact with the nature protecting territory, along its circuit, there goes the bio corridor along the Ždírnický stream.

Part of the area of the proposed PLC lies in the protective zone of the railroad Ústí nad Labem – Most.

The engineering systems are in a sufficient range available right on the place, the area is not touched by any protective zones of the higher-rank systems.

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the cities Chabařovice and Krupka, both the cities give as a condition for the realization of the PLC the adaptations of the road network in the surrounding region (see their deliverance).

TABLE 7: LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner/factor	Way of protection
1697/1	86 985	Chabařovice 650498	railway	Other ground	ČD a. s., nábreží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
225/4	65 998	Unčín u Krupky 675318	bare ground	Other ground		none
302	149	Unčín u Krupky 675318	Building without the house number	built-up area and a courtyard	ČR/Správa železniční dopravní cesty s. o., Dlážděná 1003/7, 110 00 Praha Nové Město	none

Source: Prepared by the author

6.4 Lovosice

The most promising locality on the Usti Region territory from the point of view of the PLC seem to be Lovosice. This statement comes from the following reasons:

- Connection to all three kinds of transport with the biggest capacity:
 - Harbour Prosmyky on the Labe waterway with the well-kept sailing conditions during the whole year,
 - Railway station Lovosice on the state-wide railroad registered in the European railway system and the transit corridors,
 - Motorway D8 and the roads I/15 and I/30
- Locality is near to the geometrical gravity center of the region,
- Existence of important sources and objectives of the transport servicing in the neighbourhood:
 - chemical plants in Lovosice,
 - industrial zone Lovosice západ,
 - cement works in Čížkovice.

In the area of the city Lovosice, there already are logistic facilities around the railway station. These are two container transit sheds and the hall of the lump article. In the immediate surroundings of the railway station two more logistic centers are in construction (in the direction to Lukavec). Together with the logistic capacity of the harbour Prosmyky the perspective of the PLC operation is assured.

Quality of the connection to the particular kinds of transport

Connection of the locality to the transport infrastructure is far from the optimum. It has to be remarkably improved to reach it, which now is in progress in the field of the road traffic. The locality today is connected with three kinds of freight transport:

Railway transport

PLC would be in touch with the rail yard of the railway station Lovosice, through which goes the double-tracked electrified railway Praha - Děčín secured by the automatic block, which is included in the European railway system. Into the harbour Prosmuky, there goes the single-track non-electrified tap line, connected with the safety equipment of the railway station Lovosice.

For the optimal functioning of the PLC Lovosice to the public railroad network, it is indispensable to connect it with the line Lysá nad Labem – Ústí nad Labem západ, which is on the opposite (right) bank of Labe. Reason for this is a realistic perspective of capacity surcharge of railways around Praha by the development of the suburban railroad traffic. It will be necessary for the trains servicing the PLC Lovosice to find an alternative way into the Czech inland and farther in the southward direction to the South-east Europe. There are several possibilities how to solve this problem. Some of them reach behind the borders of the Usti Region and all of them need investments with the support from the state or from the EU.

All the solutions must meet the requirement of the PLC servicing by the freight trains:

- continuous operating of the electric traction (elimination of the swapping as one of the conditions for reaching the optimal travelling speed of the train),
- the railroad safety equipment answering the conditions of the European railroads with the operations of the speed freight trains,
- reaching the category of the permitted load D4,
- length of the station track at least 600 m,
- the train speed at least 60 km/h.

Reconstruction of the line Lovosice – Česká Lípa (section Lovosice – Žalhostice) and a line Žalhostice – Velké Žernoseky

As the easiest way of solving the situation seems to be use of the existing public railroad infrastructure, which shall be reconstructed for the PLC needs.

The line Lovosice – Česká Lípa now is a single-track, non-electrified railroad secured only by the telephonic communication among the train dispatchers. The train speed is at most 60 km/h. Parameters of the stations and their safety device are on the level of the regional lines.

Configuration of the railway station Lovosice remarkably complicates the connection between the PLC (shunting station) and the passenger part of the station, from which the line to Česká Lípa starts. The train from the shunting station would have to go to the track 13b – 13c in the area of the passenger station, from here turning back across the switches 29 – 29 – 25 – 21 – 15 – 14 – 11 – 10 – 9 and to the line in the Česká Lípa direction. In doing so, it would block the Prague gridiron of the passenger station. After arriving to the railway station Žalhostice the train would have to turn back again and go on the line Žalhostice – Velké Žernoseky to the line Lysá n. L. – Ústí n. L. In the station Velké Žernoseky it would have to turn back for the third time (in case it would continue towards the inland).

Because of the necessity of the turning backs and the gradient ratio, it would be necessary to equip each train by the pusher (second engine on the opposite end of the train), which would become the main train engine for some part of the journey. While it's switching off in the railway station Velké Žernoseky, it would be necessary to make the examination of the brakes and the related operations. The whole passing of the way from Lovosice shunting station – Velké Žernoseky (cca 7 km) would in the optimal case take approx 20 minutes, but it is highly probable it would be remarkably longer (influence of the passenger transport operation).

Unavoidable constructional and technological adaptations:

- reconstruction of the track line Lovosice – Žalhostice including the adaptations of the base for the permitted load category D4 (especially bridges), enhancement of the clearance height on the bridge over the road I/15,
- new Lovosice – Žernoseky gridiron and an adaptation of the Litoměřice gridiron in the railway station Žalhostice for enhancing of the usable length of the running track n. 3 to 600 m,
- to make the track 6 open for traffic in the railway station Velké Žernoseky in its whole length, adaptation of the Ústí gridiron in this station so that it would be possible to extend the track n. 3 to the length 600 m,
- new safety equipment on the line in the sections Lovosice – Žalhostice and Žalhostice – Velké Žernoseky, new station safety equipment in the stations Žalhostice and Velké Žernoseky,
- electrification of the line sections Lovosice – Žalhostice and Žalhostice – Velké Žernoseky, adaptations of the traction mains in the railway station Velké Žernoseky.

To reach the optimal functioning of the railroad transport in the area of Žalhostice – Velké Žernoseky it would be advisable, except for the mentioned adaptations, also to pursue changes of the stopping points of the passenger trains on the line Lysá n. L. – Ústí n. L. (to disestablish stopping of the ordinary trains in the railway station Velké Žernoseky and establishing of the stops Žalhostice station in the area of the crossing with the road to Píšťany and Velké Žernoseky station in the center of the village) and elimination of the level crossing with the road to Píšťany (substitution by the overpass in the area of the CS Beton company and by the reconstructed road along the late tannery), which is an important traffic impediment on the through highway of the road II/261 through Žalhostice.

Benefit of the action for the Usti Region would be a reconstruction of a part of the important regional line and elimination of the point defects on the important roads, quality of the PLC connection to the right-bank track line would be very problematic.

Reconstruction of the track-line Lovosice – Česká Lípa (section Lovosice – Litoměřice Kocanda) and the track-line Žalhostice – Velké Žernoseky, ablation of the track-line Lysá nad Labem – Ústí nad Labem in the section Litoměřice dolní nádraží – Velké Žernoseky

Second possible solution comes from the existing railroad, which would be adapted for the required standards of the PLC operating and solves also the problematic of the railway passage through the residential area of the city Litoměřice.

The line Lovosice – Česká Lípa is now a single-track, non-electrified railroad secured only by the telephonic communication among the train dispatchers. The train speed is at most 60 km/h. Parameters of the stations and their safety device are on the level of the regional lines.

Configuration of the railway station Lovosice remarkably complicates the connection between the PLC (shunting station) and the passenger part of the station, from which the line to Česká Lípa starts. The train from the shunting station would have to go to the track 13b – 13c in the area of the passenger station, from here turning back across the switches 29 – 29 – 25 – 21 – 15 – 14 – 11 – 10 – 9 and to the line in the Česká Lípa direction. In doing so, it would block the Prague gridiron of the passenger station.

The train would continue on the reconstructed track-line to Litoměřice, where it would use the new track connection to the right-bank line (in case it would continue in the inland), or it would make the second turning back in Žalhostice and continue to Velké Žernoseky (in case it would go in the direction to Děčín).

Because of the inevitability of the turning back, the main train engine would start from the shunting station as a pusher. While switching off the second engine in the railway station Lovosice/Velké Žernoseky, it would be necessary to make the examination of the brakes and the related operations. The journey between the shunting station in Lovosice and the area of Žalhostice would be faster in comparison with the previous version, the negative influence on the line Praha – Děčín (Prague gridiron in the passenger railway station Lovosice) would stay unchanged.

Unavoidable constructional and technological adaptations:

- reconstruction of the track line Lovosice – Litoměřice horní nádraží (or Kocanda) including the adaptations of the base for the permitted load category D4 (especially bridges), enhancement of the clearance height on the bridge over the road I/15, important adaptations of the vertical alignment in the section Žalhostice – Litoměřice Kocanda (to imbed the railroad under the surface and to make it double-track line)
- new Lovosice – Žernoseky gridiron and an adaptation of the Litoměřice gridiron in the railway station Žalhostice for enhancing of the usable length of the running track n. 3 to 600 m,
- General adaptation of the railway station Velké Žernoseky caused by the leaving of the right-bank railroad and making the track-line to Žalhostice double-tracked,
- Building-up of the double-track railroad connection Litoměřice Kocanda – Litoměřice plynárna (area of the Polepy gridiron in the railway station Litoměřice dolní nádraží),
- new safety equipment on the line in the sections Lovosice – Litoměřice horní nádraží and Žalhostice – Velké Žernoseky, new station safety equipment in the stations Žalhostice, Velké Žernoseky and Litoměřice horní nádraží,
- electrization of the line sections Lovosice – Litoměřice Kocanda – Litoměřice dolní nádraží and Žalhostice – Velké Žernoseky, adaptations of the traction mains in the railway station Velké Žernoseky.

To reach the optimal functioning of the railroad transport in the area of Velké Žernoseky – Litoměřice it would be advisable, apart from the mentioned adaptations, also to pursue changes of the stopping points of the passenger trains on the line Lysá n. L. – Ústí n. L. and a new common section with the line Lovosice – Česká Lípa (to disestablish stopping of the ordinary trains in the railway station Velké

Žernoseky and establishing of the stops Velké Žernoseky station in the center of the village and Litoměřice Kocanda by the hospital).

Benefit of the action for the Usti Region would be a reconstruction of a part of the important regional line, its change into the state-wide line, elimination of the point defects on the important roads, elimination of the passing of the frequented railway through the central part of Litoměřice and the possibility of a common use of the today railway corridor of the line Lovosice – Česká Lípa in the residential area by both railway and road transport (conversion of the railroad under the surface). Quality of the PLC connection to the right-bank track line would be better in comparison with the previous option.

At the conclusion of both the “Žalhostice” alternatives it is necessary to mention also a theoretical possibility to use the tap-line to the harbour Prosmky. It would eliminate one of the very problematic places, which is the crossing from the shunting station to the line to Česká Lípa. However its directional parameters (curve radius) do not correspond with the requirements of the public railroad. Crossing of the river Labe in continuation of the tap-line would demand to build a new railway bridge, which would have a problematic connection on the right bank of the river.

Transformation of a part of the Mondi a. s. Tap-line to a public railroad in the section Hněvice – Štětí

Another possible solution deals with the existing non-public railway infrastructure (tap-line Mondi a. s.), which would be adapted for the necessary requirements of the PLC operation.

The tap line Mondi a. s. Hněvice – Štětí is now a single-track, non-electrified line, secured by the track safety equipment. The train speed is at most 30 km/h. Both the connected stations lay on the double-track electrified railways secured by the auto block, the station equipment in Hněvice is modern, in Štětí obsolete.

The advantage of this option would be the exit from the shunting station in Lovosice directly to the track-line Praha – Děčín. Configuration of the railway station Hněvice would enable carriageway of the trains in the direction to Štětí solely through the shunting yard.

Directional and inclinational ratio of the tap-line follow their use, they do not fulfil the requirements for the public railroad (especially the deficit of the railway curve radius). Its change in the conditions of the

border between the big industrial area and the residential area of the city would be practically impossible; also the connection to the both connecting stations is hardly to be modified.

After taking these arguments into consideration the use of the Mondi a. s. tap-line as a public railroad seems to be unrealistic.

Building-up of the railroad linkage Vraňany/Mělník – Dolní Beřkovice/Liběchov

This option solves the problem outside the Usti Region, but it represents probably the optimal way, how to provide the connection of the PLC Lovosice to the right-bank Labe railroad. The base of the solution is a building-up of the new railroad linkage in the area southwards from the village Dolní Beřkovice, which would connect both the lines from both directions, which means from the stations Vraňany and Dolní Beřkovice (line Praha – Děčín), or Mělník and Liběchov (line Lysá nad Labem – Ústí nad Labem západ). Mutual distance of the lines is approx 1 700 m. Configuration of the terrain in relation to the river Labe would enable a connection from all the directions by the regulated receptions and departures from the stations, or from the new branch lines.

The new connection would enable the direct way of the trains servicing the PLC Lovosice out from the shunting station to the line Praha – Děčín and their trouble-free crossing to the right bank of the river Labe. Its further effects would be a connection of Mělník to the railway suburb transportation of Praha and a central Bohemian agglomeration and protection of the mutual substitutability of the both lines by Labe in case of the operational problems on one of them.

Unavoidable constructional and technological adaptations:

- building-up of the double-track railroad linkage with a bridge over Labe in the area between Dolní Beřkovice and Mlazice, including a traction, communicational and safety equipment,
- foundation of the branch lines Vliněves, Vehlovice and Mlazice,
- adaptation of the rail yard in the railway station Dolní Beřkovice,
- adaptations of the railway safety equipment on the lines Praha – Děčín a Lysá n. L. – Ústí n. L. západ.

Contribution of the action for the Usti Region would be, apart from the optimal connection of the PLC to the right-bank of Labe railroad, also a possibility of providing the direct trains from Praha to Štětí

and Litoměřice and a more flexible reaction of the railway transport operator to the operational problems on the lines going along the river Labe.

Reconstruction of the lines Kralupy nad Vltavou – Neratovice and Praha – Turnov (section Neratovice – Všetaty)

This option solves the problem outside the Usti Region territory, but it probably represents the least demanding way, as for the investments, how to provide the connection of the Lovosice PLC to the right-bank Labe railway. The base of this solution is a reconstruction of the existing connection Kralupy nad Vltavou – Všetaty.

The lines Kralupy nad Vltavou – Neratovice and Praha – Turnov (section Neratovice – Všetaty) are single-track and non-electrified. Their safety system works on the telephonical communication of the train dispatchers, the station safety equipment is partially modernized. Parameters of the stations as for the length of the rail yard are satisfactory for the PLC operating trains.

Connection of the Lovosice PLC and the Czech inlands across Neratovice and Všetaty would demand the PLC operating trains to turn back in Všetaty.

The new connection would enable the direct exit of the PLC operating trains from the shunting station to the line Praha – Děčín and their trouble-free crossing to the Right bank of Labe. In the section Vraňany – Kralupy nad Vltavou and Neratovice – Všetaty, the trains would get into the contact with the suburb transportation of Praha and a central Bohemian agglomeration, though with the less occupied branches.

Unavoidable constructional and technological adaptations:

- adaptations of the railway safety equipment on the lines Kralupy nad Vltavou – Neratovice and Praha – Turnov (section Neratovice – Všetaty) and of the station safety equipment on the relevant sections,
- electrization of both the track-lines.

Apart from the relatively favourable connection of the PLC to the right-bank Labe railway, this solution would bring to the Usti Region only marginal effects (improvement of the possibility for the railway operators to react to the operational problems on the lines going along the river Labe).

Road transport

Connection of the PLC area to the road network is provided by road III/24712, which parts from the road I/15 in the south-east part of Lovosice. Both the roads are the two-lane roads, they cross in the intersective junction, regulated only by the traffic signs. From the road II/247 the PLC operating is not legally possible with regard to its crossing through the residential area of Lukavec.

Infrastructure of the road traffic will be remarkably improved by the finishing of motorway junction Lovosice (D8 – I/15), which will make the connection between the PLC and motorway D8 much easier, because it will go outside the residential areas of the municipalities. Another improvement will be adaptation of the crossroads I/15 – III/24712 on the southeast edge of Lovosice to make the exit from the PLC safer, when connecting to the superior road network. It is still inevitable to pursue the protection of the village Lukavec and a Lovosice quater Nový Klapý against the transit freight transport, which will be made through the effective control of the ban on the transit through the Lukavec residential area, by building-up of the direct connection of the PLC to the road II/247 in the area of the motorway junction Lovosice jih (D8 – II/247). This connection is prepared in the land-planning documentation and the magistrate of Lovosice persists on the realization of the direct connection of PLC to road II/247, as on the essential condition for widening of the logistic terminal ČD Cargo. As an equal priority the magistrate regards also acoustic shielding along the road I/15 in a curve westwards from its crossroads with III/24712 on the western edge of Lukavec.

Water transport

Infrastructure of the water transport is sufficient as for the capacity.

Demands of the PLC for the employees transport protection

Locality of the PLC Lovosice is reachable by the suburban service bus line Litoměřice – Třebenice (nearest stop Lukavec, prodejna is approx 750 m far) and by the stopping trains (station Lukavec on the line Praha – Děčín, approx 900 m far). Parking for the employees could be established within the area of the PLC.

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located just in the city of Lovosice. These are the chemical plants approx 2,5 km far and the industrial zone between the rail yard of the passenger railway station and the motorway D8 (approx 3 km from the PLC).

Within 10 – 20 km from the proposed PLC there are many more producing capacities (Čížkovice cement works, plants in Litoměřice, Štětí and Roudnice nad Labem). Thanks to the connection to the water transport the PLC could be attractive also for the further regions (Louny District, Šluknov District, Česká Lípa District, Liberec District). Because of the good communicational accessibility, the area is already an attractive zone for the Usti District, Teplice District, Děčín District and even for the further localities of the Usti Region.

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

The fundamental problem of the PLC function and possible future development is a conflict with the logistic equipment in the area of the railway station Lovosice – Lukavec with the protection of ALR and with the property of private subjects. The only realistic development is possible in the area between the rail yard of the station, road III/24712 and the residential area of Lukavec (plots 3017/1 and 3017/7 cadastral unit Lovosice), which is registered as an arable land and belongs to a private subject (Hyparkos s. r. o., Praha 2). Magistrate Lovosice refuses further expansion of the traffic infrastructure areas on its territory and on the territory of Lukavec.

Part of the area of the proposed PLC lies in the protective zone of the railroad Praha – Děčín, or in the rail yard of the railway station Lovosice.

The ingeneering systems are in a sufficient range available right on the place, the area is not touched by any protective zones of the higher-rank systems.

Locality of the PLC in relation to the territorial plan.

The placing and further development of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the city Lovosice.

TABLE 8: LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner	Way of protection
2872	125	Lovosice 687707	Building without the house number	built-up area and a courtyard	ČD a. s., nábřeží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
2874	3 731		House number 1189			none
2876	1 968		Building without the house number			none
3015	127		Building without the house number			none
2700/1	203 347		railway			Other ground
2700/4	134		shared courtyard	built-up area and a courtyard		none
2700/6	123		Building without the house number			none
2700/7	89		shared courtyard			none
3019/2	764		bare ground	Other ground		none
3042/6	649		Other ground	Other ground		none
3042/7	15		Other ground	Other ground		none
3042/8	1 955		Other ground	Other ground		none
2700/19	16 220		Lovosice 687707	railway		Other ground

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner/factor	Way of protection
3017/10	2 999	Lovosice 687707		arable soil	ČR/Pozemkový fond ČR, Husinecká 1024/11a, 130 00 Praha Žižkov	agricultural land fund
3017/5	915			arable soil		
2701	63		Building without the house number	built-up area and a courtyard	ČR/Správa železniční dopravní cesty s. o., Dlážďená 1003/7, 110 00 Praha Nové Město	none
2702	510		Building without the house number	built-up area and a courtyard		none
2703	76		Building without the house number	built-up area and a courtyard		none
2873	308		Building without the house number	built-up area and a courtyard		none
2700/3	89		Building without the house number	built-up area and a courtyard		none
2700/5	43		Building without the house number	built-up area and a courtyard		none
3017/2	1 791		Building without the house number	built-up area and a courtyard		none
3017/3	380		Building without the house number	built-up area and a courtyard		none
3018/1	1 548		other road	Other ground		none

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner/factor	Way of protection
2875	57	Lovosice 687707	Building without the house number	built-up area and a courtyard	ČSKD INTRANS s. r. o., Jana Želivského 1922/2, 130 00 Praha Žižkov	none
3041	68		railway	Other ground		none
2700/14	152		Other ground	Other ground		none
2700/15	19		Other ground	Other ground		none
2700/16	102		Other ground	Other ground		none
3042/2	478		Building without the house number	built-up area and a courtyard		none
3016	41	Lovosice 687707	Building without the house number	built-up area and a courtyard	HYPARKOS s. r. o., Škrétova 490/12, 120 00 Praha Vinohrady	none
2700/20	515		railway	Other ground		none
2700/21	241		railway	Other ground		none
3017/1	31 706			Arable soil		agricultural land fund
3017/6	1 375			Arable soil		
3017/7	12 028			Arable soil		
3020/13	7 948		Building under construction	built-up area and a courtyard		none
3020/15	1 321			Arable soil		agricultural land fund
3020/16	774			Arable soil		

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner/factor	Way of protection
3020/17	552	Lovosice 687707		arable soil	HYPARKOS s. r. o., Škrétova 490/12, 120 00 Praha Vinohrady	agricultural land fund
3020/18	49			arable soil		agricultural land fund
3020/19	21 223		Building under construction			none
3020/20	11 733		Building under construction	built-up area and a courtyard		none
3020/21	282		Building under construction			none
3020/4	268			arable soil		
3020/5	16 086			arable soil		agricultural land fund
3020/7	6 270			arable soil		
3020/8	1 019			arable soil		
3040/2	403		Manipulation ground	Other ground		none
3019/1	1 797	Lovosice 687707	bare ground	Other ground	not registered in the List of the Owner	none
3020/1	17 050			arable soil		none
3040/1	529		bare ground	Other ground		none
3042/1	529		Manipulation ground	Other ground		none
2872	125	Lovosice 687707	Building without the house number	built-up area and a courtyard	ČD a. s., nábřeží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
2874	3 731	Lovosice 687707	House number 1189		none	

Source: Prepared by the author

6.5 Postoloprty – Bitozeves

Another proposed locality for placing of the PLC is the area of Postoloprty and Bitozeves on the former military airport Žatec. This would be a local PLC providing the needs of the developing industrial areas and optimization of the effects on transport infrastructure in the surroundings. Reasons for this proposal are following:

- Connection of the locality to the state-wide railway network (railroad Most – Žatec) in the satisfactory quality,
- Connection to the road network (I/7, future R7),
- Accessibility of the industrial zones Triangle and Joseph in the area of the former airport Žatec and in Havran.

Both the zones lack resources to provide their connection to the railroad. All of the material transport is provided by the trucks, which means a great burden for the surrounding road network and also for the residential areas.

Quality of the connection to the particular kinds of transport

The connection of the locality to the transport infrastructure is technically trouble free, although it is currently realized only by the road network.

Railway transport

The PLC is planned into the south-east part of the industrial area Triangle. For the railway transport it is necessary to restore the tap line of the former airport Žatec, which was dissolved in the recent years. Its body is preserved in the section between the railway station Postoloprty to the crossing of the railroad with the road II/250, in its biggest part it is an estate of the Usti Region. Location of the PLC is planned so that no operating on the tap line would affect into the area of fine electronic plants. The tap line would be a single-track, non-electrified line, leading into the railway station Postoloprty. The station lies on the single-track electrified line secured by the relay semiautomatic block.

Road Transport

The connection of the area of the PLC to the road network is provided by a private road, parallel with an already realized section of the road R7. The connecting point would be solved as a T-junction, regulated only by the traffic signs.

Nearby crossroads R7 – II/250 is elevated and provides safe and capacitive connection in the directions to Žatec and Libčeves.

Demands of the PLC for the employees transport protection

Locality of the potential PLC is reachable by the public transport (bus lines to/from the stop Staňkovice, Triangle – jih in the direction to Most, Louny, Chomutov and Žatec).

Parking for the employees could be established within the area of the PLC.

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located in the industrial zone Triangle (approx 1 – 3 km) and in the industrial zone Joseph (approx 10 km).

Within 10 – 20 km from the proposed PLC there are many more producing capacities and mining areas (district of the cities Most, Louny, Chomutov, Žatec) and potentially developing areas (e.g. area Nové Spořice).

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

The PLC is planned into the south-east part of the industrial zone Triangle, which is owned solely by the Usti Region. The area touches no residential area, in the real estate register, it is still registered as an ALR. The area is not in any contact with the nature protecting territory.

Part of the area of the proposed PLC lies in the protective zone of the road R7.

The ingeneering systems are in a sufficient range available right on the place, the area is not touched by any protective zones of the higher-rank systems.

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the industrial zone Triangle.

TABLE 9: LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner	Way of protection
467/1	528	Bitozeves 604925	Other road	Other ground	Ústecký kraj Velká hradební 3118/48, 400 01 Ústí nad Labem	none
476/1	85 925			Arable soil		Agricultural land fund (ALR)
476/2	30 462			Arable soil		
476/3	21 279			Arable soil		
476/4	32 338		Bare ground	Other ground		none
476/5	4 709		Other ground	Other ground		none
476/6	21 122			Arable soil		Agricultural land fund

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner	Way of protection	
476/7	23 005	Bitozeves 604925		Arable soil	ČR/Pozemkový fond ČR, Husinecká 1024/11a, 130 00 Praha Žižkov	Agricultural land fund	
476/8	359	Bitozeves 604925		Arable soil		Agricultural land fund	
476/9	1 771	Bitozeves 604925	Other ground	Other ground	Ústecký kraj, Velká hradební 3118/48, 400 01 Ústí nad Labem	none	
554/20	25 561	Tatinná 702382	sport and recreation area	Other ground		none	
556	59 558			Arable soil		agricultural land fund	
559/1	47 436		sport and recreation area	Other ground		none	
560	155		Other road	Other ground		none	
561/1	43 446			Arable soil		agricultural land fund	
562	207		sport and recreation area	Other ground		none	
1404	39 060		Bitozeves 604925	Manipulation ground		Other ground	none
1416	458			Manipulation ground		Other ground	none
711/1	18 503		Postoloprty 726117	railway		Other ground	none

Source: Prepared by the author

6.6 Žatec západ

Locality proposed for the location of the PLC could be also the area northwards from the railway station Žatec západ. It would be a local PLC, providing the needs of the developing industrial zones and optimization of the effects on the infrastructure in the surrounding region. Reasons for this proposal are following:

- Connection of the locality to the state-wide railway network (railroad Most – Žatec) in the satisfactory quality,
- Connection to the road network (I/27),
- Accessibility of the industrial zones Triangle and Joseph in the area of the former airport Žatec and in Havran.

Both the zones lack resources to provide their connection to the railroad. All of the material transport is provided by the trucks, which means a great burden for the surrounding road network and also for the residential areas.

Quality of the connection to the particular kinds of transport

The connection of the locality to the transport infrastructure is technically trouble free as for the railroad, while more problematic is the relation with the road network.

Railway transport

The PLC is planned northwards from the railway station Žatec západ. PLC would use part of the rail yard of the station. The station lies on the single-track electrified line secured by the relay semiautomatic block.

Road transport

It is necessary to connect the PLC directly with the road I/27 by its overpass upon the eastern station gridiron. It would lessen the conflict of PLC with the houses along Mostecká street. Combination of this

connection together with adaptation of the crossroads I/27 – Mostecká street to Okružní street would enable to minimize the appropriation of surrounding land, which seems to be optimal. (PLC would connect to the road I/27 “unilaterally”, which means that the vehicles going in/ from the other direction would turn back on the new ring junction of the streets Plzeňská – Mostecká – L. Janáčka).

To improve the parameters of road network surrounding the proposed PLC, it is essential to reconstruct the road I/27 in its sector Most – Žatec – crossroads with I/6, which would lead to the bringing the road out of the residential area and to reaching the standard directional and inclinational ratio.

Demands of the PLC for the employees transport protection

Locality of the potential PLC is reachable by the public transport (trains stopping on the railway station Žatec západ and also some bus lines of the Žatec public transport).

Parking for the employees could be established within the area of the PLC (arrival from the Chomutovská street or Mostecká street).

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located in the city of Žatec (industrial areas by both the local railway stations and in the direction to Velichov).

Within 10 – 20 km from the proposed PLC there are many more producing capacities and mining areas (industrial zone Triangle and in the industrial zone Joseph, district of the cities Most, Louny, Chomutov, Žatec).

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

The PLC is planned into the northern part of the railway station Žatec západ, or between the connecting road Mostecká – Chomutovská and the optimized rail yard. The whole area is a property of ČD a. s. (Czech Railways, joint stock company), and it is practically unused. The area is in no conflict with the ALR or with the nature and countryside protection. As a little problematic seems to be the short distance towards the residential area on the eastern edge of the zone (Mostecká street), where houses are owned by private subjects.

Part of the area of the proposed PLC lies in the protective zone of the railroad Žatec – Plzeň, or of the railway station Žatec západ.

The engineering systems are in a sufficient range available right on the place, the area is not touched by any protective zones of the higher-rank systems.

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the city Žatec, the authorities of the city give in their statement conditions for the road connection.

TABLE 10: LIST OF THE AFFECTED PLOTS

Source: Prepared by the author

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner/factor	Way of protection
786/2	297	Žatec 794732		garden	ČR/Pozemkový fond ČR (Land fund of the Czech Republic), Husinecká 1024/11a, 130 00 Praha Žižkov	agricultural land fund
786/1	4 618	Žatec 794732	manipulation ground	Other ground	ČD a. s. Nábřeží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
860	268	Žatec 794732	built-up area and a courtyard	House number 715		none
1098	1 383	Žatec 794732		House number 238		none
1822	50	Žatec 794732		Building without the house number		none
2221	502	Žatec 794732		Building without the house number		none
2223	384	Žatec 794732		Building without the house number		none

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner/factor	Way of protection
5262	15	Žatec 794732		Building without the house number		none
5722	41	Žatec 794732		Building without the house number		none
5723	67	Žatec 794732		Building without the house number		none
5724	21	Žatec 794732		Building without the house number		none
5725	64	Žatec 794732		Building without the house number		none
5726	20	Žatec 794732		Building without the house number		none
5727	36	Žatec 794732		Building without the house number		none
5728	46	Žatec 794732		Building without the house number		none
5729	423	Žatec 794732		Building without the house number		none
5730	7	Žatec 794732		Building without the house number		none

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner	Way of protection
1702/24	95	Žatec 794732	railway	Other ground	ČD a. s., nábřeží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
1702/25	254	Žatec 794732	railway	Other ground		none
1702/26	334	Žatec 794732	railway	Other ground		none
1702/55	15 536	Žatec 794732	railway	Other ground		none
1702/58	288	Žatec 794732	manipulation ground	Other ground		none
1702/59	132	Žatec 794732		Other ground		none
1702/61	58 157	Žatec 794732	railway	Other ground		none
3824	199	Žatec 794732	built-up area and a courtyard	House number 2557		none
3825	441	Žatec 794732		Building without the house number		none
3826	168	Žatec 794732		Building without the house number		none
3827	457	Žatec 794732		Building without the house number		none
3828	58	Žatec 794732		Building without the house number		none
3829	46	Žatec 794732		Building without the house number		none
3830	40	Žatec 794732		House number 238		none
3831	38	Žatec 794732		House number 238		none
3832	38	Žatec 794732		House number 238		none
3833	40	Žatec 794732		House number 238	none	
3834	83	Žatec 794732	House number 238	none		

6.7 Kadaň – Prunéřov

Local PLC could be placed into the area southwards from the Railway station Kadaň – Prunéřov. It would be a local PLC, providing the needs of the developing industrial zones and optimization of the effects on the infrastructure in the surrounding region. Reasons for this proposal are following:

- Connection of the locality to the state-wide railway network (railroad Chomutov - Cheb) in the satisfactory quality,
- Connection to the road network (I/13),
- Accessibility of the developing industrial zones Verne and Prunéřov in the area of Klášterec nad Ohří and Kadaň and the biggest energetic source on the base of brown coal in CR (power station Prunéřov) with supplementary plants.

Both the zones lack resources to provide their connection to the railroad. All of the material transport is provided by the trucks, which means a great burden for the surrounding road network and also for the residential areas.

Quality of the connection to the particular kinds of transport

The connection of the locality to the transport infrastructure is technically trouble free as for the railroad, while more problematic is the relation to the road network.

Railway transport

The PLC is planned south-eastwards from the railway station Kadaň – Prunéřov. PLC would use part of the rail yard of the station. The station Kadaň – Prunéřov lies on the double-track electrified line secured by the relay semiautomatic block.

Road transport

The infrastructure of the road transport will be modified in relation to the adaptation of the road I/13 to the four-lane arrangement. Current T-junction of I/13 and III/1981 will cease and will be functionally substituted by the elevated crossroads by the rest house Ušák. Underpass under the mining railway Pruněřov – Březno u Chomutova has a narrow clearance height, but 4,3 m is sufficient for the ordinary road vehicles.

Demands of the PLC for the employees transport protection

Locality of the potential PLC is reachable by the public transport, but the attendance distance from the railway station Kadaň – Pruněřov is approx 700 m.

Parking for the employees could be established within the area of the PLC.

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located in the area of the power station Pruněřov, other in the localities Královský vrch and Verne (both to 5 km).

Within 10 – 20 km from the proposed PLC there are many more producing capacities and mining areas (district of the cities Kadaň and Klášterec nad Ohří, area of the power station Tušimice and the mine Nástup).

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

The VLC is planned into the south-eastern part of the railway station Kadaň – Pruněřov. The whole area is in the financial administration of subjects controlled by the state (Pozemkový fond ČR, SŽDC s. o., ČD a. s.), which almost do not use it. Part of the area, which is in the administration of the Land fund of the Czech Republic, is registered as the arable land (ALR), but the reality is, with regard to the character of the area (stabilized spoil bank) different. The area is in no conflict with the residential areas or with the nature and countryside protection. Problematic could be foundation of the objects with regard to probably still unsettled stabilization of the region after mining.

In the valid land planning documentation most of the area is registered as the arable land. In case of interest in realization of the local PLC in this location, it would be necessary to make a proper modification of the Land planning documentation.

Because of the previous use of the area the ingeneering systems are missing, but it is possible to bring them from the surrounding zone of the power station Pruněřov, or from the mechanism of the railway station. The area is touched by the protective zones of the high voltage (on the south-eastern edge) and the line Chomutov – Cheb, or railway station Kadaň – Pruněřov (north-western edge).

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in conflict with the conditions of the valid land planning documentation of the city Kadaň, because the PLC should be located on the plots registered partly as ALR.

TABLE 11: LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner	Way of protection
106/4	4 056	Pruněřov 661864	bare ground	Other ground	ČD a. s., nábřeží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
106/41	15 890	Pruněřov 661864		Arable soil	ČR/Pozemkový fond ČR, Husinecká 1024/11a, 130 00 Praha Žižkov	Agricultural land fund (ALR)
106/42	231 103	Pruněřov 661864		Arable soil		Agricultural land fund (ALR)
106/44	43 980	Pruněřov 661864		arable soil		Agricultural land fund (ALR)
106/5	3 385	Pruněřov 661864	other road	Other ground	ČD a. s.	none

106/6	19 827	Pruněřov 661864	Manipulation ground	Other ground	ČR/Správa železniční dopravní cesty s. o., Dlážděná 1003/7, 110 00 Praha Nové Město	none
205/4	6 698	Pruněřov 661864	Manipulation ground	Other ground	ČD a. s.	none
1025/2	86 813	Pruněřov 661864	railway	Other ground	ČR/SŽDC s. o.	none

Source: Prepared by the author

6.8 Chomutov

Locality suitable for location of the PLC is the area southwards from the railway station Chomutov (plot number 3901/4 of the cadastral ground Chomutov I and its neighbourhood). It would provide needs of the developing areas and optimization of the effects on the transport infrastructure in the surroundings. Reasons for this proposal are following:

- Connection of the locality to the state-wide railway network (railroad Most – Chomutov, Chomutov – Cheb and Praha - Chomutov) in the satisfactory quality,
- Connection to the road network (I/7, future R7 and I/13),
- Accessibility of the developing industrial zones Verne and Pruněřov in the area of Klášterec nad Ohří and Kadaň, Černovice u Chomutova, Triangle in the area of the former airport Žatec and Joseph by the village Havran, and also the biggest concentration of the energetic sources on the base of brown coal in CR (power stations Pruněřov and Tušimice) with supplementary plants.

All of the developing zones still lack the sources, which would enable their connection to the railway transport. All of the material transport is provided by the trucks, which means a great burden for the surrounding road network and also of the residential areas.

Quality of the connection to the particular kinds of transport

The connection of the locality to the transport infrastructure seems to be practically trouble free as for both the railroad and the road network.

Railway transport

PLC is planned to the southern part of the shunting railway station Chomutov. PLC would use part of its rail yard. The station Chomutov lies on the double-track electrified line secured by the relay automatic block.

Road transport

Connection of the PLC to the road network is provided by street Spořická/Chomutovská, connected to both current and future route of the road I/7. Quality of the infrastructure will be remarkably improved when the road R7 will be finished in the sector of the by-road at Spořice. This will enable to lessen the burden, which the road transport means for the village Spořice, because it is crossing its very center. The connection of the PLC will be provided by the pro-longed street Chomutovská/Spořická towards R7. To improve the connection of PLC with the communication network in the city, the crossroads by the customs office must be adapted.

Demands of the PLC for the employees transport protection

Locality of the potential PLC is directly reachable by the public transport bus line 7 Chomutov – Jirkov (DP Chomutov – Jirkov a. s. / Transport undertaking Chomutov – Jirkov, joint stock company), bus stops Staviva a Feroná.

Parking for the employees could be established right in the area of the PLC.

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located in the city of Chomutov.

Within 10 – 20 km from the proposed PLC there are many more producing capacities and mining areas (the area of Klášterec nad Ohří and Kadaň, power stations Tušimice and mine Nástup, industrial zones Prunéřov, Verne, Triangle and Joseph).

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

The PLC is planned into the southern part of the railway station Chomutov. The whole area is in the financial administration of subjects controlled by the state (SŽDC s. o., ČD a. s.), which almost do not use it. The area is in no conflict with the residential areas or with the nature and countryside protection.

The engineering systems are with regard to the former use of the area available. The area is touched by the protective zone of the railroad Chomutov – Cheb, or the railway station Chomutov (north-western edge).

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the city Chomutov.

TABLE 12: LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner	Way of protection
3901/3	15 297	Chomutov I 652 458	manipulation ground	Other ground	ČD a. s., nábřeží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
3901/4	26 988		railway	Other ground		none
3901/5	3 253		manipulation ground	Other ground		none
3901/6	25		built-up area and a courtyard	Building without the house number		none
3901/7	334		built-up area and a courtyard	Building without the house number		none
3901/8	23		shared courtyard	built-up area and a courtyard		none
3901/9	4 496		manipulation ground	Other ground		none

Source: Prepared by the author

6.9 Rumburk

Locality conditionally suitable for location of the PLC is the area northwards from the railway station Rumburk. It would provide the needs of the traditional and developing industrial areas and an optimization of the effects on the transport infrastructure in the neighbourhood. Reasons for this proposal are following:

- Connection of the locality to the state-wide railway network (line Česká Lípa – Rumburk and Rumburk – Jiříkov – state borders CR/Germany) in the satisfying quality,
- Connection to the road network (I/9),
- Accessibility of the traditional industrial zones in the cities of Sluknovian bulge and the developing area on the southern edge of the city Rumburk.

Connection of the traditional zones to the railroad was in the past provided by the importation into the particular station and loading places on the regional lines. This system practically ceased on many places. The developing areas still lack sources, which would provide their connection with the railroad. All of the material transport is provided by the trucks, which means a great burden for the surrounding road network and also of the residential areas.

Quality of the connection to the particular kinds of transport

The connection of the locality to the transport infrastructure is technically trouble free as for the railroad, more problematic it is in relation to the road network.

Railway transport

The PLC is planned into the northern part of the railway station Rumburk. PLC would use part of its rail yard. The railway station Rumburk makes a junction of single-track non-electrified lines, out of which the both main are secured:

- line Česká Lípa - Rumburk by the relay semiautomatic block,

- line Rumburk – state borders CR/Germany by the telephone communication.

Road transport

The reason of the problematic connection to the road network is a driveway from the road I/9 through the residential area of Rumburk realised on second-class roads and especially traffic situation on the road II/266, by its crossing the railroads Česká Lípa – Rumburk and Rumburk – Dolní Poustevna. Crossroads II/266 (street 9. května) and Plynární street, would be used to a direct connection of the PLC. It is located in the immediate vicinity of the crossing and the surrounding built-up area doesn't allow any adaptations, which would enable its transformation into the standard (distance at least 15 m from the crossing) and so enable the safe connection of the PLC to the road network.

Demands of the PLC for the employees transport protection

Locality of the potential PLC is reachable by the public transport, which means by the passenger trains stopping in the railway station Rumburk, or by the bus lines of the suburban and long-distance transportation.

Parking for the employees could be established within the area of the PLC.

Situating of the potential clients of the PLC in the surrounding region

The nearest producing capacities are located in the city of Rumburk including the developing zone on its southern edge.

Within 10 – 20 km from the proposed PLC there are many more producing capacities (the area of the cities Varnsdorf, Šluknov and other towns in the Sluknovian bulge).

Relation of the PLC to nature, landscape and Agricultural land resources (ALR) protection and to the property of other subjects

The PLC is planned into the northern part of the railway station Rumburk. The whole area is in the financial administration of subjects controlled by the state (SŽDC s. o., ČD a. s.), which almost do not use it. On its eastern edge, the zone is in conflict with the residential area of Rumburk (2. polské armády street and Novákova street). The area is in no conflict with the nature and countryside protection.

As a consequence of the former use of the area, the technical infrastructure is available. The area is touched by the protective zone of the railway station Rumburk.

Locality of the PLC in relation to the territorial plan.

The placing of the proposed PLC is in no conflict with the conditions of the valid land-planning documentation of the city Rumburk, but the city authorities do not agree with the construction of such a center, because of its accessibility only by the street.

TABLE 13: LIST OF THE AFFECTED PLOTS

Plot number	size (m ²)	cadastral ground	Form of usage	Kind of plot	Owner	Way of protection
2308	113	Rumburk 743518	Building without the house number	built-up area and a courtyard	ČD a. s. (CD, joint stock company), nábřeží Ludvíka Svobody 1222/12, 110 15 Praha Nové Město	none
2036/5	1 574	Dolní Křečany 743607	railway	Other ground		none
2628/9	41 452	Rumburk 743518	railway	Other ground		none
2928/15	157	Rumburk 743518	Building without the house number	built-up area and a courtyard		none
1304/2	192	Dolní Křečany 743607	Other road	Other ground	Město Rumburk (City of Rumburk), Třída 9. Května 136648, 408 01 Rumburk	none
2295/1	2 506	Rumburk 743518	Other road	Other ground		none
2295/2	2 547		Other road	Other ground		none
2295/3	1 163		Other road	Other ground		none
2295/4	170		Other road	Other ground		none
2928/12	8		railway	Other ground		none

Source: Prepared by the author

6.10 Examination of the area around the industrial zone Libouchec – Žďárek with the view of the PLC foundation

There exists an intention in the area of Libouchec – Žďárek, to found an industrial area with the included logistic activities. Because of the submitter's demand, the area was examined with the view of the possible inclusion into the PLC system.

The locality lies in the vicinity of the motorway junction Knínice, so it has almost immediate connection to the motorway D8 and the road I/13. With regard to the PLC, the connection to other kinds of freight transport seems complicated. In this area, only the railway transport could come into consideration, which here is represented by the regional line Děčín – Oldřichov u Duchcova. Today, the line is almost in its whole length out of order, its technical equipment is completely exhausted. Especially in the field of the communication and safety equipment, there is the simplest possible equipment, which enables only a restricted transporting capacity and ground speed. In the section Jílové – Děčín, which is the closest connection to the state-wide railway with the satisfactory quality, the line Děčín – Oldřichov u Duchcova collides with some variants of the slip road D8 – Děčín route (by-pass I/13).

In the very locality, the connection to the railway would mean overcoming of the serious difference in altitude between the area of the potential PLC and the railroad (which is going through the deep trench). Technically possible is only building-up of an approximately 1,3 km long tap line from the technical station Malé Chvojno to the south-east part of the proposed industrial zone. The section Děčín – Malé Chvojno would have to be equipped by the line safety equipment, the technical station Jílové and Malé Chvojno would have to be changed to the railway stations with the station safety equipment (probably remote-operated from the railway station Děčín). Only the construction of the communication and safety equipment would need the investments in an amount of several tens of millions Kč (Czech crowns).

On that account the locality Žďárek – Knínice is not found perspective for the multimodal logistic center.

6.11 Examination of the former goods store of the railway station Obrnice with the view of the PLC foundation

There is an intention in the area of the railway station Obrnice to found a PLC. It would use the deserted goods store, which provides the administration building, storage halls and wide outdoor braced grounds. The area used to provide the needs of the collection service of the parcels and of the manipulation with the truck load. It is deserted since approximately 15 years ago and sporadically used by the smaller companies with various occupations. According to the publically accessible documentation, the area is owned by ČD a. s.

The locality has a good connection to the road and also to the railway transport: a few hundred meters far there is an elevated crossroads České Zlatníky on the road I/13, which has four lanes here. The railway station Obrnice lies on the crossing of the state-wide railroads, which are mostly electrified, its rail yard has a satisfactory reserve as for the capacity to the PLC servicing.

Locality of the railway station Obrnice seems to be suitable for the PLC foundation. It was not nominated into the original list of localities and it is not examined because of its relative closeness to other proposed localities (especially Postoloprty – Bitozveves). As for the accordance with the spatial-planning documentation and considering its original use, there might be no conflict with realising the PLC.

7 Conclusion

The nine localities defined in the chapter 2 - Introduction were discussed with representants of the competent local governments. The outcome of the discussion was an approval of the authorities of spatial planning in cases 1) – 6) and 8) with the conditions, which a possible investor of the PLC has to fulfil. These are especially adaptations of the road infrastructure, which would reduce the negative after-effects of the PLC on the surrounding area (adaptation of the crossroads, by-pass roads around the residential areas, etc.).

In case of the locality 7), a conflict was found with the valid SPD for the area of the proposed locality: SPD itemizes the locality as an area for the agricultural production.

Locality 9) met with a strict disapproval of the local authorities in Rumburk, which was explained by a complicated connection of the locality to the road network in the residential area of the city.

For the localities which were added later according to the additional demand of the submitter (Žďárek and Obrnice), the judgement was made according to the conditions of the original submission. In the case of Žďárek, it was found that the area does not fulfil the condition of connection to at least two kinds of freight transport, locality Obrnice was found as answering the conditions of the submission.

On the base of the data set above it is possible to enunciate the following facts:

- Optimal locality for placing of the PLC with the region-wide sphere of action is Lovosice, where a similar resort is already in function and its widening is prepared (zone Hyparkos, s.r.o. is being built, widening of the area of ČD Cargo, joint stock company is being prepared),
- After compliance of the conditions of the valid land planning documentation and other conditions of the particular cities regional PLC is possible to be placed in the locality of Děčín – Loubí, Ústí nad Labem – Krásné Březno, Chabařovice, industrial zone Triangle, Žatec and Chomutov,
- For placing the PLC to the locality Kadaň – Pruněřov it would be necessary to change the land planning documentation,
- The chosen locality in Rumburk is strongly disapproved by the local authorities because of the road network connection.

Out of the areas inserted later the locality Libouchec – Žďárek does not fulfil the condition of connection to the railroad network in the satisfying parameters, locality Obrnice seems to be sufficient for the PLC.

8 Recommendations

On the basis of the author's experience it is recommended, when the public authority or the state administrative body, responsible for some higher administration unit, wants to locate potential localities for the transport facilities of the PLC type to:

- Prepare a catalogue of the localities potentially suitable as for the connection to the transport infrastructure and in no conflict with the land planning documentation, land protection and landownership,
- Consistently discuss the draft with the respective municipalities, so to eliminate any future differences, when a real investor would enter the project in the concrete locality,

Work on the adaptation of the land planning documentation by the municipalities according to the accepted proposals.

Further recommendations:

- Introduce properly the catalogue to decision-makers or involve them into preparation fase,
- Present the catalogue to public or involve public into preparation fase,
- When not involving public into preparation, it is important when presenting it to explain the reasons and origin of the catalogue and how the areas were chosen

Possible usage of this type of approach:

The fulfilment of the main aim of this study is the usage of this approach in other cases. The result is that this approach can be used not only in cases of sites served for transport services. This approach can be used when planning any regional strategic areas in different fields e.g. in tourism and recreation, when planning the wind power stations etc.

This approach is suitable for any public authority responsible for spatial planning and administrating its territory (regional authority, municipality, but also whole country).

Steps:

1. It is necessary first to define the conditions what should the area fulfil and to have the concrete problem description from the authority.
2. Find areas fulfilling the set conditions (with respect to spatial plans).
3. Discuss the areas with regional/local authority (submitter).
4. Discuss the proposed areas with stakeholders (owners, users, neighbours, planners).
5. Complete the catalogue.
6. Introduce the catalogue to public.
7. Use the catalogue in decision process.

9 Added value and expected benefits

The public logistic centres are very important for the freight transport within the EU. This study provides the catalogue of potential and suitable areas of PLC in Usti region. These localities fulfil special conditions and are connected to at least two kinds of transport. This catalogue can serve to help decision makers about building the PLC in the area of the Usti Region and will serve mainly to the regional government to lead the discussion with potential investors.

The proposed localities open a possibility to shift part of the road transport to waterways and railways and so lessen the pressure on the backbone network of the road and motorway network in the respective regions as expected.

When thinking about the second and main aim of this case study and as mentioned above in chapter 8 is this approach usable in planning of strategic areas of many types. Above are mentioned areas for tourism and recreation or wind power stations. Important is that the authority wants to prevent accidental creation of more similar areas in a region or in a city not respecting the public interests. The authority should plan where are/is the most suitable location for such an area. The authority should be prepared for discussions with potential investors. So the already mentioned “road map” leads actually the authority and the investor too.

10 Evaluation criteria for successful implementation of output

The aim of this study was to create a catalogue of the areas within the Usti Region, which are potentially suitable for intermodal public logistic centers (PLC) creation.

The works on this catalogue was regularly discussed with regional planning and transport experts. The study will serve for the transport and spatial regional planning as a background.

According to SoNorA objectives this study fulfil the aim of WP4 which is to facilitate network infrastructure realisation. The first obstacle for planning of a suitable regional logistic infrastructure was the lack of a catalogue of suitable areas for placing the PLC. This first step has been completed as emerged from the results of the document.

How to build consensus and effectively implement the investment

For the investors' decisions is easier to orientate in the territory when it is properly planned. Of course it has to be taken in account that the decisions of investors are more often led by other reasons like ownership of sites, financial benefits etc. Therefore the potential investments has to be led by regional or local authorities. To prevent potential arguing and discussions with investors when planning their investments it is recommended to involve the potential investors (owners of sites) to preparing phase of sites catalogue. Of course not only investors and owners have ideas how the site can be used. The other stakeholders recommended to involve are: owners of neighbour sites, users of sites, nature protection institutions, local inhabitants etc.

The way of involving can differ according to kind of target group. It can be e.g. public sessions or personal meetings.

- **Condition for successful implementation of approach:** Suitable problem being addressed,
- Financial sources for preparation of catalogue,
- Several areas of which to choose,
- Potential risk of accidental using of area not according to public interests.

Outcome of the discussion lead with the municipalities of particular cities, towns and villages

Remark: The full report of the discussion and corresponding with the local governments are available as an annex to the original document in Czech language. Following is a brief summary.

The first nine areas proposed for the localization of the PLC were discussed with the respective authorities because of the possible conflict with the area planning. Municipality Kadaň declared that the PLC is planned on the arable land and the building is in conflict with the valid area planning and it would demand standard discussion about its modification. Municipality Rumburk severally disagrees with the proposed locality especially because of the problems with connection of the PLC to the road network.

Other respective authorities did not find any conflicts with the valid area planning documentation, and some declared requirements as to the solution of the road connection to the particular PLCs, which were included in the presented text.

11 Summary

First aim of this case study is the creation of a catalogue of the areas within the Usti Region which are potentially suitable for the creation of intermodal public logistic centers (PLC).

On the base of the data set above it is possible to enunciate the following facts:

- Optimal locality for placing of the PLC with the region-wide sphere of action is Lovosice, where is a similar resort already in function and its widening is prepared (zone Hyparkos, Ltd. is being built, widening of the area of ČD Cargo, joint stock company is being prepared),
- After compliance of the conditions of the valid land planning documentation and other conditions of the particular cities regional PLC is possible to be placed in the locality of Děčín – Loubí, Ústí nad Labem – Krásné Březno, Chabařovice, industrial zone Triangle, Žatec and Chomutov,
- For placing the PLC to the locality Kadaň – Pruněřov it would be necessary to change the land planning documentation,
- The chosen locality in Rumburk is strongly disapproved by the local authorities because of the road network connection

Out of the localities inserted later the locality Libouchec – Žďárek does not fulfil the condition of connection to the railroad network in the satisfying parameters, locality Obrnice seems to be sufficient for the PLC.

Considering the second aim of this case study: to provide a sort of “road map” which any relevant authority or state administrative body should follow when locating potential sites for the transport facilities of the PLC type can be sum up following:

- The catalogue serves as kind of “road map” for decision-makers, investors and planners.
- It is also an approach of how to build a consensus between decision-makers, investors, planners and public.
- This approach can be used also in other cases when planning the usage of territory.

- The problems to solve can be e.g. tourism infrastructure, wind/solar/other power stations, housing, parks, industrial zones or transport infrastructure of PLC type etc.

12 Sources and literature

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Magistrát města Ústí nad Labem (4 strany), (*Municipality of Ústí nad Labem 4 pages*)

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Město Kadaň (2 strany), (*The city of Kadaň 2 pages*)

Statutární město Chomutov (1 strana) a (*Corporate town Chomutov 1 page*) and

Městský úřad Rumburk (3 strany). (*Municipal office of Rumburk 3 pages*).

List of the concerned companies and institutions

České Dráhy a. s. (ČD a.s.)	<i>Czech Railways, joint stock company</i>
ČD Cargo a. s.	<i>ČD Cargo, joint stock company</i>
České přístavy a. s.	<i>Czech Harbours, joint stock compay</i>
Česko - saské přístavy s. r. o.	<i>Czech – Saxonian Harbours, Ltd.</i>
ČSKD INTRANS s. r. o.,	<i>ČSKD INTRANS, Ltd.</i>
Hyparkos s. r. o.,	<i>Hyparkos, Ltd.</i>
Mondi a. s.	<i>Mondi, joint stock company</i>
Pozemkový fond ČR	<i>Land fund of the Czech Republic</i>
Správa železniční dopravní cesty s. o. (SŽDC s.o.)	<i>Administration of the railway transport lines, state organization</i>