



Juraj Jagelčák

University of Žilina, Slovakia



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Present state – tank cleaning stations inside chemical sites

- **Slovnaft a.s. Bratislava**

- own tank wagons – own chemicals
- tank vehicles, tank containers – for external customers

- **Duslo a.s. Šaľa**

- own tank wagons – own chemicals

- **NCHZ a.s. Nováky**

- own tank wagons – own chemicals

- **Slov-vagon a.s. – Strážske –**

- own tank wagons
- tank vehicles, tank containers – external customers



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Present state – other tank cleaning stations

- Harvis s.r.o. Nové Mesto - **SQAS assesment**
 - tank vehicles, tank containers
 - silotanks
 - cleaning and disinfection – foodstuffs
 - **European Cleaning Document – first in Slovakia on 20th October 2010**
- J&P Tankwash s.r.o., Bratislava - **SQAS assesment**
 - tank vehicles, tank containers
 - silotanks
 - cleaning after foodstuffs
 - **NON-STOP operation**
 - **European Cleaning Document -- first on 23th November 2010**



European Cleaning Document®



www.eftco.org

SK 01-10-00001

HARVIS

HARVIS s.r.o.
Prmyslová 2
915 01 Nové Mesto nad Váhom
Slovak Republic

Cleaning Station / Čistiaca stanica cisterny
a member of CACs / člen CACs
email: harvis@harvis.sk
web: www.harvis.sk

Tel./Fax: +421 327 712 450
+421 327 711 960
ICD: 31410081
IC DFH: SK 2020360464

2. Zákazník čísla / Customer reference number* 028	3. Sériové číslo / Serial number 102643
4. Zákazník / Customer FLAMANN SPEDITION, Am Mühlberg 16-18, 91477 Markt Bibart, SRN	5. Identifikačné číslo / Identification numbers Vožidlo / Vehicle NEA-WF 360 Cisterna, Silo, Kontajner IBC / Tank, Silo, Container, IBC NEA-W 383

6. Vlastnosti látky / Nature of product*	7. Nasledujúca nákladka / Next Load*
--	--------------------------------------

Comp	ii Čistený produkt / Cleaned product		9. Postupy čistenia Cleaning Procedures kódy EFTCO / EFTCO Code / Description*
	UN N°	Názov / Name	
1		Kauramin Leim 612	C99, P10, P40
2			
3		Kauri-Leim 329	C99, P10, P40
4		Kauramin Leim 612	C99, P10, P40
5			
6			

10. Dodatočné práce / Additional Services C99 - Rôzne (); P10 - Umývanie horúcou vodou (); P40 - Naparovanie ()
--

11. Poznámky / Comments

12. Miesto čistenia / Name cleaner* C3. Zámečník Miloš	13. Príchod / Time In* 14:35	14. Dátum / Date 20.10.2010
---	---------------------------------	--------------------------------

Čistiaca stanica a vodič (pre autotankové vozidlá), že pri čistení boli použité vyššie uvedené postupy (viď EFTCO definícia "čistoty").
The cleaning station and the driver (for tank-trucks) confirm that above services to clean the tank have been carried out (see EFTCO definition of "clean").

14. Čistiaca stanica / Cleaning Station Meno / Name v4. Kotrasová Zdenka Podpis / Signature	15. Vodič / Driver* Meno / Name Seiffert Podpis / Signature
--	--



European Cleaning Document®



www.eftco.org

SK 02-10-00001

Tank Wash

J&P TANK WASH s.r.o.
Zavodná 3
821 06 Bratislava
Slovak Republic

Cleaning Station / Čistiaca stanica cisterny
a member of CACs / člen CACs
email: mrozek@net.adem.pl
web: www.tankwash.eu

Tel.: +48 602 445 231
+421 911 151 300
Tel./Fax: +421 245 521 714
IČO: 35891301
DIČ: SK 2021840469

2. Zákazník čísla / Customer reference number* 126	3. Sériové číslo / Serial number 3162/10□□
4. Zákazník / Customer EW-TRANS Transport Paliw Spedycja, ul. Cicha 31, 95-035 Ozorków, Poland, PL 7321071059	5. Identifikačné číslo / Identification numbers Vožidlo / Vehicle EZG 4EA5C1 Cisterna, Silo, Kontajner IBC / Tank, Silo, Container, IBC EL 778CY

6. Vlastnosti látky / Nature of product* chemický produkt bez ADR	7. Nasledujúca nákladka / Next Load* KSYLENE
--	---

Comp	8. Čistený produkt / Cleaned product		9. Postupy čistenia Cleaning Procedures kódy EFTCO / EFTCO Code / Description*
	UN N°	Názov / Name	
1		olej bazový	C10, E16, E25, E50, P10, P40, T01
2		olej bazový	C10, E16, E25, E50, P10, P40, T01
3		olej bazový	C10, E16, E25, E50, P10, P40, T01
4			
5			
6			

10. Dodatočné práce / Additional Services C10 - Neutrálni prostriedok (); E16 - Vysokotlaké čistenie (); E25 - Cirkulačné mytie (); E50 - Čistenie hadíc (); P10 - Mytie horúcou vodou (); P40 - Naparovanie (); T01 - Vizualná kontrola ()
--

11. Poznámky / Comments

12. Miesto čistenia / Name cleaner* Mrozek Marian	13. Príchod / Time In* 12:00	14. Dátum / Date 23.11.2010
--	---------------------------------	--------------------------------

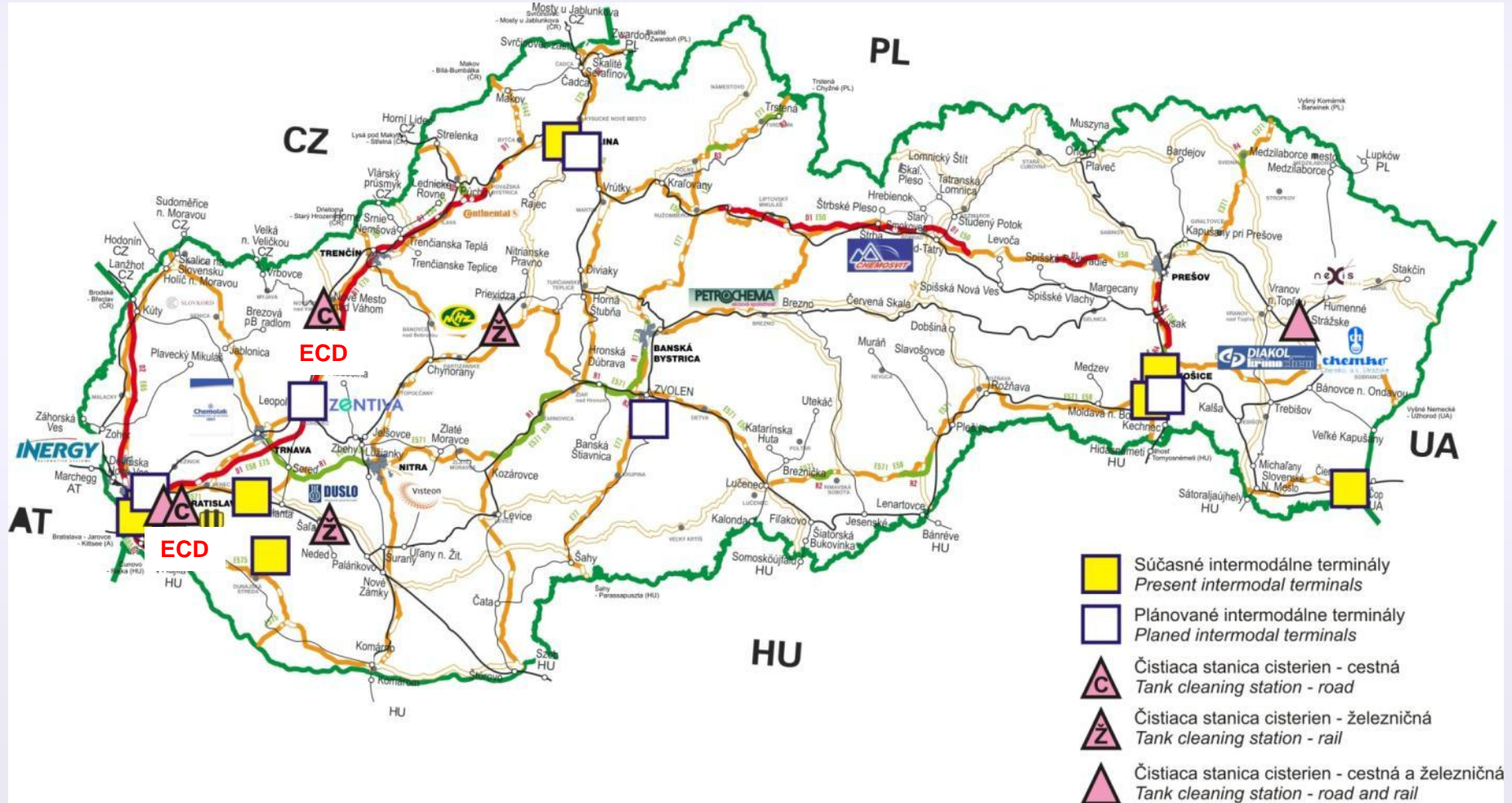
Čistiaca stanica a vodič (pre autotankové vozidlá), že pri čistení boli použité vyššie uvedené postupy (viď EFTCO definícia "čistoty").
The cleaning station and the driver (for tank-trucks) confirm that above services to clean the tank have been carried out (see EFTCO definition of "clean").

14. Čistiaca stanica / Cleaning Station Meno / Name Mrozek Piotr Podpis / Signature	15. Vodič / Driver* Meno / Name Baldowski Podpis / Signature
--	---

* nepovinný údaj

* nepovinný údaj

Road – Rail network





EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Cleaning stations close to Slovakia

- Czech Republic

- CACS members - Třanovice, Bohumín, Střelice u Brna

- Poland

- PSMC members - 2x Kędzierzyn-Koźle, Włosienica, Tychy, Dębica, Bytom
 - other – Chrzanów, Kędzierzyn-Koźle



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

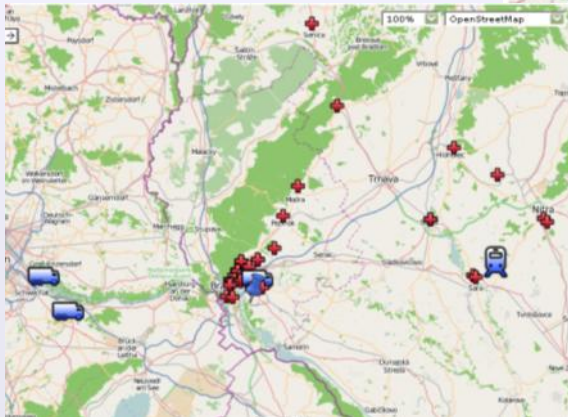
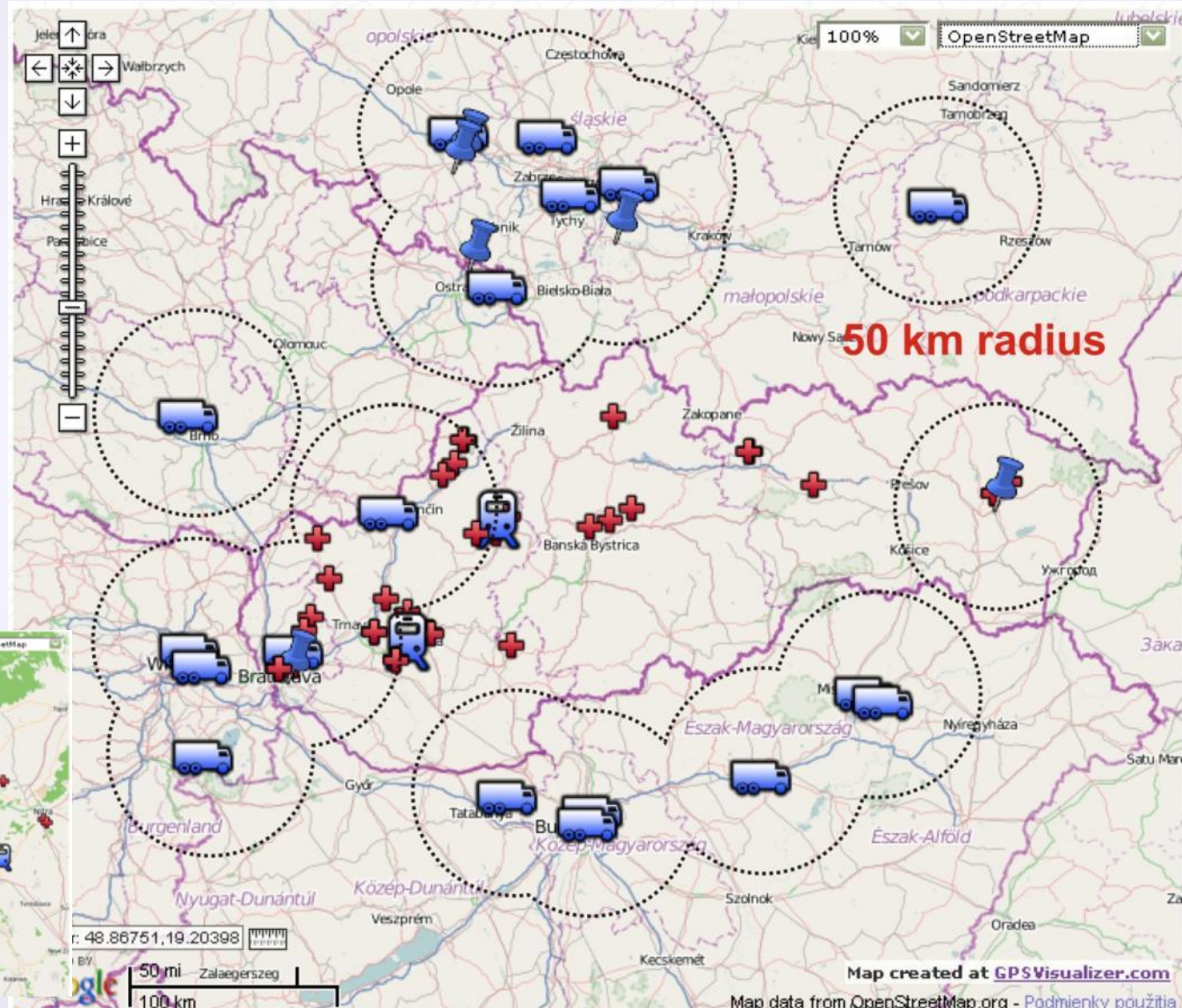
Cleaning stations close to Slovakia

- Austria
 - VÖTS members - Schwechat/Mannswörth, Enzersdorf a. d. Fischa
- Hungary
 - MTSZ members - Bicske, Sopron, 2 x Budapest, Heves, Nagycsécs, Tiszaújváros



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

- Tank cleaning stations
- ZCHFP SR members





Requirements for tank cleaning station

- health
- hygiene
- fire prevention
- safety
- security
- waste management
 - in chemical sites
 - other
 - own waste water cleaning station
 - agreement with specialized firms for waste waters recycling



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

New possible localities

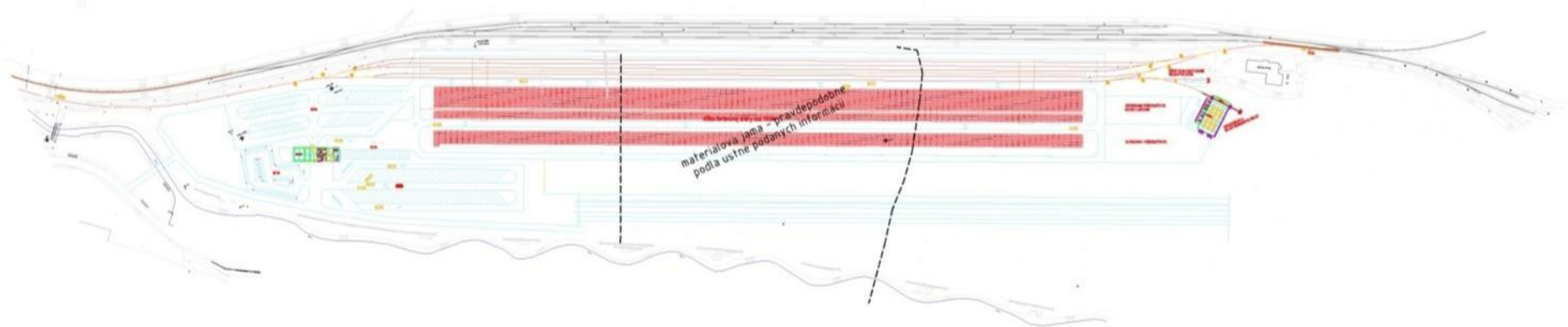
- Intermodal terminal Žilina
- Bratislava/Senec - D1
- Šaľa – chemical site DUSLO
- Nováky – chemical site NCHZ



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Present **plans** in project documentation to:

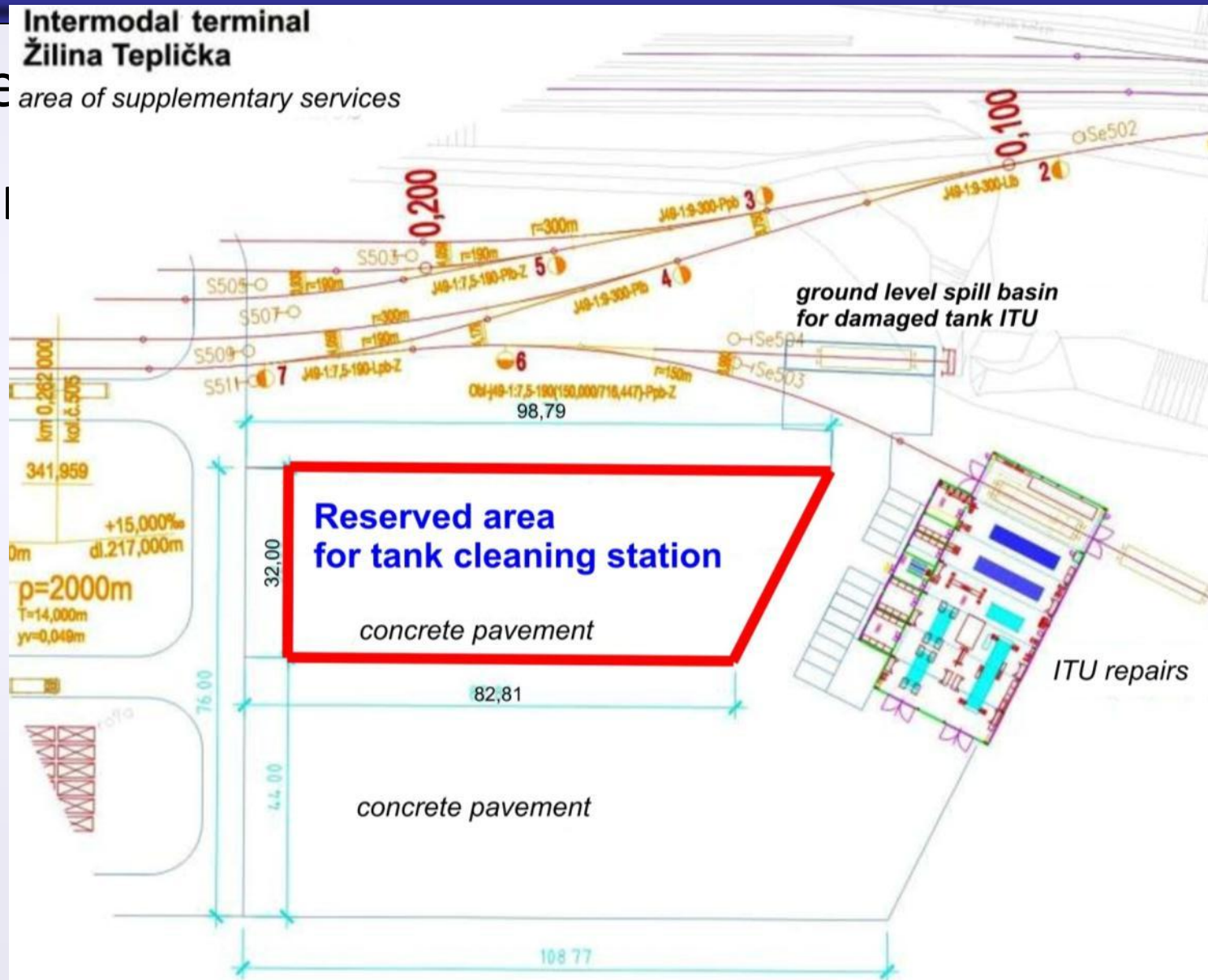
- Intermodal terminal – Žilina Teplička



Intermodal terminal Žilina Teplička

Pre area of supplementary services

- ITU





EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Proposal

- 2 x drive through cleaning positions
- 2 x 3 rotation heads
- steam generator
- cleaning
 - cold water
 - hot water
 - with solvents
 - hand cleaning
- external waste management



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Cleaning station – locality Bratislava/Senec

- planned reconstruction of intermodal terminal Bratislava - Palenisko close to Danube – not possible from the point of environment
- Senec locality close to D1 motorway
 - huge industrial area
 - logistics centres
 - possible cleaning after chemicals and foodstuffs
 - truck and trailer dealers already performing truck cleaning



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

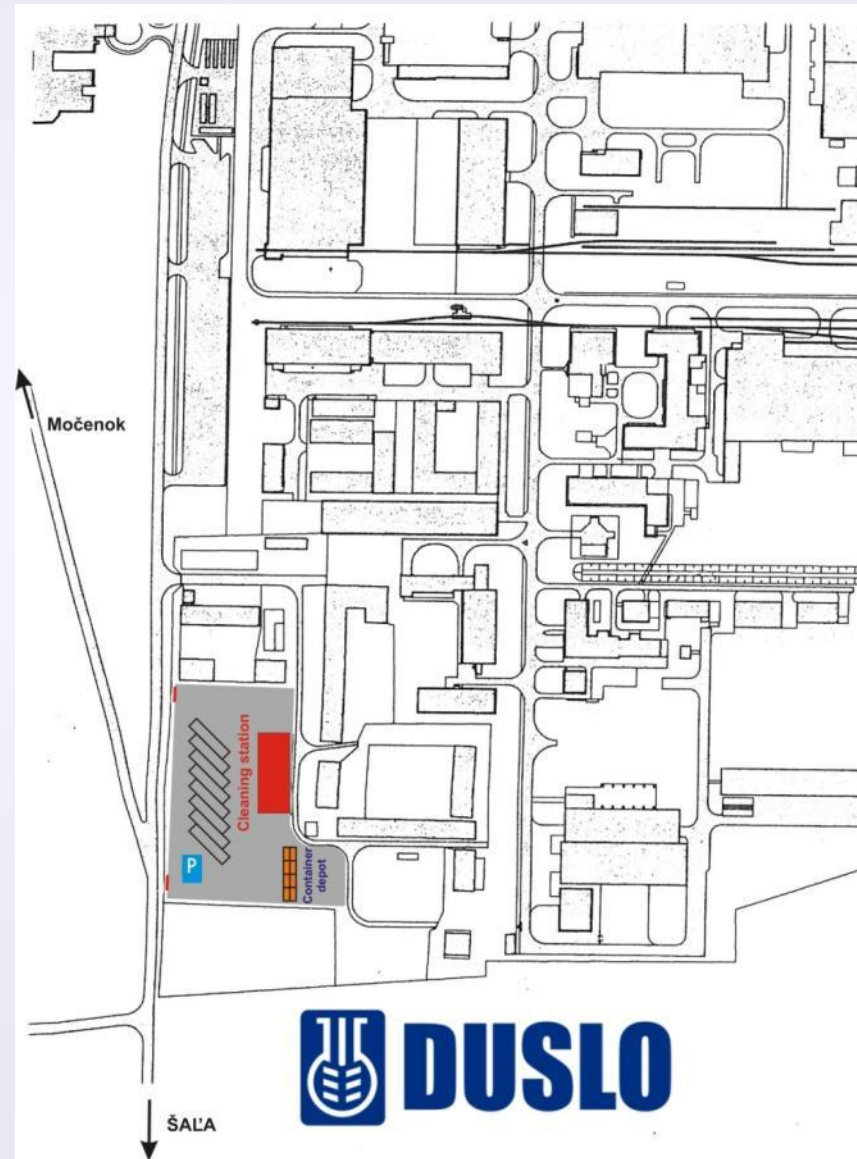
New cleaning station - Šaľa

- good conditions close to chemical site
- available infrastructure (water, steam, nitrogen and waste water cleaning station with chemical and biological cleaning)
- the tank waggon are equipped by RFID tags
- present sewage tanks for waste water



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

- locality close to present tankwagon cleaning station
 - in close vicinity of company waste water sewerage plant
- new locality close to chemical site





EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

New cleaning station - Šaľa

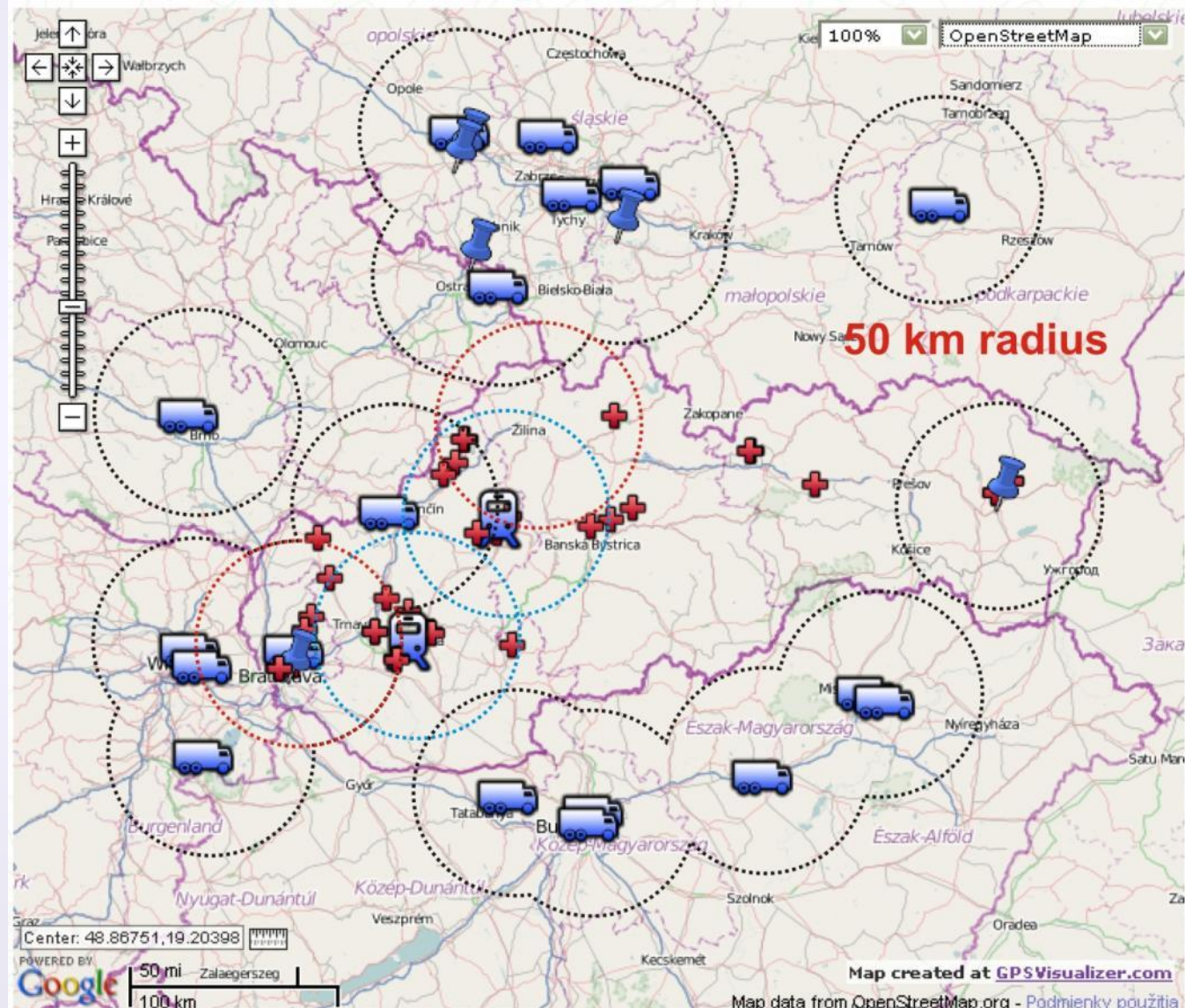
- other possible services to offer
 - parking lots
 - container depo
 - tank inspections
- possible cleaning of Class 6 – incineration plant in Duslo (Anilin import)

Nováky

- present cleaning for selected products and own tank wagon
- not finished tank wagon cleaning station



- Tank cleaning stations
- **ZCHFP SR members (+)**
- new localities
 - **Žilina**
 - **Šaľa**
 - **Bratislava/Senec**
 - **Nováky**





EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Module tank cleaning station

- flexible and mobile solution
- technology inside container frames
- waste management still needs to be solved
- floor and drainage to collecting tanks necessary



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

Thank you for your attention!

