

• Visegrad Fund

The Romanian-Ukrainian freight traffic flows

An evaluation of current situation

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Research objective

Assessment of the current capacity of the Romanian infrastructure to cope with the needs generated by the cargo flows between the EU and Ukraine

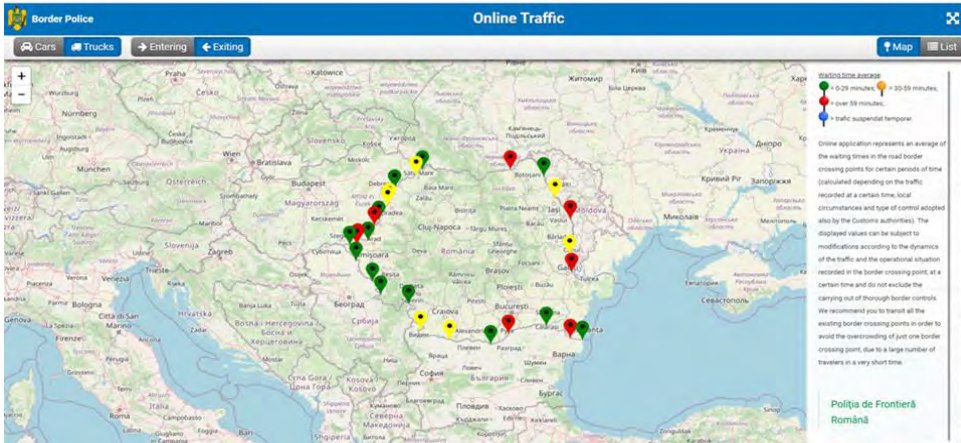
Research hypotheses

- H1.** The projected capacity of the crossing border points (CBP) is exceeded by the freight traffic registered at the Romania-Ukraine border
- H2.** The transport and logistics infrastructure covers the needs generated by the large volume of goods crossing the CBPs from the Romanian-Ukrainian border.
- H3.** The measures taken by the Romanian authorities are effective and sufficient for strengthening EU-Ukraine connectivity.

Dimensions of research	D1. The current situation (H1 and H2)	D2. Romanian actions carried out to improve the current situation (H3)
Indicators	I.1.1. Existing number of entry/exit lines for each RO-UA CBP	I.2.1. Legal framework concerning prospects for increasing the capacity of existing border crossing points/or opening new ones at Romanian border with Ukraine (for freight transport)
	I.1.2. The waiting time (minutes) at the Halmeu, Siret, Galați and Isaccea CBP, broken down by entries and exits, in and from Romania	I.2.2. Future infrastructure projects related to the development of Transport freight corridors
	I.1.3 Volumes of cargo and vehicles passed through the Halmeu, Dyakove, Siret, Porubne, Isaccea, Orlivka checkpoints	
	I.1.4. Volumes of cargo and trains passed through the Halmeu, Dyakove, Vadu-Siret, Vișani checkpoints	
	I.1.5. Existing TEN-T corridors (for road and rail transportation)	
	I.1.6. Type of bottlenecks in Ukraine - Romania (rail/road connectivity)	
	I.1.7. Existing industrial parks/hubs from Romanian side of the border with Ukraine in Maramureș, Satu Mare, Suceava and Botoșani Counties	
	I.1.8. Existing transportation and logistic hubs in Maramureș, Satu Mare, Suceava and Botoșani Counties	
	I.1.9 Existing economic development zone in Maramureș, Satu Mare, Suceava and Botoșani Counties	

Research methodology

1. For each border crossing point, respectively entry / exit, the data was collected daily, from the *Online Traffic* platform of the Romanian Border Police, between November 3 and December 7, as follows:
 - November 3 – November 6, between 6 a.m. and 12 p.m., personal survey every 2 hours
 - November 6 – December 7, 24 hours, hourly by an automatic data collection software



An automatic data collection software was created and a database was obtained with the following items: date, time, waiting minutes, open lines on entry, open lines on exit, minutes waiting to entry in Romania, minutes waiting to exit from Romania, comments regarding the traffic conditions

1. A content analysis was also conducted on local and central media to collect traffic data from research CBP
2. Analysis of official documents containing numerical and non-numerical data developed by national, regional and local authorities, as well as those developed by the European Commission
3. Comparative analysis of the data obtained at the level of Romanian and Ukrainian checkpoints

Research limitations

1. Official addresses were sent to the Romanian Customs Authority and the Romanian Border Police to obtain information regarding designed capacity of checkpoints (based on legislation/ technical documentation etc, units of vehicles per day; units of cargo trains per day). The data was not delivered because it is classified data category. So, the data regarding the designed capacity we could only extract from the *Online Traffic* platform
2. The Romanian Border Police did not deliver, for the I.1.3 the volume of cargo (thsd tonnes). So, we could not compare the volumes of cargo passed through the Halmeu, Dyakove, Siret, Porubne, Isaccea, Orlivka checkpoints. So, we have only the information from the Ukrainian side of the border.
3. The Romanian Border Police delivered, for the I.1.4 only the number of train, instead of wagons number. So, we could not compare the volumes of cargo and trains passed through the Halmeu, Dyakove, Vadu-Siret and Vicşani checkpoints.
4. The lack of national public databases regarding freight transport indicators and development infrastructure

Research results - I.1.1. Existing number of entry/exit lines for each RO-UA CBP

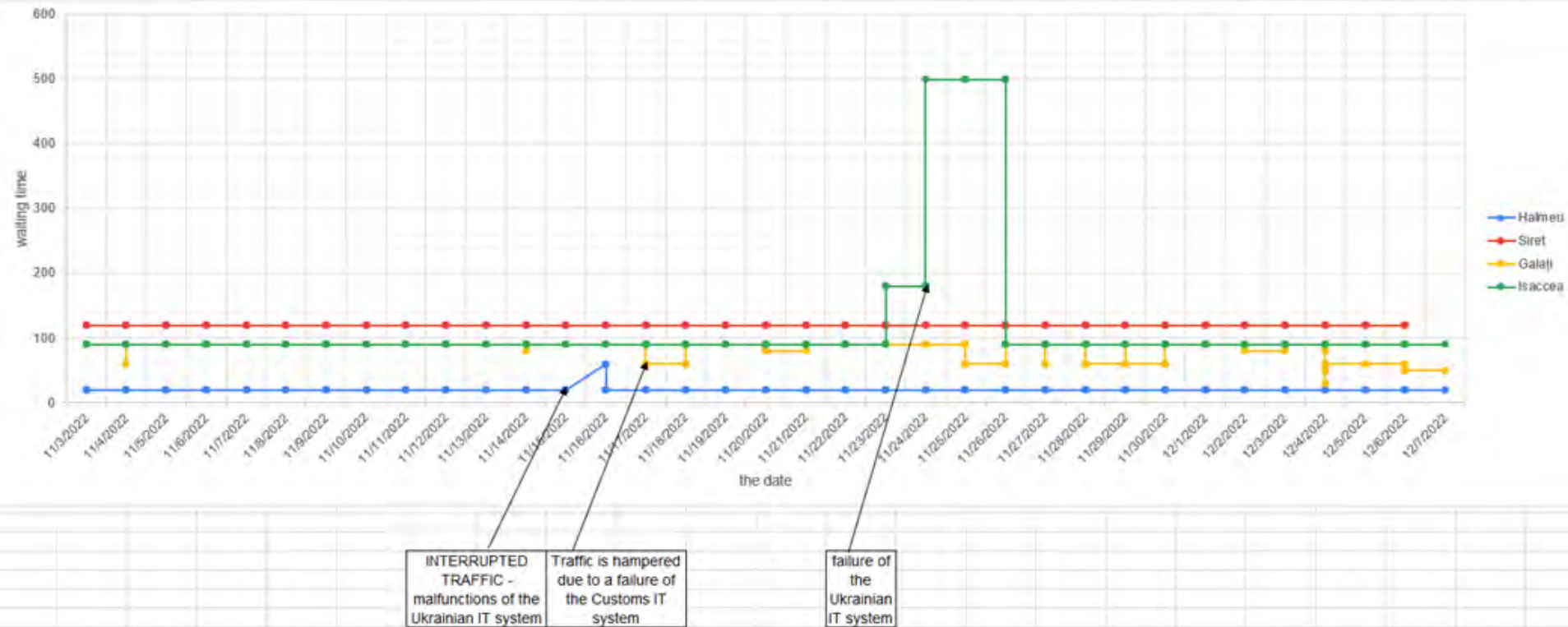
Number of entry/exit lines for each crossing border point

	Halmeu - Dyakove permanent operation, car and rail, for people and goods	Siret - Porubne permanent operation, car and pedestrian people and goods	Galați - Giurgiulești - Reni permanent operation, river	Isaccea - Orlovka permanent operation, river (2 ferries)
Number of entry lines	1	6	2	1
Number of exit lines	1	3	2	1



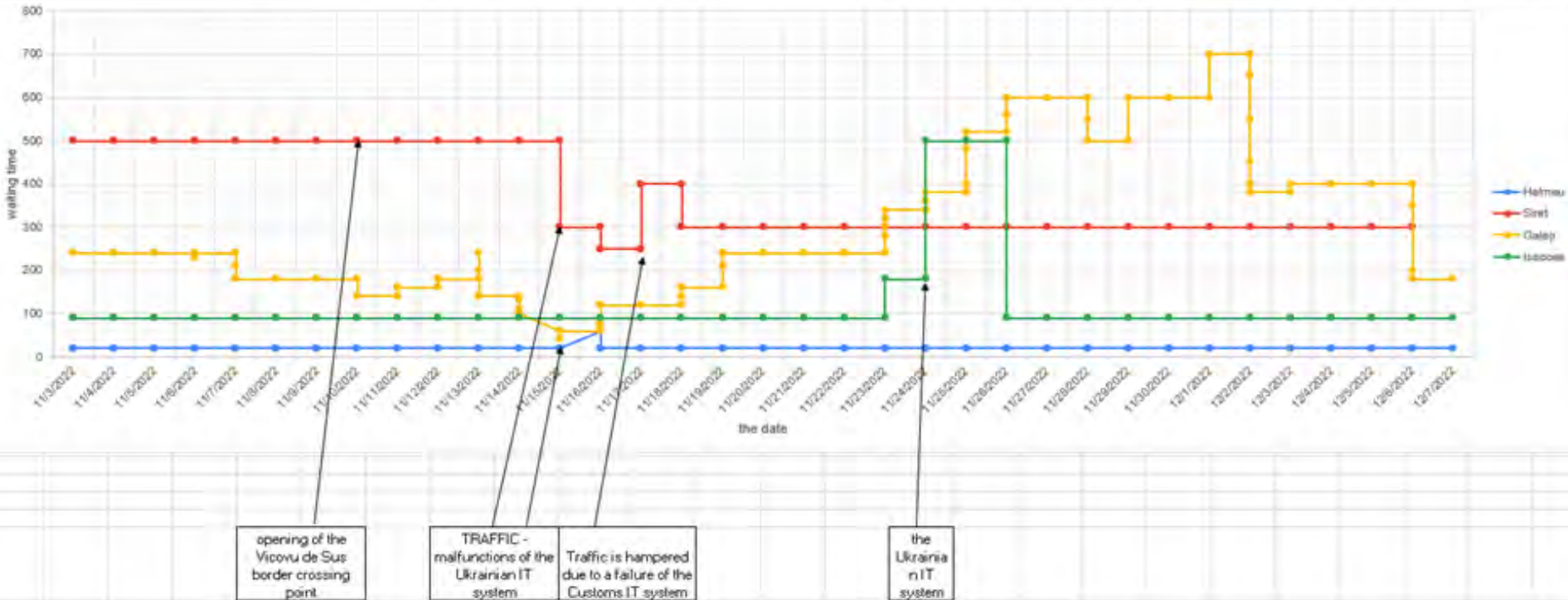
Research results - I.1.2. The waiting time (minutes) at the Halmeu, Siret, Galați and Isaccea CBP, broken down by entries and exits, in and from Romania

Entering to Romania



Research results - I.1.2. The waiting time (minutes) at the Halmeu, Siret, Galați and Isaccea CBP, broken down by entries and exits, in and from Romania

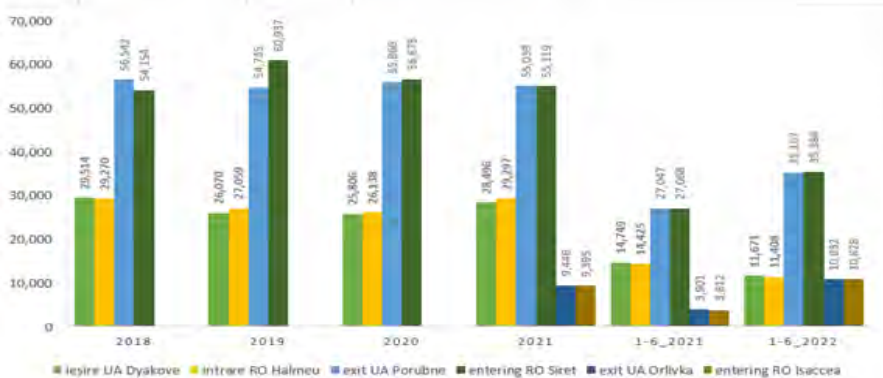
Exit from Romania



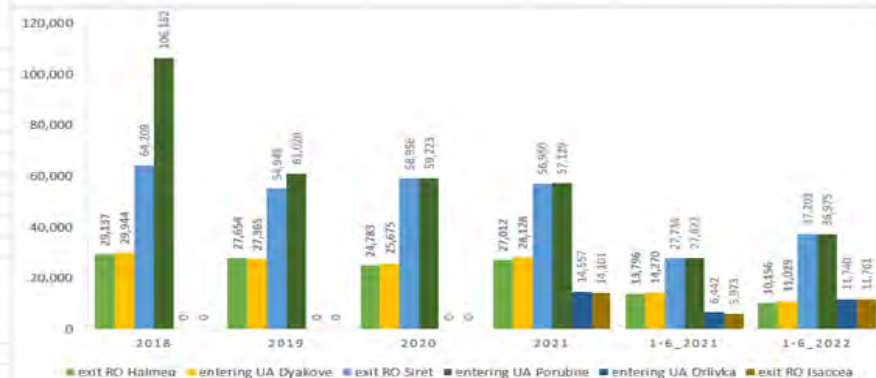
Types of messages delivered by the Online Traffic platform

The date	Halmeu	Siret	Galați	Isaccea
3 Nov. – 15 Nov., 9 PM	-	INTENSE TRAFFIC, very large number of means of transport present at the control		
15 Nov., 10 PM – 16 Nov., 5 AM	INTERRUPTED TRAFFIC – malfunctions of the Ukrainian IT system	INTERRUPTED TRAFFIC – malfunctions of the Ukrainian IT system		
16 Nov., 6AM – 17 Nov., 2 PM	-	INTENSE TRAFFIC, very large number of means of transport present at the control		
17 Nov., 3 PM – 17 Nov., 11 PM	-	INTENSE TRAFFIC, very large number of means of transport present at the control Traffic is hampered due to a malfunction of the Customs IT system		
17 Nov., 12PM – 7 Dec..	-	INTENSE TRAFFIC, very large number of means of transport present at the control		
3 Nov. – 7 Dec.			Large number of vehicles under control, blockage between CBP Giurgiulesti (R.Moldova) and CBP Reni (Ukraine) is being worked on 2 lines	
3 Nov. – 24 Nov., 7 AM				Heavy traffic - large number of trucks presented at the border control. The crossing is made by ferry.
24 Nov., 8 AM - 26 Nov., 7 AM				Heavy traffic - large number of trucks presented at border control. The crossing is made by ferry. The Ukrainian computer system is defective.
26 Nov., 8 AM - 7 Dec.				Heavy traffic - large number of trucks presented at the border control. The crossing is made by ferry

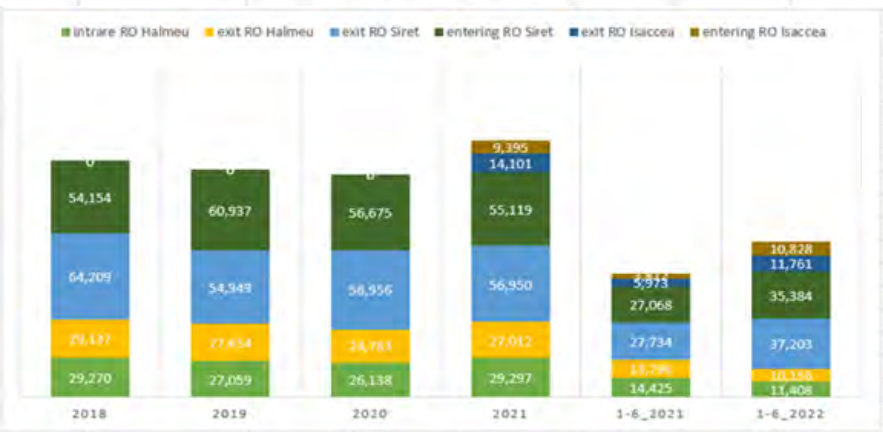
Research results - I.1.3. Volumes of cargo and vehicles passed through the Halmeu, Dyakove, Siret, Porubne, Isaccea, Orlivka checkpoints



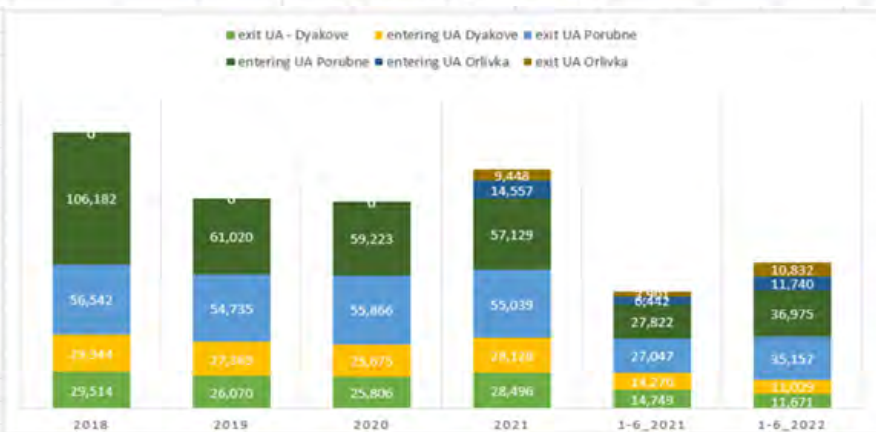
number of trucks exiting UA - entering RO



number of trucks exiting RO - entering UA

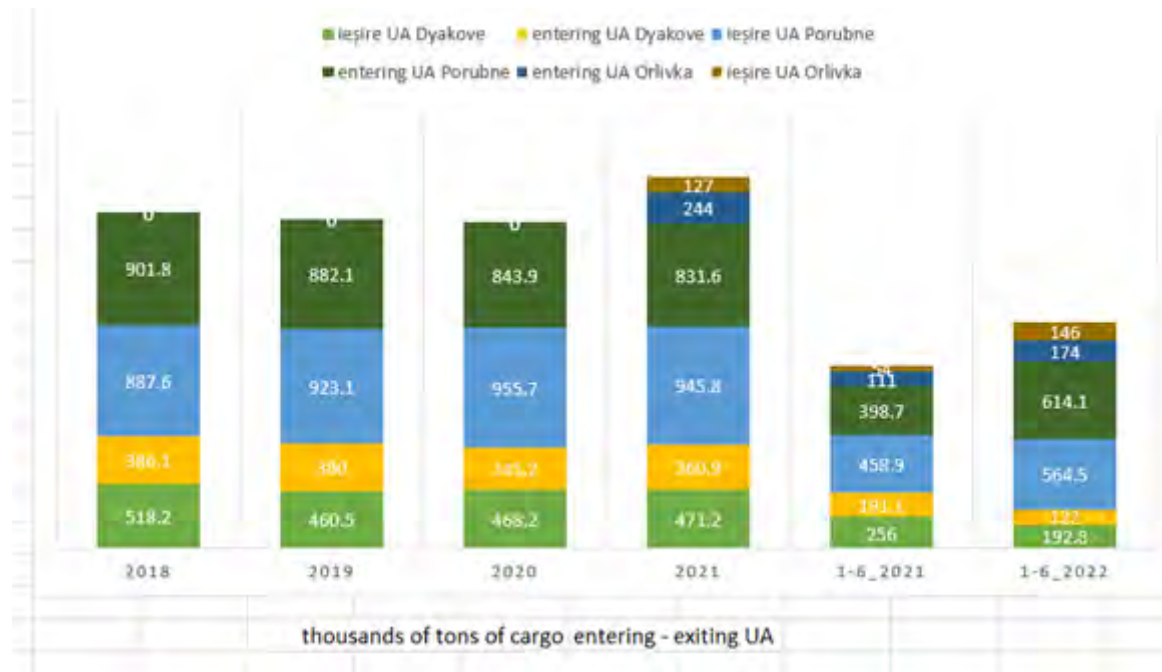


number of trucks entering - exiting RO



number of trucks entering - exiting UA

Research results - I.1.3. Volumes of cargo and vehicles passed through the Halmeu, Dyakove, Siret, Porubne, Isaccea, Orlivka checkpoints



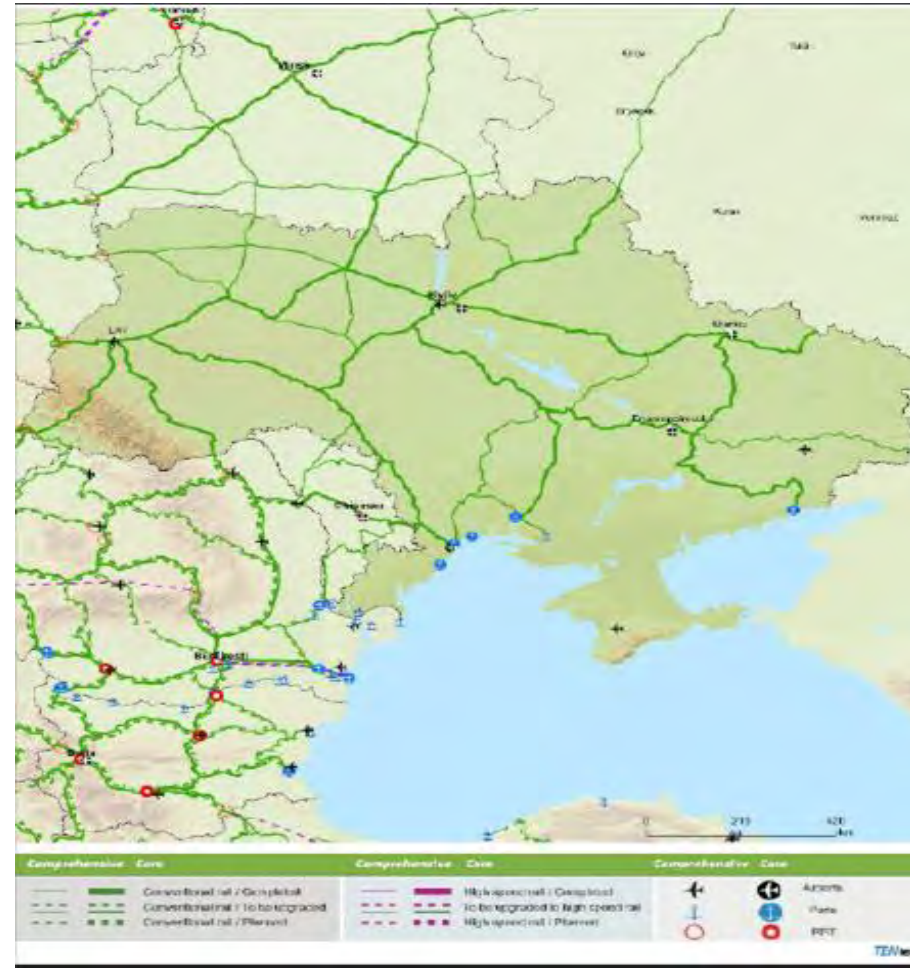
Research results - I.1.4. Volumes of cargo and trains passed through the Halmeu, Dyakove, Vadu-Siret, Viçșani checkpoints

	Halmeu - Dyakove		Vadu Siret - Viçșani	
	exit UA - Dyakove	entering RO Halmeu	exit UA Viçșani	entering RO Vadu-Siret
2018	4,090	386	24,718	1,288
2019	3,143	410	16,381	1,218
2020	3,973	411	24,569	998
2021	6,803	488	23,671	1,053
1-6_2021	3,279	249	11,595	473
1-6_2022	6,733	383	16,474	646

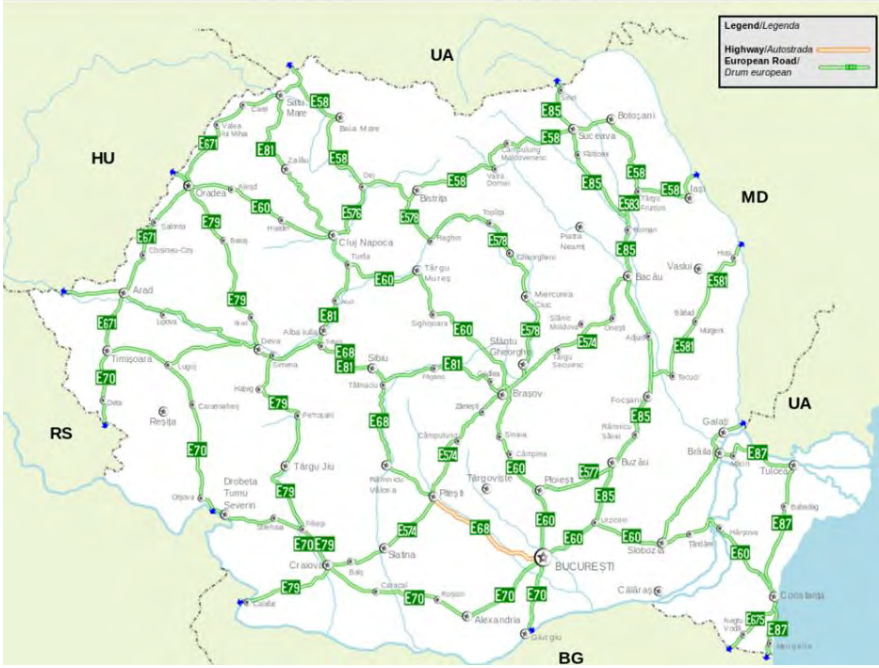
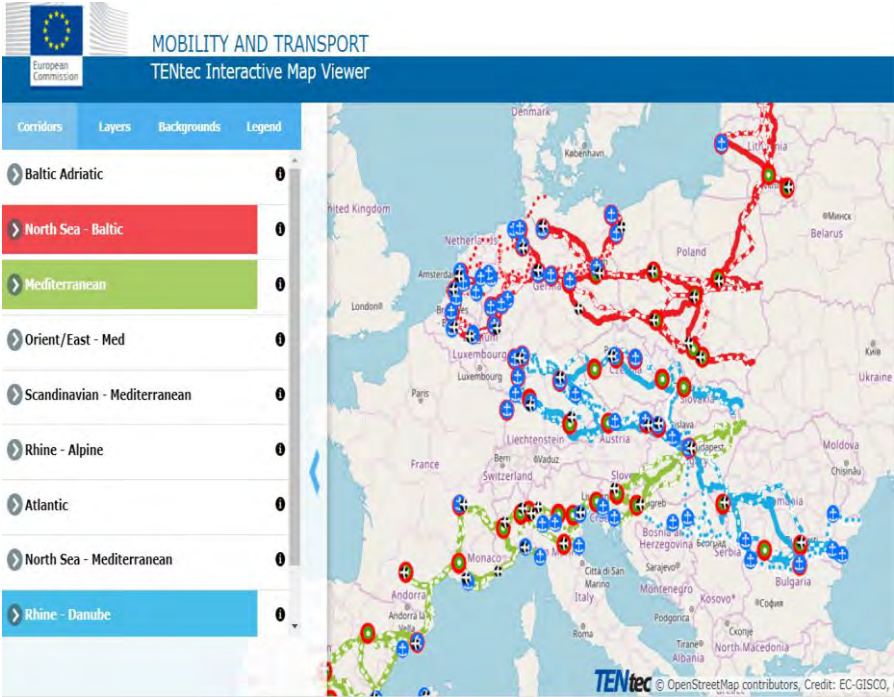
	Halmeu - Dyakove		Vadu Siret - Viçșani	
	exit RO Halmeu	entering UA Dyakove	exit RO Vadu-Siret	entering UA Viçșani
2018	388	4,082	1,482	24,811
2019	413	3,261	1,408	16,075
2020	416	3,826	1,396	24,308
2021	494	6,759	1,462	23,602
1-6_2021	252	3,214	673	11,743
1-6_2022	394	6,395	870	16,218

	Dyakove		Viçșani	
	exit UA - Dyakove	entering UA Dyakove	exit UA Viçșani	entering UA Viçșani
2018	155.0	2.9	1,018.1	30.5
2019	132.0	7.3	848.0	6.2
2020	309.4	7.1	1,204.1	28.4
2021	520.4	9.5	1,257.0	3.3
1-6_2021	303.4	7.1	584.7	3.3
1-6_2022	359.6	183.3	790.9	113.8

Research results - I.1.5. Existing TEN-T corridors (for road and rail transportation)



Research results - I.1.5. Existing TEN-T corridors (for road and rail transportation)



Research results - I.1.6. Type of bottlenecks in Ukraine - Romania (rail/road connectivity)

	Type of bottlenecks
UA-RO road connectivity	Achieving connectivity through trucks is difficult due to the lack of available vehicles, certain restrictions in the framework governing transport rights, other regulations that hinder movement
	Unnecessary and costly delays in shipments still occur due to border controls (phytosanitary and veterinary customs controls). EU legislation does not require any veterinary or phytosanitary certification for grain imports either for transit through the EU.
	Local protests and the blocking of the roads connecting to Siret customs, due to the congested traffic and the speed of the trucks
	Low speed of transportation due to the fact that there are no high-speed roads
	Higher carrier expenses due to the increase in fuel prices caused by the current geopolitical crisis and the sanctions adopted in response to it. Romania has notified the Commission of an aid scheme with a value of 60.7 million euros to support companies operating in the field of road transport of goods and people in the context of the invasion of Ukraine by Russia.

Research results - I.1.7. Type of bottlenecks in Ukraine - Romania (rail/road connectivity)

	Type of bottlenecks
UA – RO rail connectivity	<p>Ukraine uses a 1520 mm wide railway gauge (broad gauge), while the EU standard gauge (UIC gauge) is 1435 mm wide.</p> <p>Ukrainian wagons cannot be used in most EU member states, and goods must be transferred from broad gauge wagons to wagons that correspond to the EU standard gauge. Such transshipment must be carried out at logistics sites near the border crossing points on both sides of the border, either by changing wagon bogies or by loading goods from broad gauge wagons in wagons that correspond to the EU standard gauge.</p> <p>From July 7, the Ministry of Transport announced the increase of the railway gauge in the port of Galati.</p> <p>Current transshipment capacity is far insufficient and not adapted to handle substantial volumes of cargo. Transshipment requires a lot of time and special machinery, which may be present in too few numbers at the transshipment points, or the capacity of such machines cannot cope with the sudden increase in demand. insufficient supply of wagons corresponding to the EU standard gauge (grain silo wagons and intermodal wagons, as well as containers and tank containers (for liquids, e. g. sunflower oil).</p> <p>Each member state will be invited to designate a point of contact dedicated to solidarity aisles (one-stop shop), in charge with ensuring the connection with the actors in the national logistics chain and with ensuring a quick solution of all logistical issues related to matters under the control of their authorities respectively.</p> <p>The redirection of grain to Romania involves transport by rail to the ports on the Danube, then the grain is loaded onto barges that sail to the port of Constanța, a complex and expensive process.</p> <p>Romania could take 8 times more grain from Ukraine, but it needs more mechanics, more locomotives and wagons, as well as more bogies, in order to adapt the Ukrainian wagons to the gauge of the lines in Romania.</p>

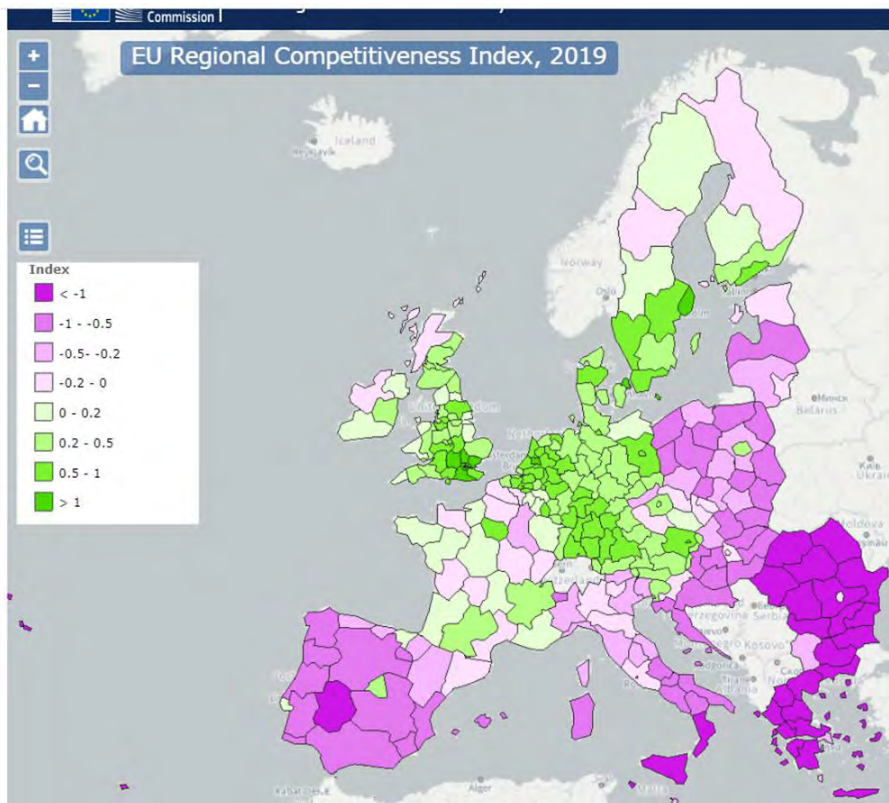
Research results - I.1.8. Existing industrial parks/hubs from Romanian side of the border with Ukraine in Maramureş, Satu Mare, Suceava and Botoşani Counties

	Maramureş	Satu Mare	Suceava	Botoşani
industrial parks/hubs	Industrial Park Baia Sprie – in project	Industrial Park Agriş, Industrial Park Schwaben, Petreşti, Industrial Park Carei North, Carei	Industrial Park Siret, Siret Industrial Park Bucovina, oraşul Salcea City and Dumbrăveni Village	Industrial Park Botoşani, Botoşani
transport hubs	In total 20 carries freight	In total 22 carries freight	In total 15 carries freight	In total 13 carries freight
logistics centres	In total 6 warehouse	In total 12 warehouse	Logistics competitiveness index 1.0 - 1.9 In total 13 warehouses	Logistics competitiveness index 1.0 - 1.9 In total 5 warehouses

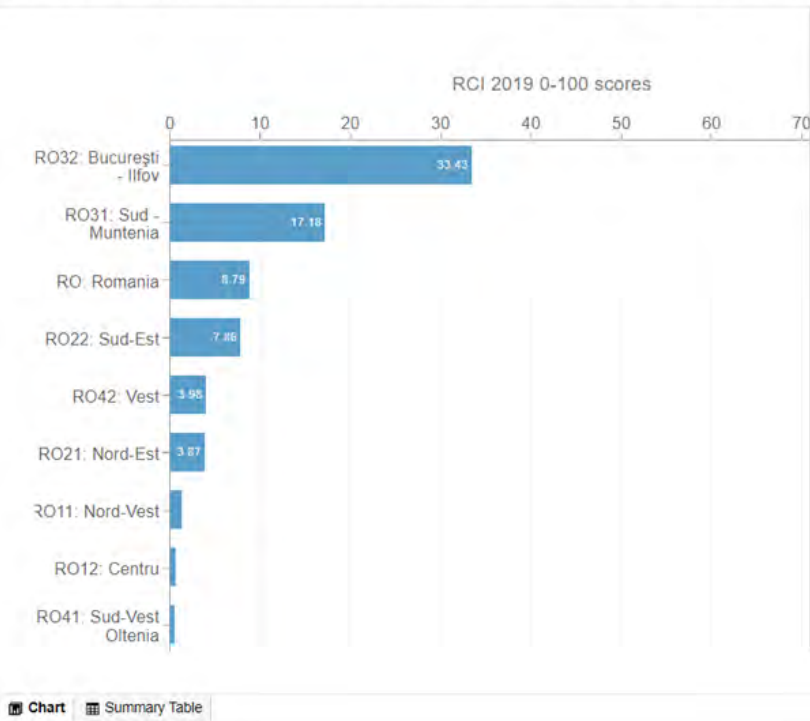
Research results - I.1.9. Existing economic development zone in Maramureș, Satu Mare, Suceava and Botoșani Counties

	Maramureș	Satu Mare	Suceava	Botoșani
economic development zones	<p>EU REGIONAL Competitiveness Index 2019</p> <p>EU RCI -1,14 North – West Development Region</p>	<p>Satu Mare QUEST Report & Action Plan (Mobility Audit), European Commission – Executive Agency for Innovation and Competitiveness, Intelligent Energy Europe, Eurodite, Contract number S12.589406, March</p>	<p>Competitiveness index 1.537501, 36th place, 2011-2018 period</p> <p>Attractiveness index 1.821512, 21st place, 2011-2018 period</p> <p>Suceava's current performance is below potential, and a proactive effort to attract investors could encourage a performance superior economy of Suceava in the following years. Workforce training is one of the main assets of the municipality of Suceava in terms of the attractiveness index, which can help in attracting foreign capital.</p>	<p>Competitiveness index 0.911036, 121st place, 2011-2018 period</p> <p>Attractiveness index 1.362201, 38th place, 2011-2018 period</p>

Research results I.1.9 Existing economic development zone in Maramureș, Satu Mare, Suceava and Botoșani Counties



European Regional Competitiveness Index 2019 by country & component



Research results - 1.2.1. Legal framework for increasing the capacity of existing border crossing points/or opening new ones at Romanian border with Ukraine

- European Commission, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, An Action Plan For EU-Ukraine Solidarity Lanes to Facilitate Ukraine's Agricultural Export and Bilateral Trade with the EU, Bruxelles, 12.5.2022
- The agreement between the Government of Romania and The Cabinet of Ministers of Ukraine regarding the crossing points of the Romanian-Ukrainian state border, Kiev, 2.2.2006
- The aspects agreed upon by the Agreement concluded between the Government of Romania and The Cabinet of Ministers of Ukraine, by exchange of verbal notes, dated August 31, 2012 and 11 September 2012, regarding the opening of international state border crossing points Romanian-Ukrainian, modified by the Agreement concluded between the Government of Romania and the Cabinet of Ministers of Ukraine, by exchange of verbal notes, from November 4, 2022 and November 7, 2022
- Romanian Government, the Memorandum on the subject: Measures for the efficiency of goods traffic and passengers in the border area with Ukraine and the Republic of Moldova in the context of the armed conflict from Ukraine, approved in September 7, 2022
- Government Decisions regarding the opening of the Points international border crossing and border customs office between Romania and Ukraine, with all the further changes

Research results - I.2.2. Future infrastructure projects related to the development of Transport freight corridors

Memorandum for "the efficiency of goods and passenger traffic in the border area with Ukraine and the Republic of Moldova in the context of the armed conflict in Ukraine" (September, 7, 2022). Adopted measures:

- I. Increasing the transit capacity of goods between Romania, Ukraine and the Republic of Moldova on the railway infrastructure, by:
 - Reopening all lines from the border stations Halmeu, Câmpulung la Tisa, Cămara Sighet, Valea Vișeuului, Viçșani, Socola, Cristești Jijia, Fălciu and Galați – Larga, as well as the reopening of several diverted lines from stations located on routes 500, 702 and 800. (**Câmpulung la Tisa - November, 15, 2022, Viçșani - November, 11, 2022**)
 - Increasing the rail traffic capacity in Halmeu station by expanding the existing infrastructure.
 - Increasing the capacity of transshipment in Halmeu, Câmpulung la Tisa, Cămara Sighet, Valea Vișeuului, Viçșani, Socola, Cristești Jijia, Fălciu and Galați – Larga by modernizing existing equipment and/or installing new equipment.
 - Increasing the capacity of transporting goods in the cross-border area by doubling some traffic sections, such as: Porumbesti - Halmeu (5 km), Socola - Ungheni (17 km), as well as by electrifying the Nicolina - Ungheni Prut traffic section (20 km);
 - Extension of the double-gauge railway to the port of Galati to facilitate the loading of river and river-sea vessels (**August 2022**)
 - Creation of customs control points for freight traffic in the Sighetul Marmației railway station, respectively Viçșani (**November,11,2022**)
- II. Increasing the transport capacity by taking over from the EU by the Romanian state 1200 wagons (1000 for the transport of grain and 200 for the transport of oil products) and 35 locomotives suitable for the transport of grain and oil products, as well as by increasing the capacity of carrying out repairs to existing wagons and locomotives used for the same purpose.
- III. Interventions to increase traffic speed and eliminate speed restrictions through repair and restoration interventions on the following traffic sections: Satu Mare – Halmeu, Câmpulung la Tisa – Valea Vișeuului – Salva, Viçșani – Suceava Nord, Ungheni Prut – Nicolina, Fălciu – Bârlad, Giurgiuilești Galați – Brateș.
- IV. Repair works for two railway bridges: Câmpulung la Tisa (over the Tisa River) and Dornești (over the Suceava River).
- V. Equipping CNCFR SA with five machines and heavy track machines, as well as with ten wagons related to them, for each of the three CF regional branches (Cluj, Iași and Galați), in order to carry out maintenance works on cross-border railways with Ukraine and the Republic of Moldova.
- VI. For the railway sector, it is proposed to provide equipment and increase the number of personnel with duties in traffic management.

Conclusions

1. The number of entry/exit lines for each RO-UA CBP are insufficient to cover the volume of goods, vehicles and trains who cross the road and rail checkpoints, resulting in a high number of waiting minutes
2. The TEN-T road corridors do not have continuity on the territory of Romania, the connection with Ukraine being made through the roads with speed restriction (E 85 and E 58), hence a source of road blockages
3. The existing differences between the Romanian and Ukrainian railway infrastructure require large investments, which cannot be achieved in a short period of time
4. The regions adjacent to Romania's Northern border with Ukraine are relatively underdeveloped, but have the potential to increase transport and storage capacity, which can be made available in the short term
5. The Romanian authorities are making efforts to respond to the EU requirements for the solidarity corridors, but the infrastructure projects are only achievable in a medium time horizon
6. In addition to the projects mentioned in the Romanian Government's memorandum, we also propose the following measures to increase the carrying capacity for freight transportation on the Ukraine-Romania border section:
 - Diversion of heavy traffic outside the villages by building bypass routes that allow higher traffic speed (express roads or highways)
 - Allocation of a greater number of entry/exit lines in the border crossing points
 - Simplification of Romanian customs, phytosanitary and veterinary control procedures

Final conclusion

Hypothesis H1 (*The projected capacity of the crossing border points is exceeded by the freight traffic registered at the Romania-Ukraine border*) is validated according to the results obtained for indicators I.1.1. - I.1.4.

Hypothesis H2 (*The transport and logistics infrastructure covers the needs generated by the large volume of goods crossing the CBPs from the Romanian-Ukrainian border*) is not validated because the current infrastructure for cargo transport and storage is insufficient (see the research results for I.1.5. - I.1.9).

Hypothesis H3 (*The measures taken by the Romanian authorities are effective and sufficient for strengthening EU-Ukraine connectivity*) is validated in the medium and long term, based on the projects of the Romanian authorities. In the short term, the Romanian measures to strengthen EU-Ukraine connectivity, which are operationalized by opening of 3 new CBPs, are effective but not sufficient (according to the research results for I.2.1, I.2.2., II.2.).