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Multimodal terminals in Poland – analysis and assessment

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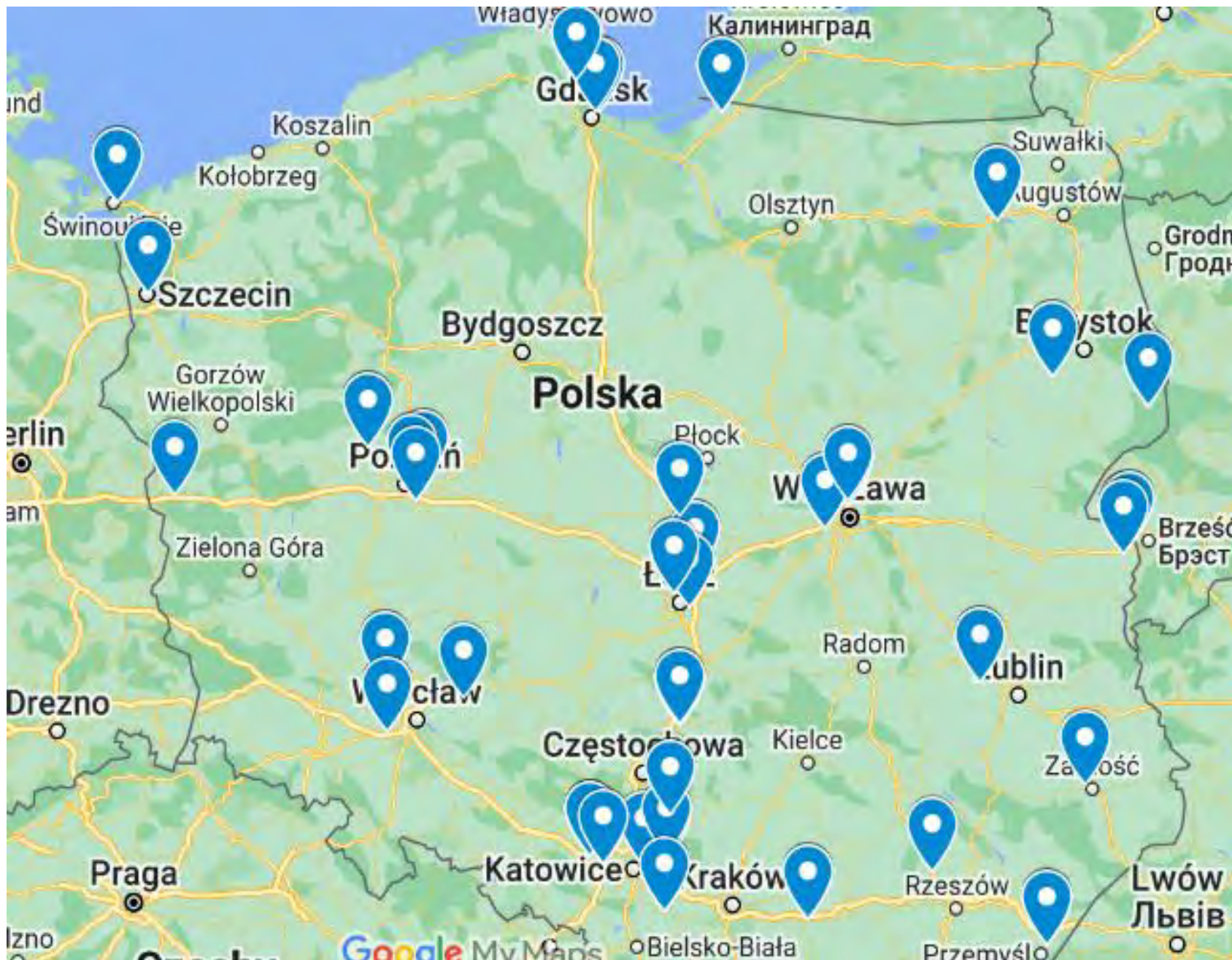
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Freight traffic flows across EU-Ukraine: current trends and future prospects

Inland intermodal terminals

- The location of a container terminal is a crucial factor in ensuring its seamless and efficient operation within the supply chain.
- Intermodal terminals is characterised by excellent connections to the railroad, the road network and other transport terminals, enabling a quick switch of transport mode without having to transfer goods.
- Each terminal has three zones designed respectively for:
 - storing empty and full containers,
 - receiving containers,
 - dispatching containers.



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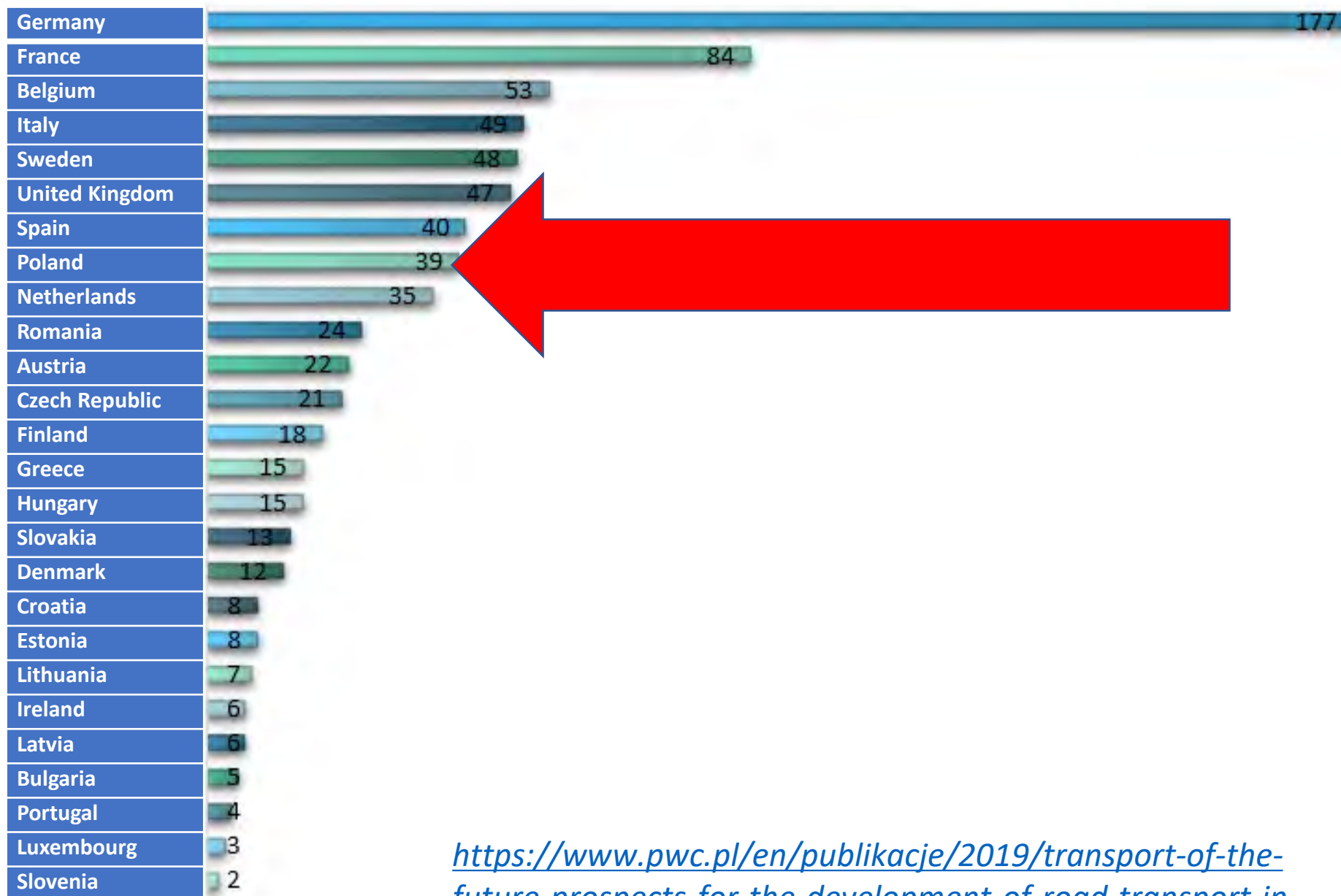
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<https://dane.utk.gov.pl/sts/transport-intermodalny/mapa-terminali/18573,Dane-o-terminalach-intermodalnych.html#Linki>

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<https://www.pwc.pl/en/publikacje/2019/transport-of-the-future-prospects-for-the-development-of-road-transport-in-poland-2020-2030.html>

Intermodal terminals in Poland

- **Intermodal terminals in Greater Poland – Gądko, Poznań–Franowo, Swarzędz**
- **Intermodal terminals in central Poland – Łódź, Kutno, Teofilów**
- **Intermodal terminals in Lower Silesia – Kąty Wrocławskie**
- **Intermodal terminals in Silesia – Gliwice, Sławków**
- **Intermodal terminals at Poland's eastern border – Medyka, Małaszewicze**

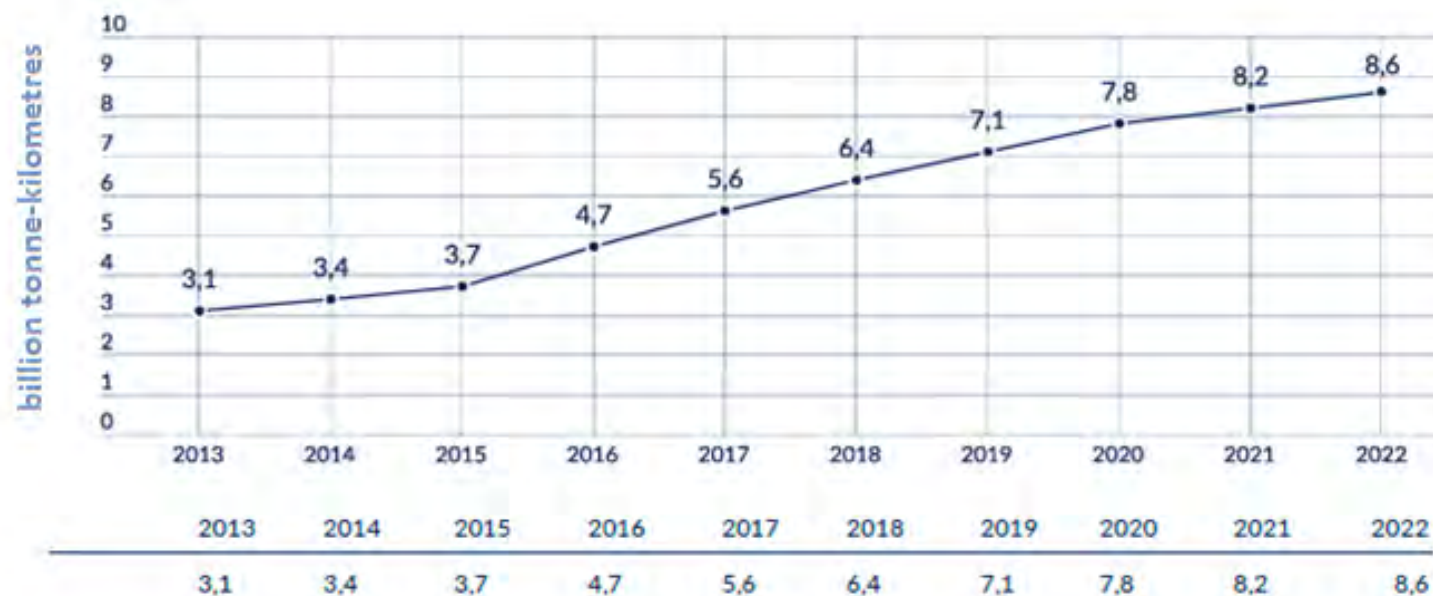
Intermodal terminals in Poland in 2022

- The year 2022 witnessed a decline in various parameters within the intermodal transport sector compared to 2021.
- The weight of transported cargo decreased by over 0.3 million tonnes, with 28,000 fewer units and 84,000 fewer TEUs (Twenty-Foot Equivalent Units) being transported.
- Transport performance experienced an increase of 0.4 billion tonne-km compared to the previous year.



Railway intermodal transport in Poland between 2013 and 2022

In 2022, a total of 26.2 million tonnes of cargo were handled in intermodal transport, compared to 26.5 million tonnes in 2021, representing a decrease of 1.4%.

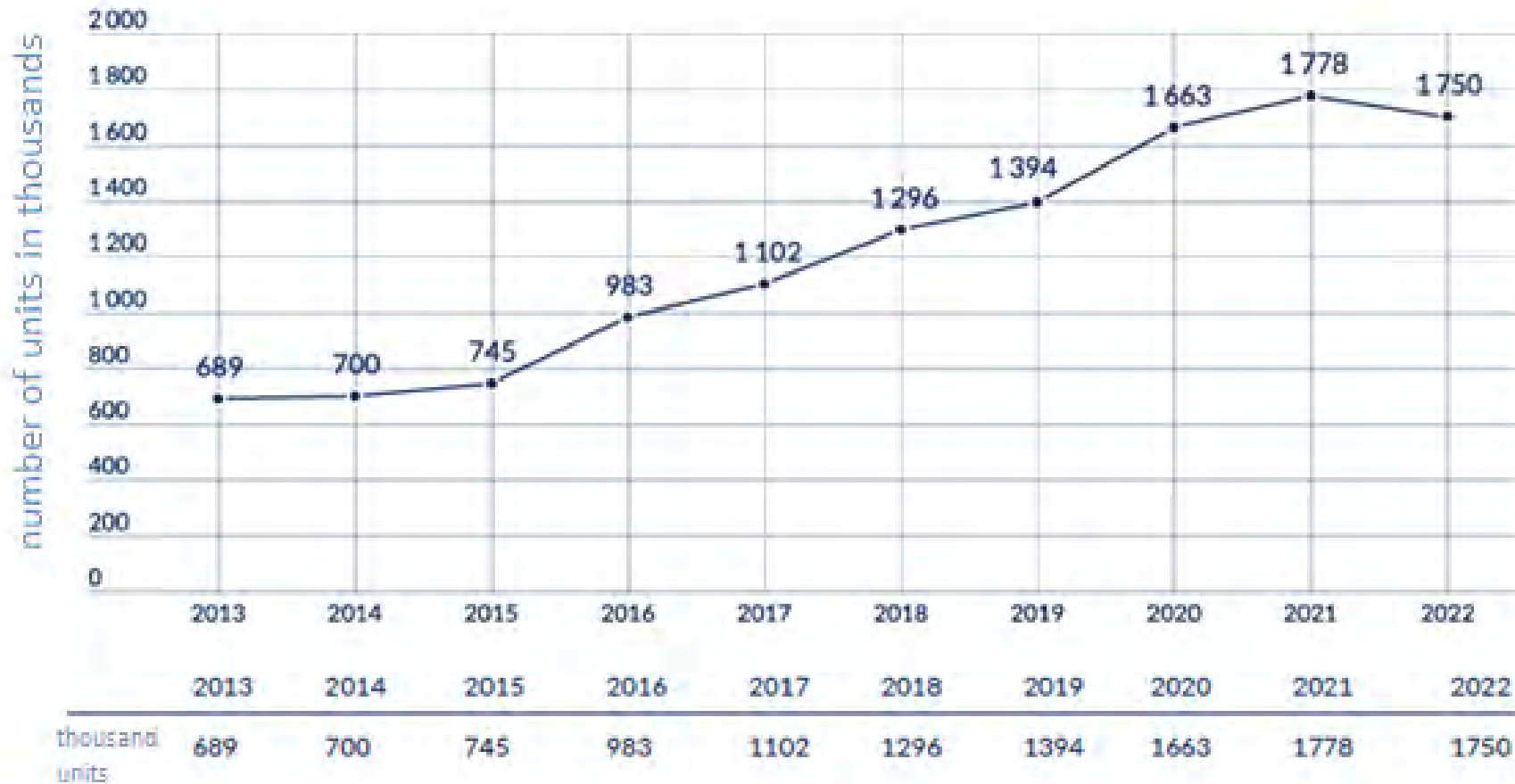


Weight and by transport performance between 2018 and 2022



	2018	2019	2020	2021	2022
weight	7.1%	8.3%	10.7%	10.9%	10.5%
transport performance	10.8%	12.6%	15.0%	14.6%	13.8%

Railway intermodal transport in Poland between 2013 and 2022



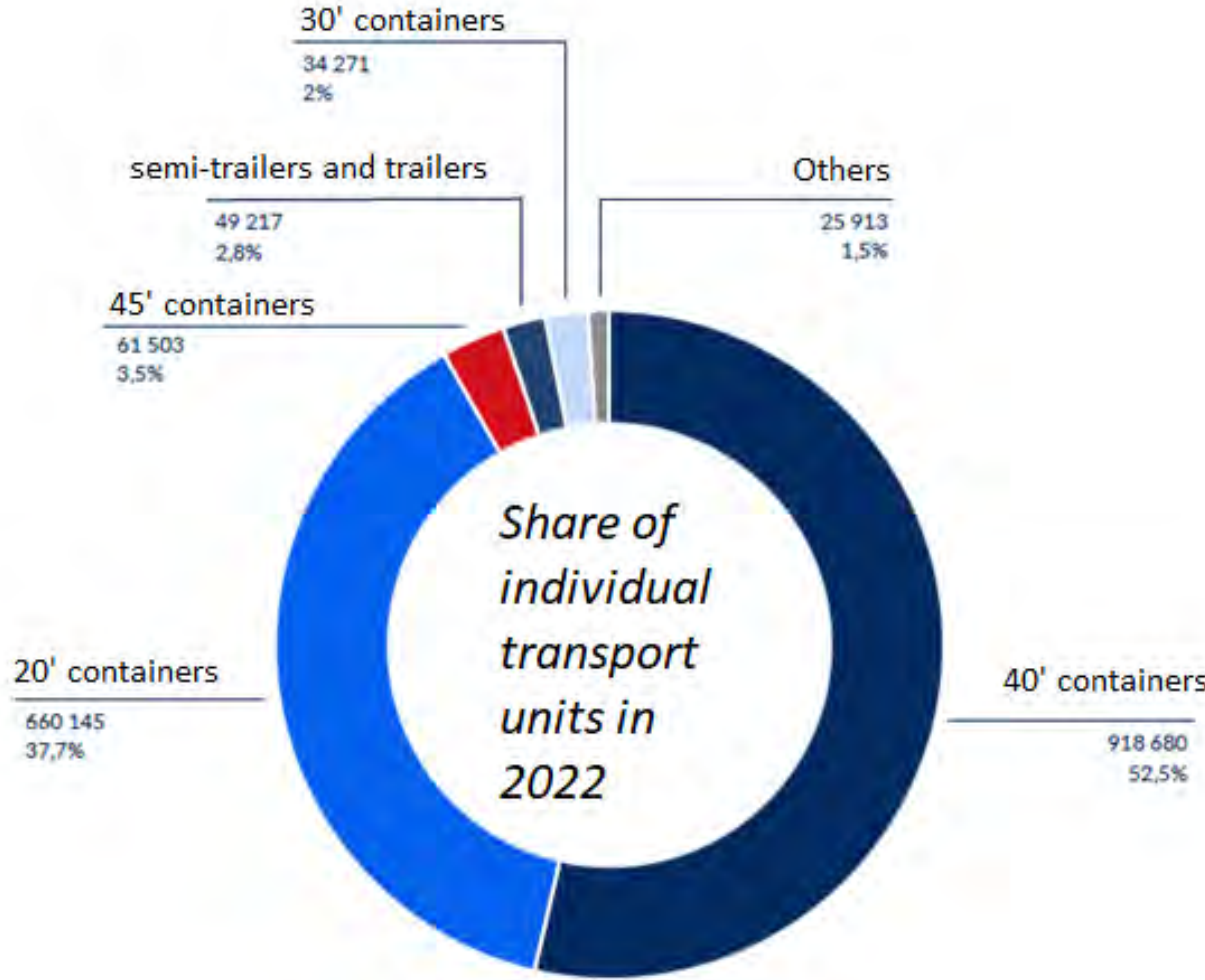
Railway intermodal transport in Poland between 2013 and 2022



Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
thousand TEUs	1 123	1 114	1 152	1 470	1 692	1 933	2 137	2 672	2 920	2 836

Share of individual transport units in 2022

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Number of semi-trailers and car trailers transported by rail in Poland between 2013 and 2022

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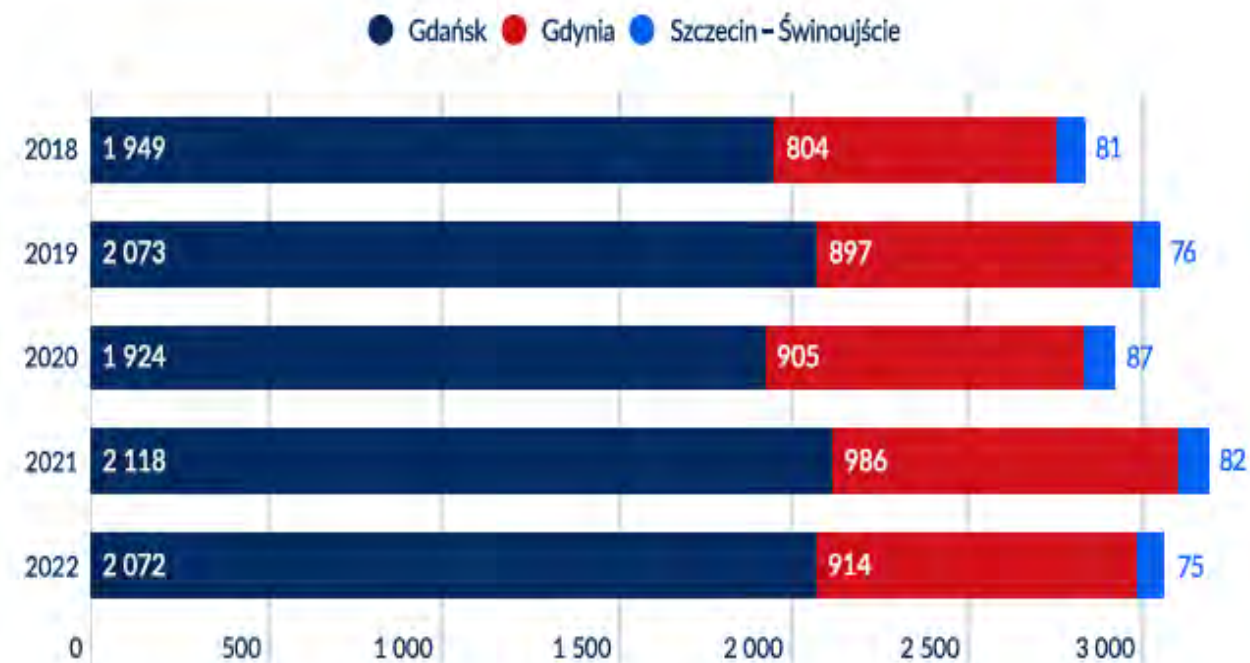


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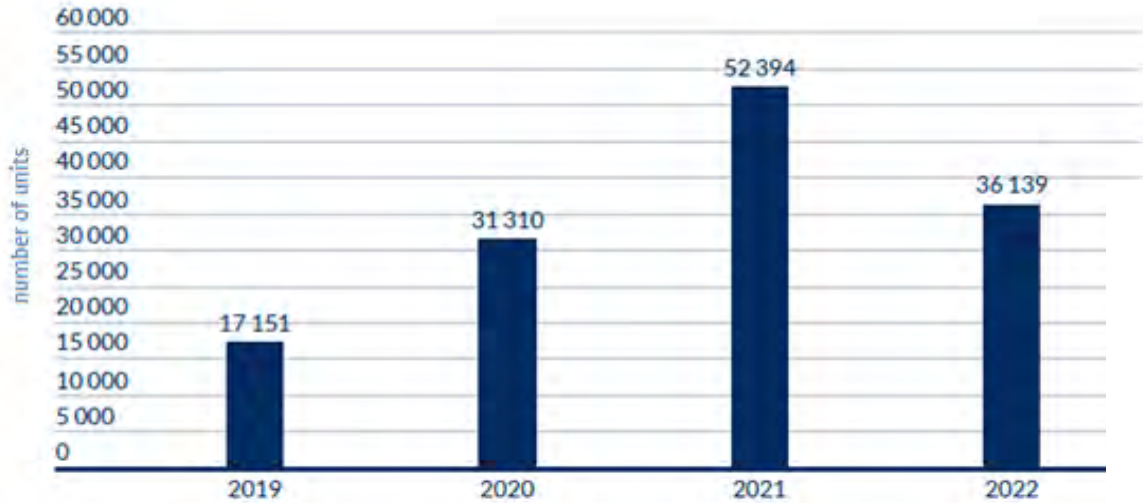
Transshipments in Polish seaports between 2018 and 2022



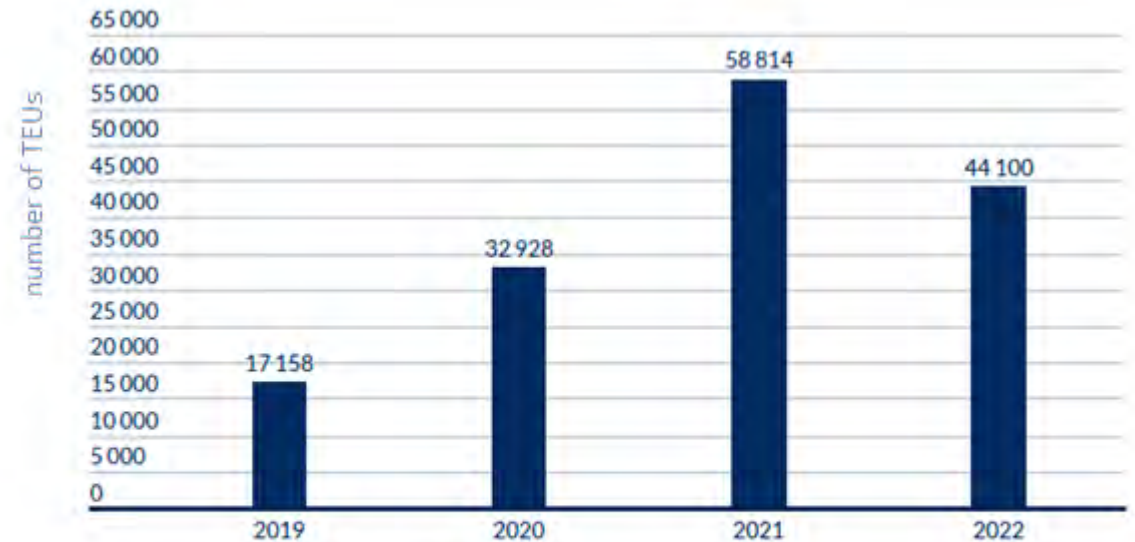
	2018	2019	2020	2021	2022
Gdańsk	1 949	2 073	1 924	2 118	2 072
Gdynia	804	897	905	986	914
Szczecin-Świnoujście	81	76	87	82	75



Number of units and TEUs carried in rail intermodal transport in Poland by PKP LHS between 2019 and 2022



	2019	2020	2021	2022
number of units	17 151	31 310	52 394	36 139



	2019	2020	2021	2022
number of TEUs	17 158	32 928	58 814	44 100

Basic parameters in intermodal transport

	2020	2021	2022	Change 2022–2021	% change 2022/2021
Q1	383,130	418,784	448,580	29,796	7.11%
Q2	377,638	450,584	448,291	-2,293	-0.51%
Q3	438,439	450,777	446,819	-3,959	-0.88%
Q4	464,125	457,404	406,040	-51,364	-11.23%

Number of units in intermodal transport (in units)

Number of units (in units)	Number of TEUs	Weight (thousand tonnes)	Transport performance (thousand tonne-km)
406,040	651,944	6,137.19	1,947,941

Basic parameters in intermodal transport – Q4 2022

Basic parameters in intermodal transport

	2020	2021	2022	Change 2022–2021	% change 2022/2021
Q1	593,046	687,898	738,312	50,414	7.33%
Q2	597,475	745,154	726,423	-18,731	-2.51%
Q3	724,202	735,008	719,647	-15,361	-2.09%
Q4	757,565	751,758	651,944	-99,814	-13.28%

Number of TEUs in intermodal transport

	2020	2021	2022	Change 2022–2021	% change 2022/2021
Q1	5,363.86	6,242.03	6,602.39	360.36	5.77%
Q2	5,585.88	6,782.07	6,682.14	-99.93	-1.47%
Q3	6,162.80	6,777.28	6,736.14	-41.15	-0.61%
Q4	6,664.33	6,728.85	6,137.19	-591.65	-8.79%

*Weight of goods in intermodal transport
(in thousand tonnes)*

Basic parameters in intermodal transport

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	2020	2021	2022	Change 2022– 2021	% change 2022/2021
Q1	1,719,739.67	1,893,486.65	2,130,728.64	237,242.00	12.53%
Q2	1,888,050.45	2,033,158.55	2,275,120.16	241,961.62	11.90%
Q3	2,093,707.92	2,140,801.65	2,256,970.98	116,169.33	5.43%
Q4	2,137,048.95	2,113,638.83	1,947,941.27	-165,697.57	-7.84%

Intermodal transport performance
(thousand tonne-km)

Basic parameters in intermodal transport

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	2020	2021	2022
Q1	9.88%	11.01%	10.60%
Q1-2	10.42%	11.15%	10.62%
Q1-3	10.56%	11.02%	10.68%
Q1-4	10.65%	10.89%	10.52%

Share of intermodal transport in the rail market by weight

	2020	2021	2022
Q1	13.81%	14.77%	14.56%
Q1-2	14.73%	14.77%	14.38%
Q1-3	15.04%	14.76%	14.29%
Q1-4	15.01%	14.61%	13.78%

Share of intermodal transport in the rail market by transport performance

Development directions

Ukrainian Railways (JSC Ukrzaliznytsia) and Laude Smart Intermodal signed a cooperation

Digital solutions, including automatic data exchange between operators.

The planned modernisation and electrification of the railway line between Zamość and Rejowiec.

The project was planned to be implemented between 2025 and 2026.

In June 2022, Ukrainian Railways completed the electrification of 90 km of the line from Kovel to Izov, increasing the capacity of the line on the Ukrainian side. Although the capacity has increased to 12 pairs of trains per day, for other technical reasons no more than 7 trainsets per day can pass through.

Conclusion

- The impact of Russia's aggression against Ukraine on intermodal transport in Poland is extensive and complex, affecting various aspects of the system.
- The effectiveness of infrastructure decongestion, particularly at the border with Ukraine, will play a significant role in determining Poland's position on the intermodal map of Europe.
- The Eastern gateway should encompass not only Małaszewicze but also the border with Ukraine, including Dorohusk, Medyka, and the entire BGML (Broad Gauge Metallurgy Line).
- Following the Russian invasion, shipments in particular to Scandinavia and the Baltic States have seen an upsurge (e.g., to Finland – 20% increase for Port Gdynia).



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Thank you for your attention

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