

Analytical Brief

Restoring and Adapting Ukraine's Export Infrastructure for Agriculture

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This paper focuses on three aspects: the current state of Ukraine's export routes, the main bottlenecks affecting logistics performance, and a few near-term priorities where EU and donor support can make a decisive difference.

Three Years of Resilience: Ukraine's Export System Endures

Over the past three years, Ukraine's agricultural exports have faced extraordinary pressure – yet the system has not collapsed. It has adapted, improvised, and kept functioning. Today, that resilience depends on how quickly we can rebuild and diversify our transport corridors.

Ukraine's resilience rests on three routes now operating in parallel:

- Maritime route revival – the Black Sea ports have [regained](#) roughly 80% of agricultural export flows, a remarkable recovery from 2022.
- Land corridors – the EU–Ukraine Solidarity Lanes still handle about one-fifth of agricultural exports and a large share of imports. Crossings through Poland, Romania, Hungary and Slovakia provide redundancy and connect Ukraine directly to EU logistics networks.
- Danube contingency – during the blockade, the Danube ports of Izmail, Reni and Kiliya kept exports alive. Even though traffic there fell by around 46% after the Black Sea reopened, the river must remain a strategic reserve route. Dredging and modernisation [continue](#), but maintenance and funding need to stay constant, so capacity is ready the moment sea access is disrupted again.

These three channels kept Ukrainian grain on world markets – proof of resilience, but also a reminder that each route still faces distinct risks.

The New Export Geography: Two Pillars of Trade

Before the full-scale invasion, over 70% of Ukraine's agricultural exports moved through Black Sea ports – Odesa, Mykolaiv, and Kherson. The war disrupted that almost overnight.

Since then, Ukraine has created a completely new logistics geography. It is run on two pillars: a reopened Black Sea corridor that now carries the majority of agri volumes, and

the EU-Ukraine Solidarity Lanes that keep non-agri exports moving and provide redundancy.

Since May 2022, around 60% of grain/oilseeds moved via Black Sea ports and 40% via Solidarity Lanes; in mid-2025 specifically, the Black Sea handled about 80% of agricultural exports while Solidarity Lanes remained vital for imports and non-agri goods.

The Black Sea remains the most efficient route, but also the most fragile. After the end of the UN-brokered Grain Initiative, Ukraine established its own temporary corridor under naval protection. Despite [the risks](#), it works: Ukraine's share of export for corn, wheat and soybeans moved via maritime routes [rose](#) from 80% in 2023 to 92% in 2024. Pre-war the Black Sea ports handled over 90% of those exports in [peacetime](#). In rough numbers: Ukraine's total grain and legume exports for marketing year 2022-23 were [48.99 mn t](#). Hence, the maritime route's revival is real.

Yet the cost of insurance and limited vessel access continue to constrain flows. Black Sea ports (Odesa, Chornomorsk and Pivdennyi) are operating despite intermittent strikes. The insurance that made this corridor viable again is the Unity facility – a war-risk scheme launched by Marsh McLennan and Lloyd's of London together with Ukraine's government and state banks. It [covers](#) both the hull and P&I (protection and indemnity) risk for ships calling at Odesa, Chornomorsk, and Pivdennyi, with limits up to USD 50 mn per voyage (initially grain, now expanded to all non-military cargo). Before this program, insurers charged war-risk premiums several times higher than normal tonnage insurance, often above 1.5-2% of cargo value. Under Unity, the rate for agricultural cargo fell to [around 0.75%](#), roughly half of what shipowners were paying a year earlier. That [reduction](#) made regular sailings commercially possible again – not only for grain but also for fertilizers and containerized non-military cargo. The facility is open to both foreign and Ukrainian operators and is underwritten through Lloyd's brokers.

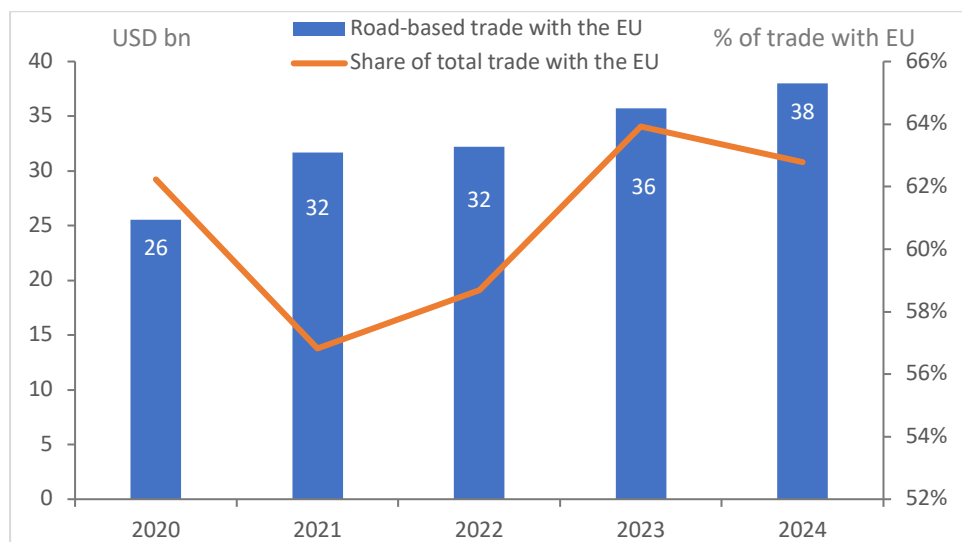
Thus, the Black Sea corridor is open and competitive again, but it remains exposed to missile and drone strikes on port and ship infrastructure. So, while capacity is present, risk remains high.

The Danube route – through Izmail, Reni, and Kiliya – in the earlier war phase became critical as a fallback. With sea routes restored, Danube [transshipment fell](#) 46% in 2024 and remained lower through H1-2025. According to recent figures the Danube's share has fallen compared to the peak – it is available as strategic reserve capacity, not mainline conduit. That means that we must keep this corridor alive because the Black Sea remains under threat. Dredging and modernisation of Danube channels is ongoing, but the publicly available data do not show full completion across all terminals. Therefore, the Danube remains essential contingency capacity.

Road and rail remain supplementary, especially for non-maritime flows and imports, and as an export corridor for destinations where maritime access is limited. According to the [World Bank logistics system review](#) (June 2025) truck crossings at key Poland-Ukraine

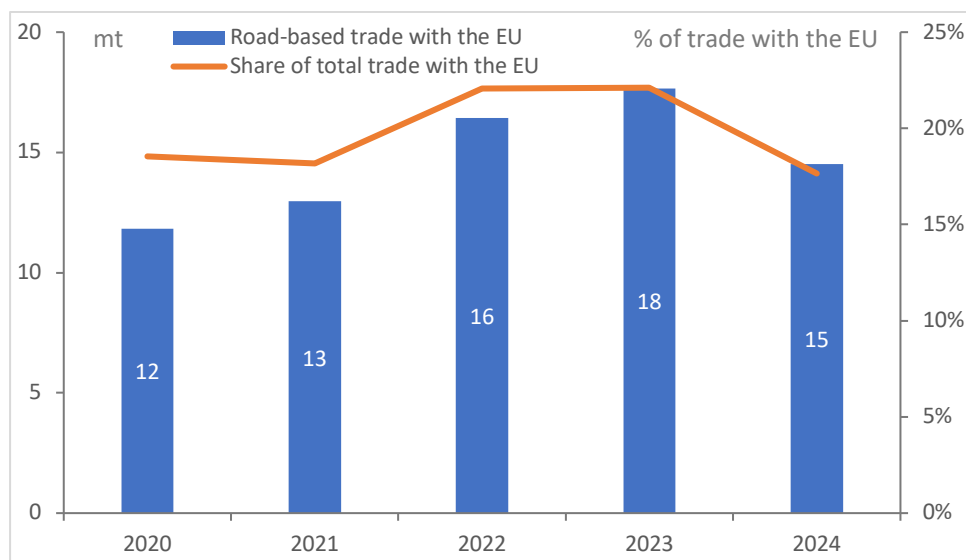
border crossing points (BCPs) – Yahodyn–Dorohusk, Krakivets–Korczowa, and Shehyni–Medyka – continue, and waiting-time dashboards (e.g., the Ukrainian Customs “Kordon” platform) show hours rather than days for many crossings. See trends of Ukraine-EU road trade on Figures 1 and 2. The electronic queue system eCherha has [grown](#). Since March 2025, all licensed trucks exceeding 3.5 t must register in eCherha ahead of arrival.

Figure 1. Value of Ukraine's road-based trade with the EU



Source: Own display based on State Customs Service of Ukraine

Figure 2. Volume of Ukraine's road-based trade with the EU



Source: Own display based on State Customs Service of Ukraine

For rail, key gateways remain Mostyska II–Medyka, Izov–Hrubieszów, Chop–Čierna, plus Vadul-Siret on the Romanian border. However, rail's agricultural export share declined (from 15% in 2023 to 7% in 2024) but remains crucial for non-maritime flows.

In short, Ukraine now exports at scale – the maritime route dominates, land corridors play critical support and redundancy roles – but each segment remains vulnerable and must be locked in, not taken for granted.

Critical Bottlenecks: Four Cluster-Failures Threatening System Resilience

Even with the routes functioning, several cluster-failures remain. The most pressing bottlenecks are:

1. targeted rail disruptions. Russia has [intensified strikes](#) on rail power, depots, and even locomotives – leading to cascading delays and forced replacements. This is new risk on top of gauge and terminal limits. These attacks raise the risk of breakdowns in key rail export corridors. Because rail capacity is already under pressure (its share in exports low and falling), these disruptions magnify impact. Ukraine must build contingency: spare electric/diesel locomotives, mobile substations, rapid repair kits.
2. border processes. Despite eCherha improvements, manual customs re-entry and redundant documentation remain. NCTS Phase 6 (New Computerised Transit System) pilot exchanges planned for 2026 will enable automatic digital transit declarations between Ukraine and EU, but deployment lags. Joint controls at major BCPs still operate as pilots, not routine. Besides, AEO cargo (Authorized Economic Operator status) gets priority, but many participants do not yet hold or use the status, and the concept needs explanation for wider audience.
3. insurance and maritime risk. The Unity facility reduces vessel cost barriers, but coverage remains limited in uptake (single-digit vessels were using it early in 2024). Ukraine must keep the sea-lane safe and insurance affordable, else shippers revert to costly detours. Without continuity, an attack or loss of cover could sharply raise costs.
4. with the sea lane back, many “hardware” constraints eased (Danube berths, barge scarcity). While Danube and land corridors are available, their readiness must be maintained. Dredging, channel maintenance, terminal readiness must not lapse. The moment the main line (Black Sea) is disrupted again, capacity must shift without collapse.

Ukraine has already implemented significant procedural reforms that, when fully operationalized and linked, will transform border efficiency. These changes must now be hardened into routine operations.

All trucks crossing into the EU now have to pre-register in the eCherha electronic queue. The system eliminated the chaotic first-come queues that once stretched for kilometers and replaced them with time-slot scheduling. Since September 2025, Ukraine’s eCherha system has operated as a fully integrated “single window” for truck crossings. A driver

registers once online, providing all the information required for border guard, customs, and veterinary control. These data are automatically shared across the agencies' internal systems, so there is no longer any need for separate applications or queues. In practice, the driver's booking in eCherha now covers the entire process – from arrival scheduling to customs and SPS clearance. The new rules adopted in July 2025 and effective 10 September have greatly improved predictability, ending duplication between databases and cutting idle waiting time at major border points.

On the physical-inspection side, [EU-funded scanner systems](#) are already being installed at the busiest border points, including Krakivets. These scanners reduce the need to unload trucks, cutting inspection times from hours to minutes.

In parallel, Ukraine and Poland are preparing [joint customs and SPS control pilots](#) – a long-discussed reform that will, for the first time, allow Ukrainian and EU inspectors to operate in a shared lane rather than in sequence on opposite sides of the border. The first pilot sites are expected to include Krakivets–Korczowa and Yahodyn–Dorohusk. If successful, these joint controls could become the single most effective procedural improvement since the launch of the Solidarity Lanes.

Ukraine is now developing NCTS Phase 6, the upgraded New Computerised Transit System used by EU countries. Once operational, it will allow digital transit declarations to flow [automatically](#) between Ukraine and EU customs, cutting out redundant paper forms and manual re-entry of data. This is part of Ukraine's preparation for accession to the Common Transit Convention. The system is being financed under EU customs cooperation programs, with pilot exchanges planned for 2026. When combined with eCherha and the Single Window, NCTS 6 will finally give Ukraine a customs architecture that functions like the EU's – fast, paperless, and traceable end-to-end.

Near-term priorities

Success in restoring Ukraine's export infrastructure requires coordinated action across four operational and strategic domains. Each intervention is achievable within 12-18 months and will generate measurable improvements in throughput, cost, and resilience.

1. on the operational side, we should harden the rail backbone under fire. Systematic Russian strikes on traction substations, depots, and locomotives deep inside Ukraine hit the long internal routes that carry grain from central and southern oblasts to the western crossings. Strengthening the resilience of those inland segments — through spare locomotives, mobile power units, and rapid-repair teams — is therefore critical for keeping exports moving.
2. make joint controls routine, not pilots. At heavy-traffic BCPs (Krakivets, Yahodyn, Shehyni) establish shared lanes where Ukrainian and EU customs and SPS inspections happen in parallel or at least in time-synchronised windows.



Communicate clearly: freight should not be delayed because a passenger-system change (e.g., EES biometric rollout) bumps cargo to the back-of-the-line.

3. digitize the queue end-to-end. The eCherha platform already shows waiting times, but the goal should be near-real-time dashboards that combine queue status, average clearance times, and truck turnover by border point. That level of visibility would help logistics operators plan routes and reduce empty runs. Rail and customs data, by contrast, are still reported monthly and cannot realistically be made live – and it makes little sense to attempt that. What is achievable is a shared monitoring platform for the Solidarity Lanes, publishing regular aggregated indicators for both road and rail performance, similar to the corridor dashboards used by the EU's TEN-T network. These improvements should build on the ongoing EU-funded upgrades of the NCTS and the Customs Single Window, ensuring that every procedural reform at the border also strengthens the long-term integration of Ukraine's customs IT systems with those of the EU.
4. protect the sea lane's economics. Continue [war-risk insurance support](#) (through Unity or equivalent) – maintain affordability, extend cover to inland legs and containerised flows. Keep supporting insurance uptake through donor guarantees (e.g., via EBRD/DFC). Strengthen port defences and backup transshipment plans (Danube or land) so shippers trust the sea corridor. Don't freeze investment in Danube modernisation or land border terminals because main corridor is up. Redundancy must stay active. Channel dredging, terminal upgrades, truck parking, and multimodal yards must stay funded and ready.

Financing and Coordination: Mobilizing EU and Donor Resources

The scale of rebuilding goes beyond any single instrument. Coordination among the EU, EIB, EBRD, World Bank, and bilateral donors is crucial. The [EU-Ukraine Solidarity Lanes platform](#) already coordinates governments, agencies, and infrastructure projects; it should explicitly add border process KPIs and publish monthly corridor performance.

In this context, sustained support for private logistics operators is equally vital. Many of the current export routes were made viable by private initiative, not state planning. The [Marsh/Lloyd's "Unity" facility](#) unlocked port calls and expanded beyond grain to cover non-military cargo – a private-market solution with public backstops.

Another example is [Danube surge capacity](#): Private vessel and terminal operators rapidly scaled on the Danube in 2022–23, creating the fallback that carried Ukraine through the worst months. Those assets now serve as overflow and resilience capacity.

New and expanded [rail terminals](#) around Mostyska, Zamość, Sosnowiec added capacity on the PL-UA axis, enabling more predictable flows. Enabling access to finance and risk insurance helps preserve that entrepreneurial energy.

Conclusions

Ukraine's export system now stands on solid but still vulnerable ground. A secure sea lane with competitive insurance. Land and rail as support. But risk hasn't evaporated.

If we lock in predictability today – through secure corridors, joint controls, digital transparency and true redundancy – then Ukraine's agricultural exports will not simply recover, they will integrate deeply into European logistics and become resilient to further shocks.

What success looks like in 2025-26 is straightforward:

- Sea exports moving without insurance or vessel-call crisis,
- Border crossings for trucks and rail measured in hours not days,
- Predictable slots and transparent queues for logistics operators,
- Steady cargo flows even when the rail network faces interruptions inland.

Each hour saved, each bottleneck removed, each alternative corridor kept ready means real tonnes of Ukrainian grain reaching market, farmers getting income, global food chains staying secure.





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