Standing Committee
for Economic and Commercial Cooperation of the
Organization of the Islamic Cooperation

COMCEC

Designing Integrated Multimodal Transport Systems in OIC Member Countries

Final Draft

27th Meeting of the COMCEC Transport and Communications Working Group
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Executive Takeaway

Integrated multimodal transport is not the presence of several modes — it is the **quality of the connections** among gateways, inland nodes, services, customs, data systems, institutions and commercial actors.

Interfaces are decisive

Delays and reliability losses often concentrate at ports, border crossings, modal handovers and inland gateways.

Field cases show workable models

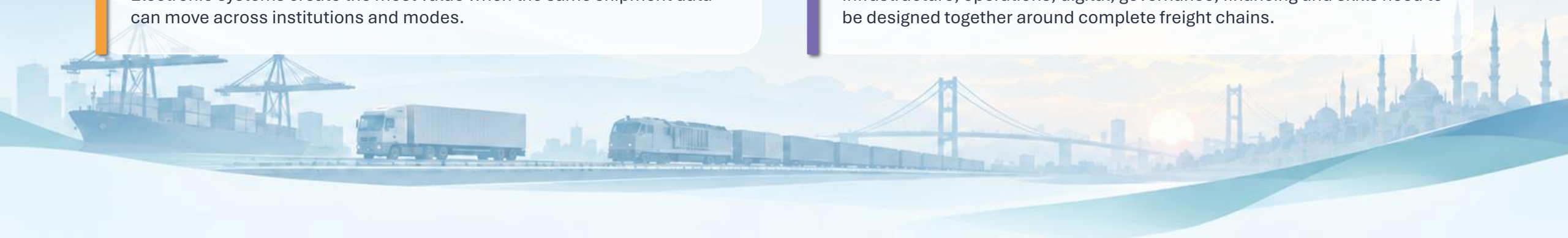
Alat demonstrates strategic multimodal clustering; Egypt's 6th of October Dry Port demonstrates a functional inland gateway linked by scheduled rail.

Digitalization must become interoperability

Electronic systems create the most value when the same shipment data can move across institutions and modes.

Policy must operate as a system

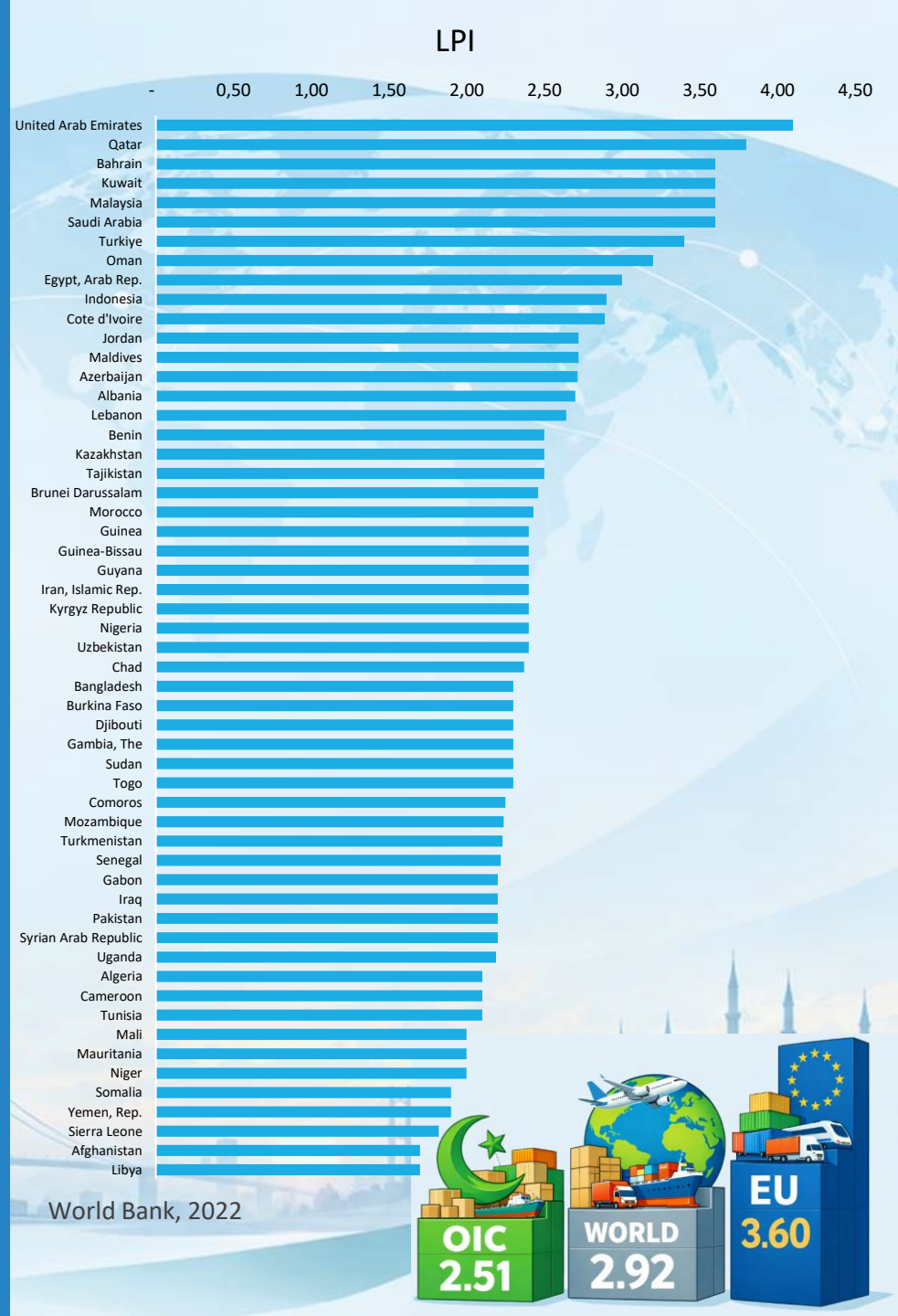
Infrastructure, operations, digital, governance, financing and skills need to be designed together around complete freight chains.



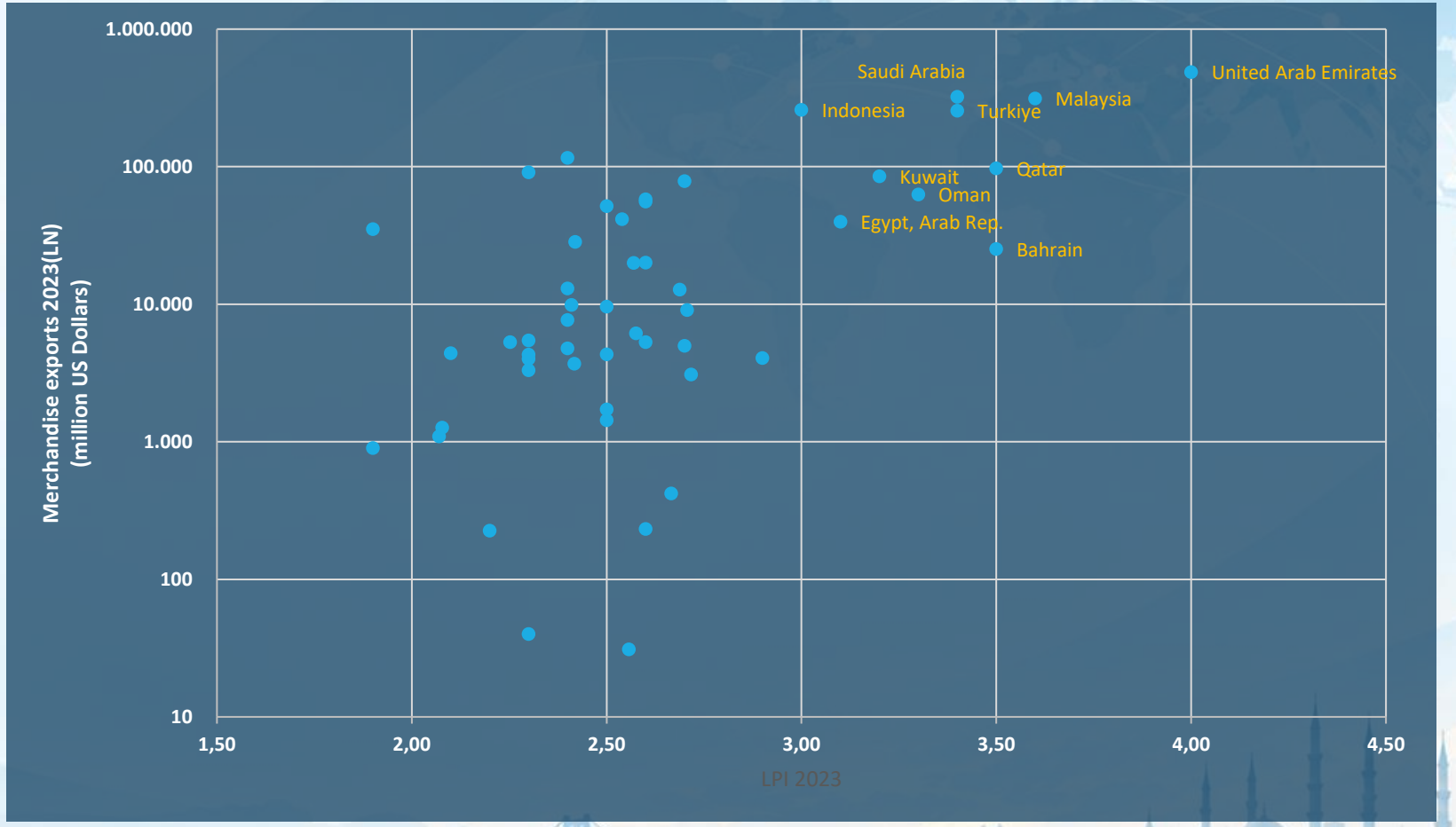
Why Multimodal Transport is Critical for OIC Countries

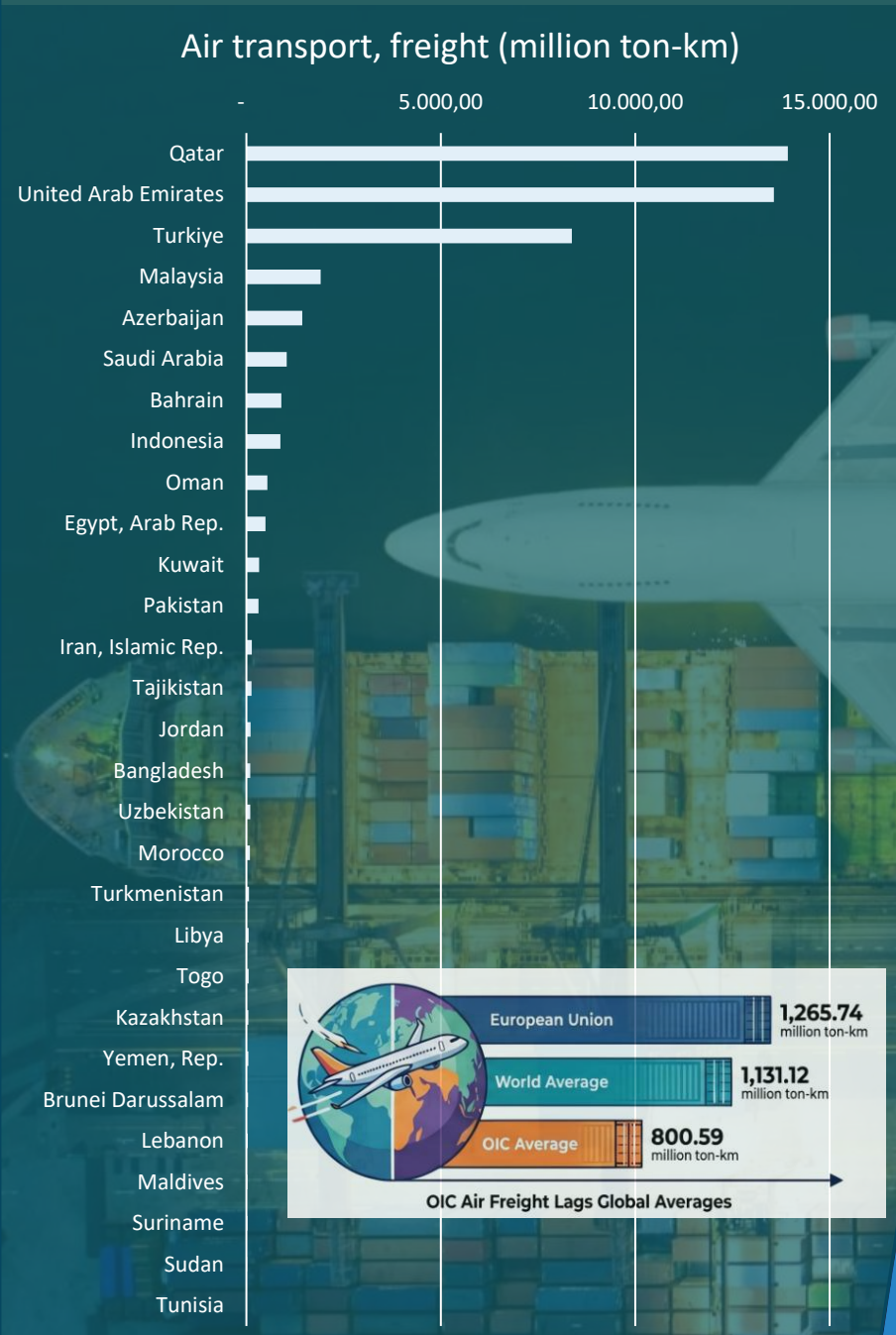
- There is a **significant performance gap**, → highlighting the need for **multimodal development**

- Multimodal Transport
  - Improves **connectivity across regions (Asia–Africa–Europe)**
  - Enables **efficient integration of ports, rail, and road**
  - Reduces **logistics costs and delays**
  - Supports **landlocked member countries**
  - Strengthens participation in **global value chains**



LPI vs Merchandise export





Air Transport

- Enables fast, high-value, and time-sensitive freight movement
- Critical for sectors such as e-commerce
- Complements other modes in multimodal chains:
  - Air + road/rail for last-mile delivery
  - Enhances speed and flexibility of logistics networks
- Supports global market access and integration into supply chains
- Increases reliability in long-distance and urgent shipments
- Limited air freight capacity and infrastructure in OIC Countries

➢ Strengthening air freight is essential to improve speed, connectivity, and competitiveness in multimodal transport systems

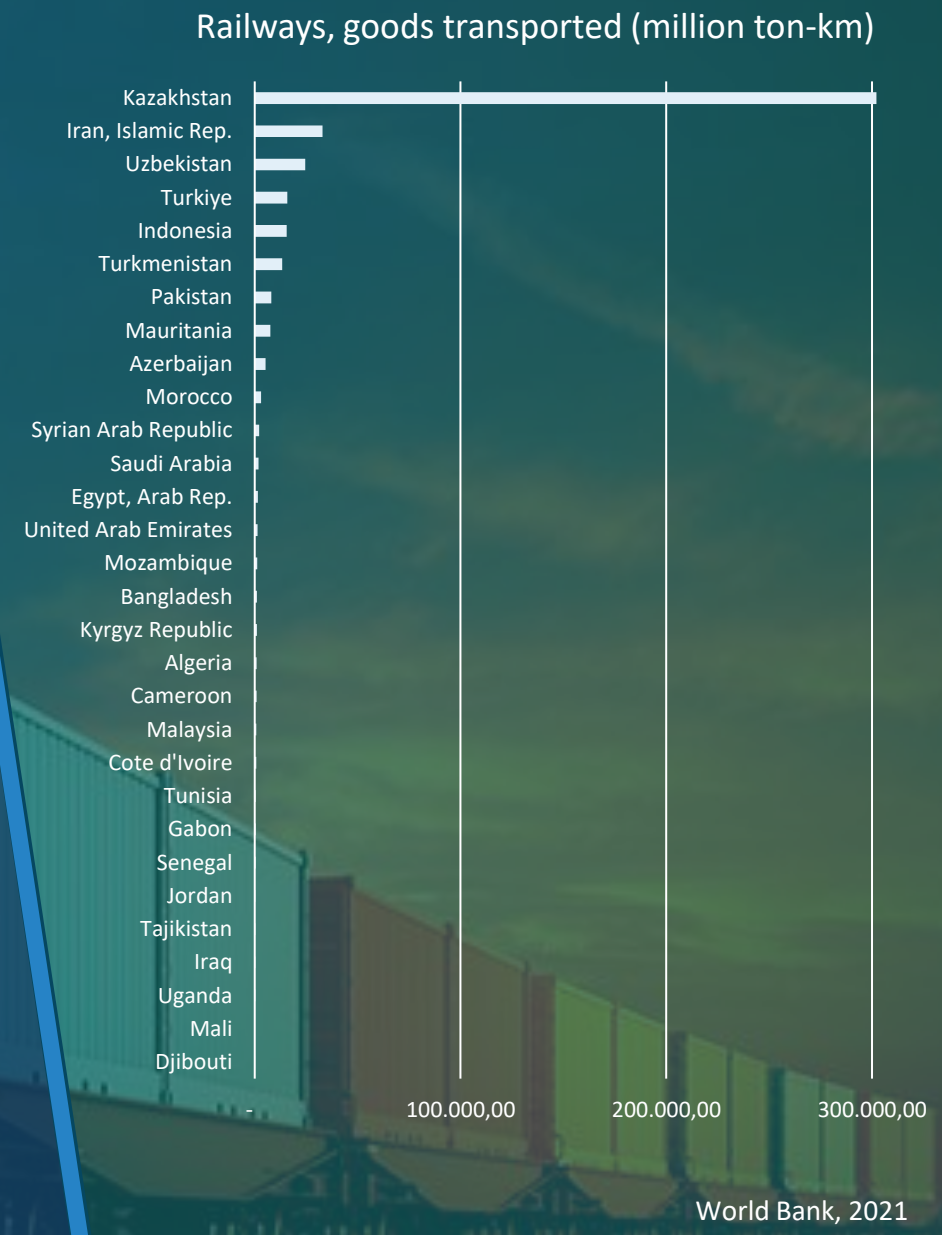
Rail Transport

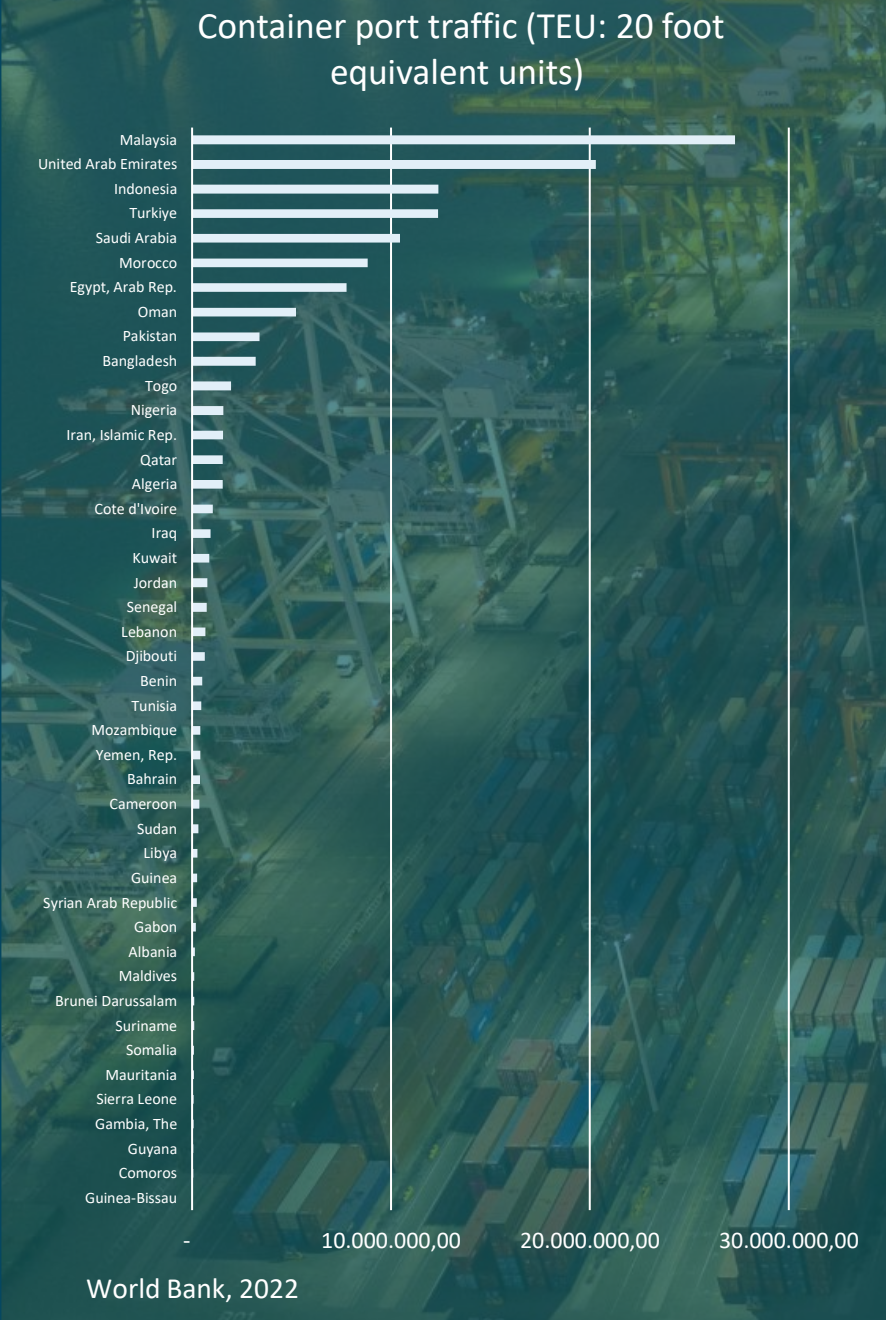
- Enables high-capacity, cost-efficient freight movement over long distances
- Key for linking ports, dry ports, and inland logistics hubs
- Supports multimodal chains:
  - Rail + maritime for bulk and container transport
  - Rail + road for efficient hinterland distribution
- Reduces transport costs, congestion, and emissions
- Improves reliability and corridor efficiency

<u>Key Gap in OIC Countries</u>

- Very limited rail freight utilization across most countries
- Lack of rail infrastructure and intermodal terminals
- Weak integration of rail into logistics networks

➢ Expanding rail freight is critical for scalable, efficient, and sustainable multimodal transport systems





Container Port Traffic

- Measures container flow between land ↔ sea transport
- Expressed in TEU (standard container unit)
- Reflects the scale and efficiency of global freight flows

Key OIC Port Hubs: Based on 2022 data,

- Malaysia: ~27.2 million TEUs (ranked 5th globally).
- UAE: ~20.3 million TEUs (ranked 8th globally).
- Indonesia: ~12.3 million TEUs.
- Turkiye: ~12.3 million TEUs.
- Saudi Arabia: ~10.4 million TEUs.

Impact of Multimodal Transport on Performance

- Reduces port congestion and dwell time
- Improves throughput and capacity utilization
- Lowers logistics costs per unit
- Enhances speed and reliability

OIC Context

- Limited multimodal integration in port systems
- High dependence on road transport
- Need for stronger rail links and dry ports

➢ Multimodal transport is essential to maximize port efficiency and global trade competitiveness

Why Multimodal Transport Matters for OIC Member Countries

- Many Member Countries depend on long-distance corridors, international gateways and cross-border connections.
- Freight efficiency therefore depends on the continuity of road, rail, maritime, inland-waterway and air interfaces — not only on individual network capacity.
- Common constraints: weak modal connectivity, infrastructure bottlenecks, inefficient border processes, institutional fragmentation and gaps in digital information exchange.
- Better integration can reduce logistics inefficiencies, strengthen resilience and improve participation in regional and international trade.

GATEWAYS	ports / airports
CORRIDORS	road / rail / IWW
INLAND NODES	dry ports / hubs
BORDERS	customs / transit
DATA	visibility / documents

The system performs only as well as its interfaces.

Study Objectives & Scope

Overall objective

- Develop a **practical guideline / policy guide** for multimodal transport integration
- Identify **key barriers and best practices** in OIC countries
- Provide **actionable, context-sensitive policy recommendations**

Scope

- Focus on **multimodal freight systems** (road, rail, maritime, air), logistics hubs
- Cover integration dimensions:
  - Physical, operational, digital, institutional, financial
- Address **OIC-specific challenges**
- Include **case studies, performance indicators, and implementation guidance**

Research Design: Multiple Evidence Streams

Conceptual & desk analysis

Literature, COMCEC/OIC materials, multilateral and country sources

Expert survey

Structured assessments of current conditions, barriers and priorities

Field cases

Azerbaijan and Egypt: stakeholder engagement, on-site assessment and operational evidence

OIC desk case

Türkiye

Non-OIC desk cases

Netherlands and Vietnam

Synthesis

Six pillars → guiding principles → recommended practices → policy recommendations

The Six-Pillar Integration Framework

1

Physical Infrastructure & Intermodality

Gateway–corridor–inland-node connectivity

2

Operational Synchronization

Schedules, handovers, terminal and customs coordination

3

Digital & Data Interoperability

Information exchange across systems and actors

4

Institutional & Regulatory Alignment

Clear responsibilities + cross-agency/corridor governance

5

Financial & Commercial Viability

Appropriate investment, risk allocation and commercial logic

6

Human Capacity

Cross-modal, digital, customs and management capabilities

FIELD CASE STUDIES

Azerbaijan & Egypt

Designing Integrated Multimodal Transport Systems in OIC Member Countries

Country profile | Infrastructure | Multimodal system | Institutions | Digitalization | Selected hub

FIELD CASE STUDIES

1	**Country Profile and Economic Context**	Geography • economic/logistics indicators • trade structure • strategic role
2	**Transport Infrastructure Overview**	Road • rail • ports/maritime • air • inland waterways • logistics hubs
3	**Multimodal Transport System**	Corridors • modal split • freight flows • containerization • operating performance
4	**Institutional and Regulatory Framework**	Policy • governance • customs • conventions • cooperation • finance • capacity
5	**Digitalization and Innovation**	Single Window • digital platforms • e-documents • tracking • interoperability
6	**Selected Multimodal Logistics Hub**	Hub role • connectivity • operations • governance • digital systems • KPIs

Field Cases at a Glance

ORIENTATION

AZERBAIJAN

Strategic west-Caspian gateway on the Middle Corridor, where rail–maritime–road interfaces and cross-border coordination determine corridor performance.

Selected hub: Alat / Port of Baku + AFEZ.

Field emphasis: corridor growth, Alat integration, inter-agency coordination, DLP and interface performance.

EGYPT

Dual-coast gateway connecting the Mediterranean and Red Seas, with a large domestic market and an emerging port–rail–dry-port network.

Selected hub: 6th of October Dry Port.

Field emphasis: port–hinterland integration, scheduled rail services, inland customs, PPP model and digital trade systems.

FIELD CASE STUDY

Azerbaijan

West-Caspian gateway where corridor integration depends on the quality of rail–maritime–road, border and digital interfaces.

Azerbaijan — Geographic Position and Strategic Logistics Role

COUNTRY PROFILE AND ECONOMIC CONTEXT

1 PROFILE

Crossroads geography

Azerbaijan sits between Europe, Central Asia, Russia, Iran and Türkiye and serves as the western Caspian gateway of the Middle Corridor.

Corridor intersection

East–West / Middle Corridor flows intersect with North–South connections, creating opportunities for consolidation, transfer and rerouting.

Strategic implication

Its logistics importance is driven more by network position and transit function than by domestic freight volume alone.

Azerbaijan — Selected Economic and Logistics Indicators

COUNTRY PROFILE AND ECONOMIC CONTEXT

10.25m Population 2025	**$75.94bn** GDP 2025	**$48.91bn** Foreign trade turnover 2025	**151.66 Mt** Road freight 2025
16.81 Mt Rail freight 2025	**9.09 Mt** Maritime freight 2025	**2,118 km** Railway network 2025	**150,000 TEU** Port of Baku container capacity current

Azerbaijan — Trade Structure and Growing Transit Role

COUNTRY PROFILE AND ECONOMIC CONTEXT

Economic logic

Hydrocarbons remain important, but policy increasingly links transport/logistics growth with diversification into manufacturing, trade and value-added logistics.

The Alat logistics-industrial cluster combines the Port of Baku, AFEZ, rail/highway links and a planned air-cargo complex.

14.3 Mt
Transit freight
2025

4.7 Mt
Middle Corridor transit
2025

67k TEU
Containerized transit
2025

392
China block trains
2025

+37%
Block-train growth
vs 2024

2.5×
Transit growth
2019→2025

Azerbaijan — Road and Railway Infrastructure

TRANSPORT INFRASTRUCTURE OVERVIEW

Road network

Road freight remains dominant in national tonnage. Major east–west and north–south highways connect production areas, borders, the Port of Baku, railway nodes, airports and AFEZ.

Railway network

The 2,118 km public railway network is central to long-distance corridor freight. The modernized Baku–Tbilisi–Kars railway provides a direct westward rail link and has a reported annual freight capacity of 5 million tonnes.

Azerbaijan — Maritime Gateway, Regional Connectivity and Emerging Air Cargo

TRANSPORT INFRASTRUCTURE OVERVIEW

Port of Baku / Alat

Current nominal capacity: ~15 million tonnes and 150,000 TEU/year. The port is the maritime anchor for trans-Caspian transfers between Caspian shipping and rail/road corridors.

Emerging air-cargo layer

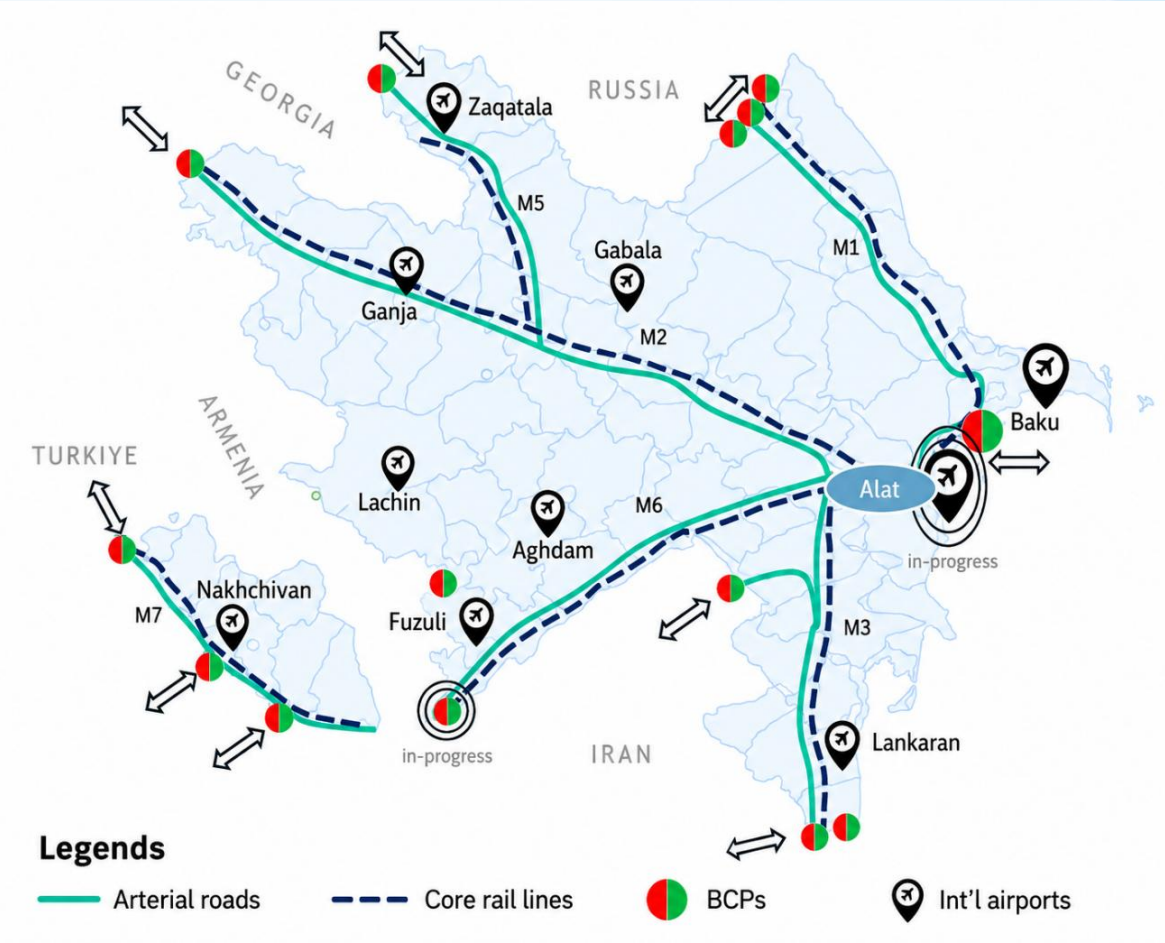
A planned Alat cargo-airport complex is intended to add a fourth mode to the logistics cluster.

Karabakh & Eastern Zangezur

New roads, rail rehabilitation and international airports are being developed as part of wider regional connectivity and corridor diversification.

Azerbaijan — Infrastructure System as a Connected Network

TRANSPORT INFRASTRUCTURE OVERVIEW



Roads

~80,320 km network; domestic distribution and cross-border freight.

Railway / BTK

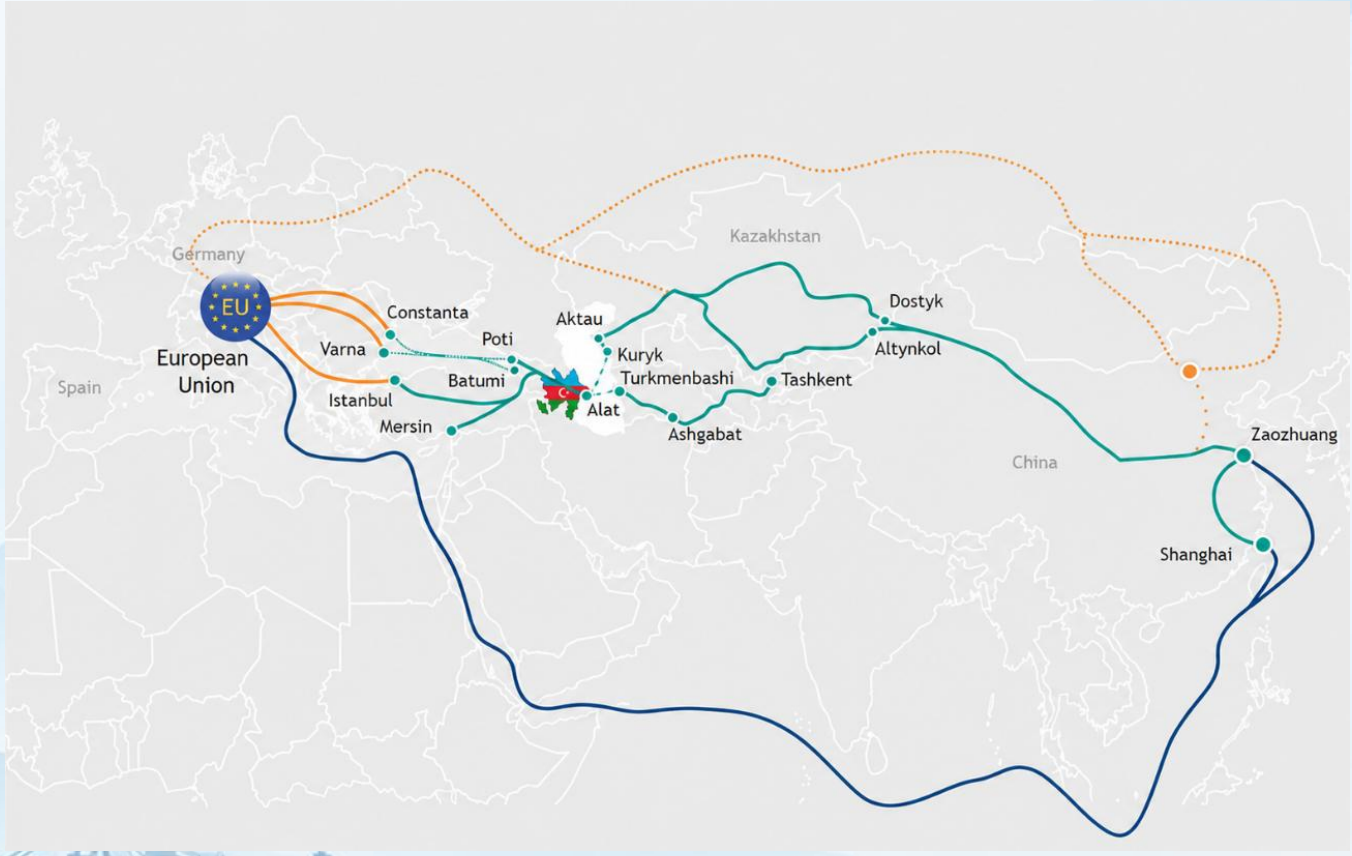
2,118 km public network; BTK provides westward long-distance corridor capacity.

Port + Alat cluster

Caspian maritime interface co-located with rail, highway, logistics and free-zone functions.

Azerbaijan — Existing and Emerging Multimodal Corridors

MULTIMODAL TRANSPORT SYSTEM



East–West / Middle Corridor

Rail + road + Caspian maritime links connect Central Asia/China with Azerbaijan, Georgia, Türkiye and Europe.

North–South Corridor

Rail and road connectivity links Russia–Azerbaijan–Iran, with Astara as the key southern gateway.

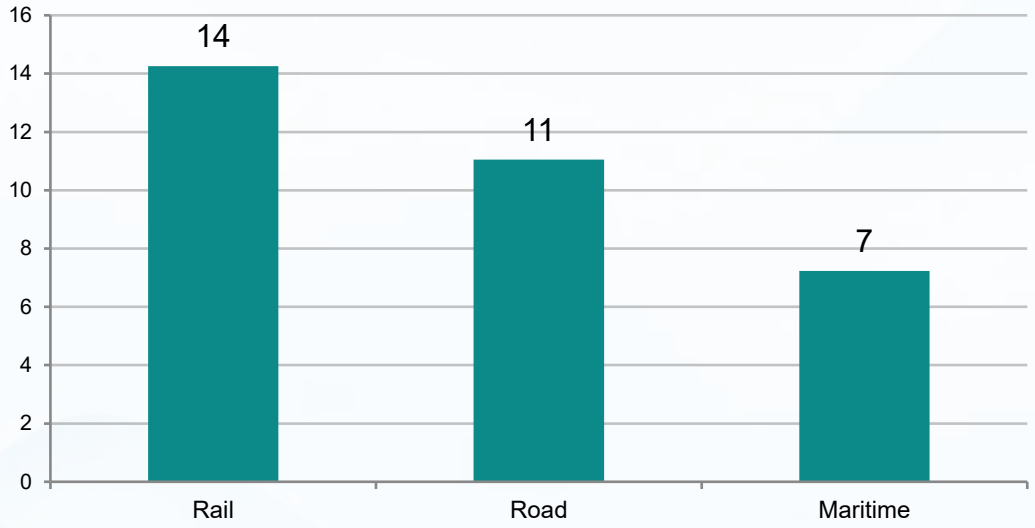
Zangezur Corridor — emerging

Planned road/rail links are intended to diversify east–west connectivity and strengthen links with Nakhchivan and Türkiye. Planned capacities should not be described as current.

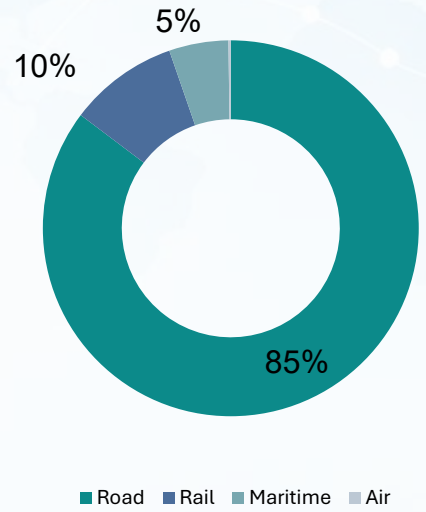
Azerbaijan — Freight Structure and Corridor Volumes

MULTIMODAL TRANSPORT SYSTEM

International corridor cargo by mode (Mt)



Non-pipeline freight modal split, 2025



Important: national freight totals, designated-corridor cargo and transit freight refer to different traffic universes and should not be directly compared.

Azerbaijan — Operational Performance at Multimodal Interfaces

MULTIMODAL TRANSPORT SYSTEM

25 days

Average container yard dwell

2022 historical

10–46 days

Container dwell range

2022 historical

1–4 days

Rail border crossing

historical benchmark

~2.5 days

Baku–Aktau one-way ferry

2022–23 benchmark

What the benchmarks show

Historical World Bank evidence indicates that delays were concentrated at port and border interfaces and could exceed physical line-haul or sailing time. This is why multimodal performance must be measured at handover points, not only by installed capacity.

Interpretation caution

These figures are historical operational benchmarks—not current 2025–2026 performance—because Azerbaijan has since introduced infrastructure upgrades, operational reforms and digitalization initiatives.

Azerbaijan — Corridor-Based Policy and Interagency Coordination

INSTITUTIONAL AND REGULATORY FRAMEWORK

4 INSTITUTIONS

Policy direction

The 2024–2026 transit action plan emphasizes transit capacity, border simplification, intermodality, international coordination and digitalization—shifting policy from mode-centric toward corridor-based management.

Coordinating Council on Transit Freight

Established by Presidential Decree No. 655 (21 October 2015), the Council is a high-level interagency mechanism for harmonizing actions across rail, maritime, port, road, customs and border institutions.

Illustrative membership

1. Ministry of Digital Development & Transport
2. State Customs Committee
3. Ministry of Economy
4. State Border Service
5. Azerbaijan Railways
6. Azerbaijan Caspian Shipping Company

Field insight: many multimodal bottlenecks are institutional interfaces—not missing infrastructure.

Azerbaijan — Customs, Electronic Documents and Corridor Cooperation

INSTITUTIONAL AND REGULATORY FRAMEWORK

4 INSTITUTIONS

Border & customs coordination

The Port of Baku Operations Management Center is an operational coordination mechanism bringing public authorities and logistics operators closer to the cargo flow. Border-capacity upgrades and simplified permit procedures complement physical infrastructure.

Electronic freight documents

Azerbaijan participates in TIR and CMR systems, has introduced e-Permit, has operational eTIR experience and is progressing toward e-CMR and electronic rail documentation.

Regional / corridor governance

Middle Corridor Roadmap, Middle Corridor Multimodal Ltd., bilateral agreements and corridor action plans reflect a shift toward joint bottleneck removal and cross-border coordination rather than domestic planning alone.

Azerbaijan — Digital Logistics Platform and Interoperability Ambition

DIGITALIZATION AND INNOVATION

Digital Logistics Platform (DLP)

Single Window concept integrating import, export, transit, transport and logistics services

Trade Guide

procedures & requirements

Trade Services

applications & documents

Reservation

cargo–carrier marketplace

Reporting

statistics & KPIs

Key challenge

The main value comes from interoperability across rail, port, customs, maritime and corridor-country platforms—not from digitizing each organization separately.

Azerbaijan — Selected Multimodal Logistics Hub: Alat

SELECTED MULTIMODAL LOGISTICS HUB

What Alat combines

Port of Baku + rail + motorway + AFEZ + logistics/container facilities + customs services + developing air-cargo complex.

Why it was selected

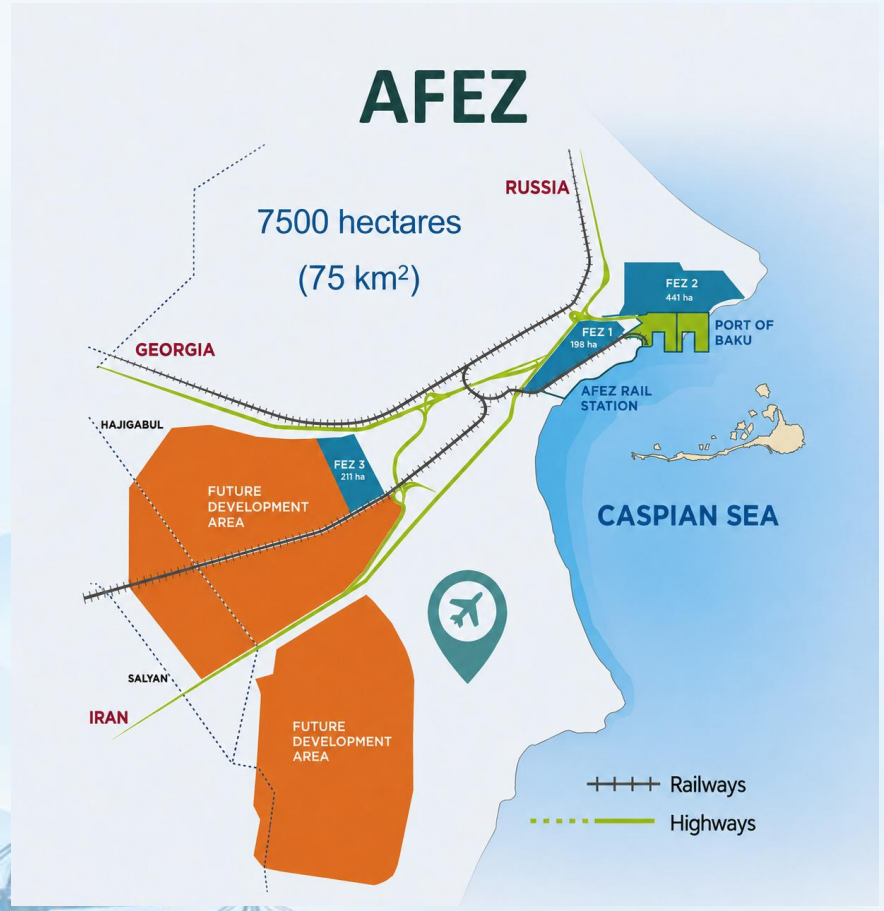
It is the most integrated concentration of transport and logistics functions in Azerbaijan and sits at the intersection of the Middle Corridor and north–south networks.

Strategic proposition

Alat is intended to move beyond simple transit toward manufacturing, logistics, value-added services and export-oriented activity through AFEZ.

Alat — Strategic Role and Intermodal Connectivity

SELECTED MULTIMODAL LOGISTICS HUB



Gateway

Connects Azerbaijan to Caspian maritime services.

Transfer

Enables sea–rail and sea–road intermodal transfers.

Value creation

AFEZ links freight flows with manufacturing and value-added logistics.

Planned air-cargo capability

Alat — Operations, Digital Systems and Two-Level Governance

SELECTED MULTIMODAL LOGISTICS HUB

6 SELECTED HUB

Operational chain

Central Asian cargo crosses the Caspian by vessel/ferry, transfers at Alat, and continues by rail/road through Georgia and Türkiye. Performance depends on vessel schedules, berth allocation, wagon availability, customs, truck appointments and downstream connections.

Digital layer

The Operations Management Center supports day-to-day coordination. The planned DLP is intended to connect cargo documentation, tracking, capacity and service availability; eTIR/eCMR and electronic rail documents can support pre-arrival processing.

Governance layer

National level: Coordinating Council on Transit Freight.

Operational level: Port of Baku + Operations Management Center.

Alat demonstrates the need for two levels of governance—high-level inter-agency coordination and day-to-day operational coordination.

Alat — Capacity, Throughput and the Need for Interface KPIs

SELECTED MULTIMODAL LOGISTICS HUB

15 Mt/yr	150k TEU	107k TEU	71.3%	500k
Current cargo capacity	Current container capacity	Container throughput	Approx. capacity utilization	Planned TEU capacity
current	current	2025	2025	future

Recommended future monitoring should extend beyond throughput:

Vessel turnaround	Container dwell	Vessel discharge → train departure	Truck turnaround / waiting	Customs release time
On-time corridor delivery	Scheduled service frequency	Electronic document share	End-to-end data exchange	CO_2 per tonne-km / modal shift

Azerbaijan — Key Field-Case Findings

FIELD SYNTHESIS

1	**Infrastructure has created strategic corridor capacity**	The remaining performance question is how reliably rail, port, ferry, border and road operations connect.
2	**Alat is more than a port**	Co-location of Port of Baku, AFEZ, rail and road creates a logistics-industrial cluster with value-creation potential.
3	**Interface performance matters**	Historical benchmarks show why dwell, border time, transfer time and reliability must be monitored separately from capacity.
4	**Governance operates at two levels**	National interagency coordination and day-to-day operational coordination are both necessary.
5	**Digitalization is moving toward integration**	DLP, e-documents and port systems can reduce repeated data entry, but cross-system and cross-border interoperability is the real objective.

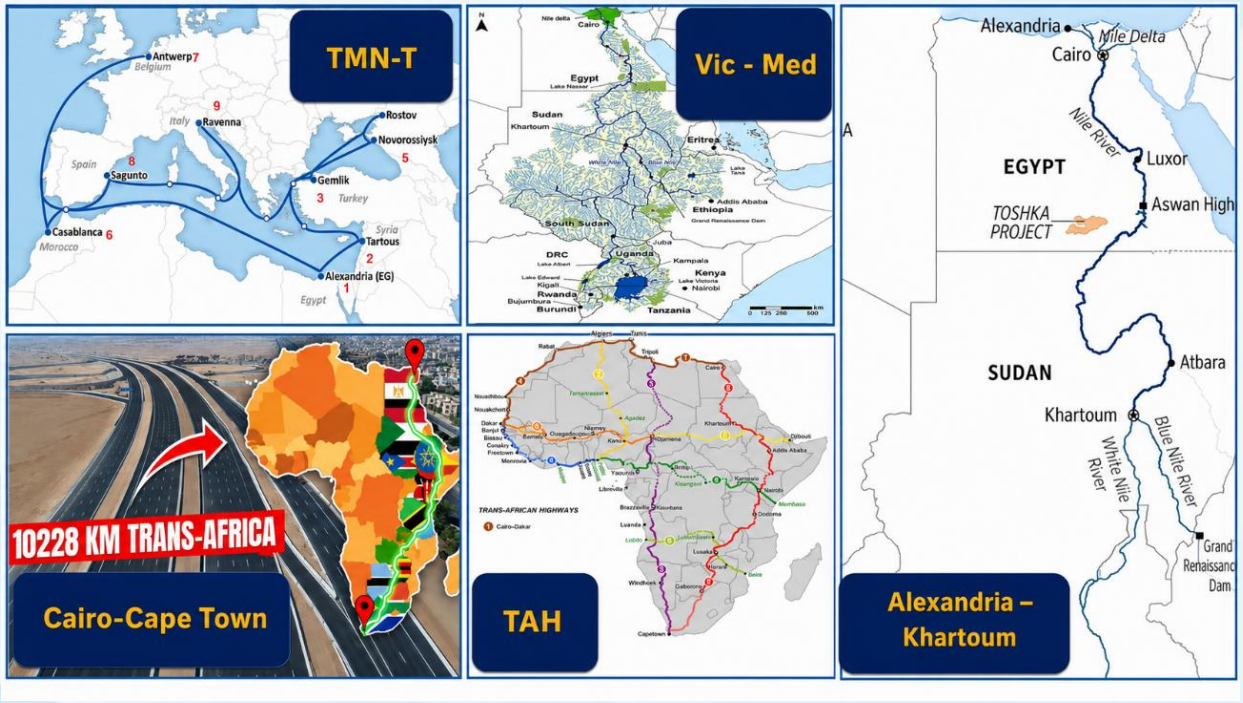
FIELD CASE STUDY

Egypt

Dual-coast gateway where multimodal integration is increasingly organized around port–rail–dry-port corridors, inland customs and digital trade systems.

Egypt — Geographic Position and Economic Context

COUNTRY PROFILE AND ECONOMIC CONTEXT



Three-region junction

Egypt links Africa, Asia and Europe and has direct access to both the Mediterranean and Red Seas.

Suez Canal advantage

The canal places Egypt directly on a major Europe–Asia maritime route while.
The Canal handles approximately 15% of total global trade and about 30% of global container traffic

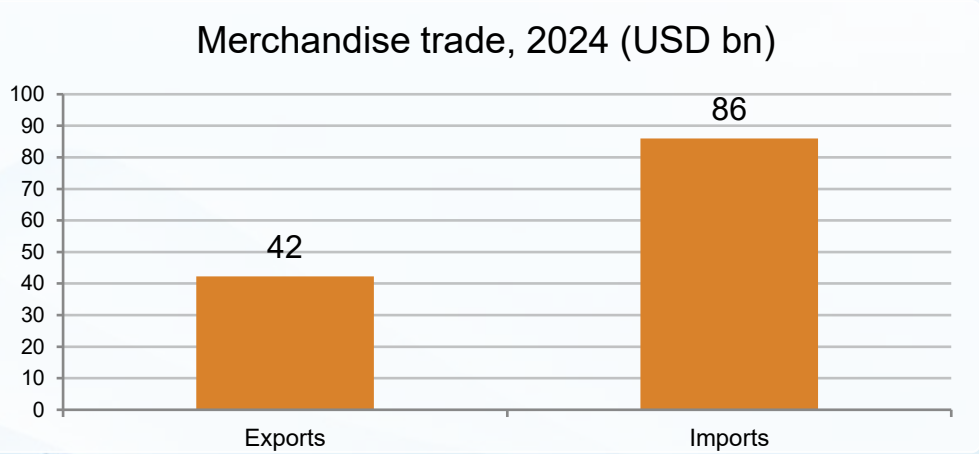
Dual-coast gateway structure

Mediterranean ports and Red Sea ports create the physical basis for land-bridge and port–hinterland logistics corridors.

Egypt — Trade Scale and Logistics Demand

COUNTRY PROFILE AND ECONOMIC CONTEXT

118.4m	$365.3bn	3.1 / 5	$128.23bn
Population	**GDP**	**LPI score**	**Merchandise trade**
2025	2025	2023	2024



Freight implications

- A large domestic market and diversified commodity mix generate demand for containers, bulk, liquid bulk, chilled and general cargo.
- Economic activity is concentrated around Greater Cairo, Alexandria/Nile Delta, 6th of October City, 10th of Ramadan, Ain Sokhna and the Suez Canal Economic Zone.

Egypt — Road and Railway Infrastructure

TRANSPORT INFRASTRUCTURE OVERVIEW

Road network

- ~7,000 km of new/modernized highways and roads form part of a strategic network targeted at ~30,000 km.
- The Regional Ring Road is particularly important for freight access around Greater Cairo.

Railway modernization

- The existing + planned network is expected to reach ~12,000 km, including ~2,000 km of new electric railway.
- Policy targets an increase in rail freight capacity from 4.5 to 13 million tonnes/year.

Egypt — Ports, Inland Waterways and Air Cargo

TRANSPORT INFRASTRUCTURE OVERVIEW

Maritime gateways

Alexandria/El-Dekheila, Damietta, Port Said/East Port Said, Sokhna, Suez, Adabiya and Safaga form a dual-coast port system. National strategy targets 400 Mt and 40m TEU by 2030.

Inland waterways

The Nile and connecting canals provide a potentially low-cost north–south freight axis. The El-Maleh Lock upgrade aims to strengthen the Alexandria–Nile interface.

Air cargo

Air is a small share of freight tonnage but important for high-value and time-sensitive cargo. Cairo is the principal air-cargo hub; national throughput was 338,600 tonnes in 2023.

Egypt — Selected Infrastructure Indicators

TRANSPORT INFRASTRUCTURE OVERVIEW

~30,000 km

Strategic highway / main-road network

target

~12,000 km

Existing + planned railway network

planned total

~2,000 km

New electric railway

planned

13 Mt/yr

Rail freight capacity

target

400 Mt/yr

National seaport capacity

2030 target

40m TEU/yr

National container capacity

2030 target

60%

Share of Egypt's foreign trade cargo
Alexandria–El-Dekheila

current

450k TEU/yr

6th of ODP design capacity

design

Egypt — Integrated Freight Corridors

MULTIMODAL TRANSPORT SYSTEM

Alexandria / El-Dekheila ↔ Greater Cairo

A major port–hinterland axis linking Mediterranean gateways with inland consumption, industry and logistics nodes.

Mediterranean ↔ Red Sea

The El-Dekheila–Sokhna electric-rail concept aims to connect Egypt's two maritime faces through Greater Cairo and logistics zones.

Operating port–rail–dry-port chain

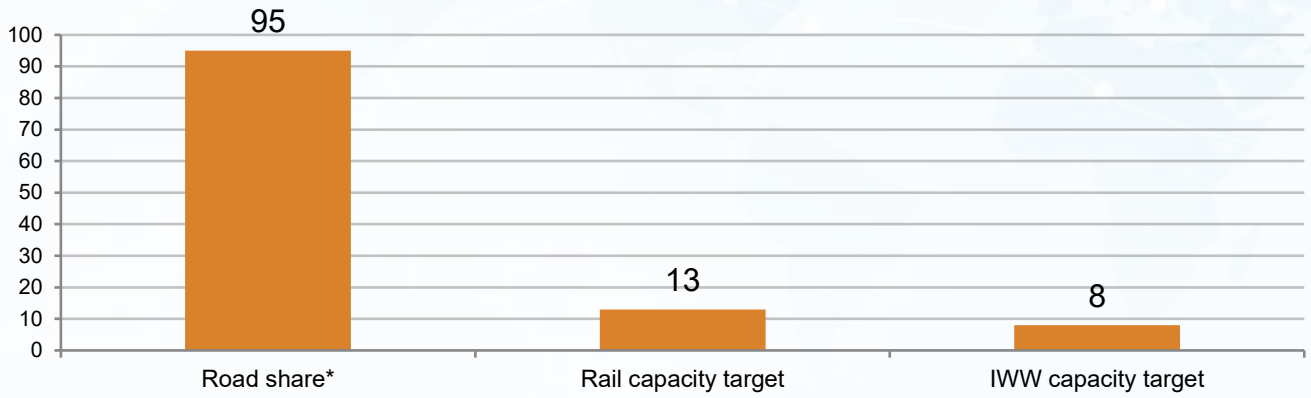
Alexandria/El-Dekheila ↔ 6th of October Dry Port already includes scheduled freight rail services—an operational example rather than only planned connectivity.

Egypt — Freight Flow Structure and Modal Balance

MULTIMODAL TRANSPORT SYSTEM

Freight geography

- Greater Cairo is the main inland consumption/manufacturing/distribution center.
- Alexandria/Nile Delta and industrial zones such as 6th of October and 10th of Ramadan generate strong flows to Mediterranean and Red Sea gateways.
- Road remains the dominant inland mode; rail and inland waterways are policy priorities for a more balanced system.



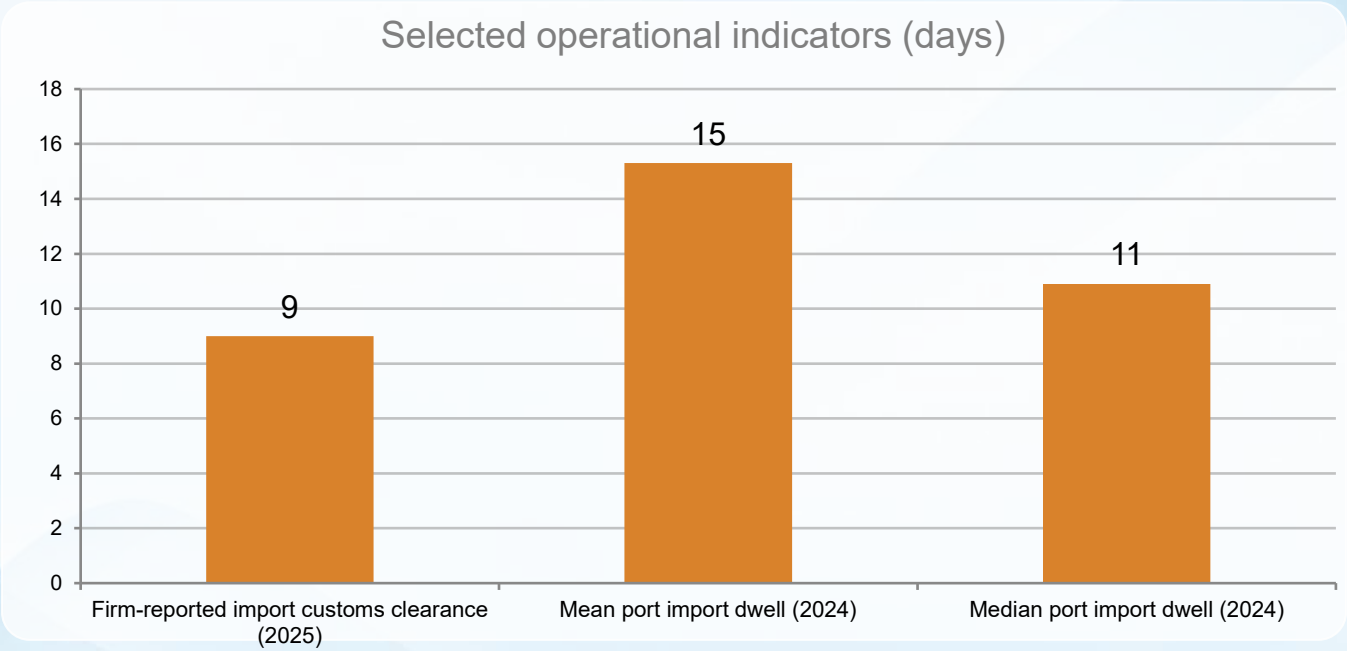
* >95% road share is a historical national modal benchmark in the report; rail/IWW figures are annual capacity targets and are not directly comparable shares.

Most concrete operating chain

Alexandria/El-Dekheila → scheduled block train → 6th of October Dry Port → customs/storage/road distribution near Greater Cairo.

Egypt — Operational Performance and Remaining Bottlenecks

MULTIMODAL TRANSPORT SYSTEM



What the indicators mean

Customs-clearance time and container dwell measure different stages of the logistics chain and should not be merged into one generic “delay” measure.

Field interpretation

Long dwell can reflect storage, documentation, cargo release, terminal coordination and inland transport scheduling—not customs administration alone.

Operational response

Inland customs + scheduled rail + digital coordination can shift work away from constrained coastal terminals.

Egypt — National Strategy and Cross-Modal Governance

INSTITUTIONAL AND REGULATORY FRAMEWORK

4 INSTITUTIONS

National Transport Strategy 2030

Policy is shifting from separate modal expansion toward integrated door-to-door multimodal chains connecting seaports, inland routes, dry ports, logistics centers and production/consumption zones.

Eight integrated logistics corridors

The Ministry of Transport is developing corridors that connect industrial, agricultural and mineral production zones with seaports via highways, railways, dry ports and logistics zones.

Supreme Committee for Transport and Logistics

Chaired by the Prime Minister, the committee coordinates interested public bodies and supports integrated planning across seaports, railways, roads and river transport.

This provides a high-level cross-sector coordination layer above specialized modal authorities.

Egypt — Customs Modernization, Public–Private Roles and Regional Frameworks

INSTITUTIONAL AND REGULATORY FRAMEWORK

Customs & trade facilitation

Nafeza National Single Window and ACI support electronic submission, pre-arrival processing and risk assessment. At ODP, bonded containers can move inland for inspection and clearance.

Public–private roles

The Ministry of Transport sets policy; specialized authorities manage rail, ports, dry ports and river transport. Private participation is important in terminal operation, logistics and finance—ODP is a key PPP example.

Regional / international layer

COMESA, AfCFTA and Arab Mashreq road/rail agreements provide complementary trade, transit and technical-cooperation frameworks relevant to cross-border multimodal connectivity.

Egypt — NAFEZA National Single Window & ACI

DIGITALIZATION AND INNOVATION

What NAFEZA does

Egypt's National Single Window for Foreign Trade provides a common electronic interface for trade-related procedures across Egyptian ports.

Why it matters for freight

- electronic submission of documents
- earlier customs risk assessment
- one shipment identifier through the import process
- foundation for linking ports, customs and inland logistics

Electronic submission

Importers and commercial stakeholders submit documents and transactions through one digital interface.

ACI before loading

Shipment information is submitted before cargo is loaded at the foreign port of origin through Advance Cargo Information.

ACID + risk assessment

The Advance Cargo Information Declaration (ACID) number links shipment data and supports advance customs processing and risk assessment.

Port + inland chain

Nafeza/ACI connects with port-level digital services and ODP electronic customs/OCR gate operations.

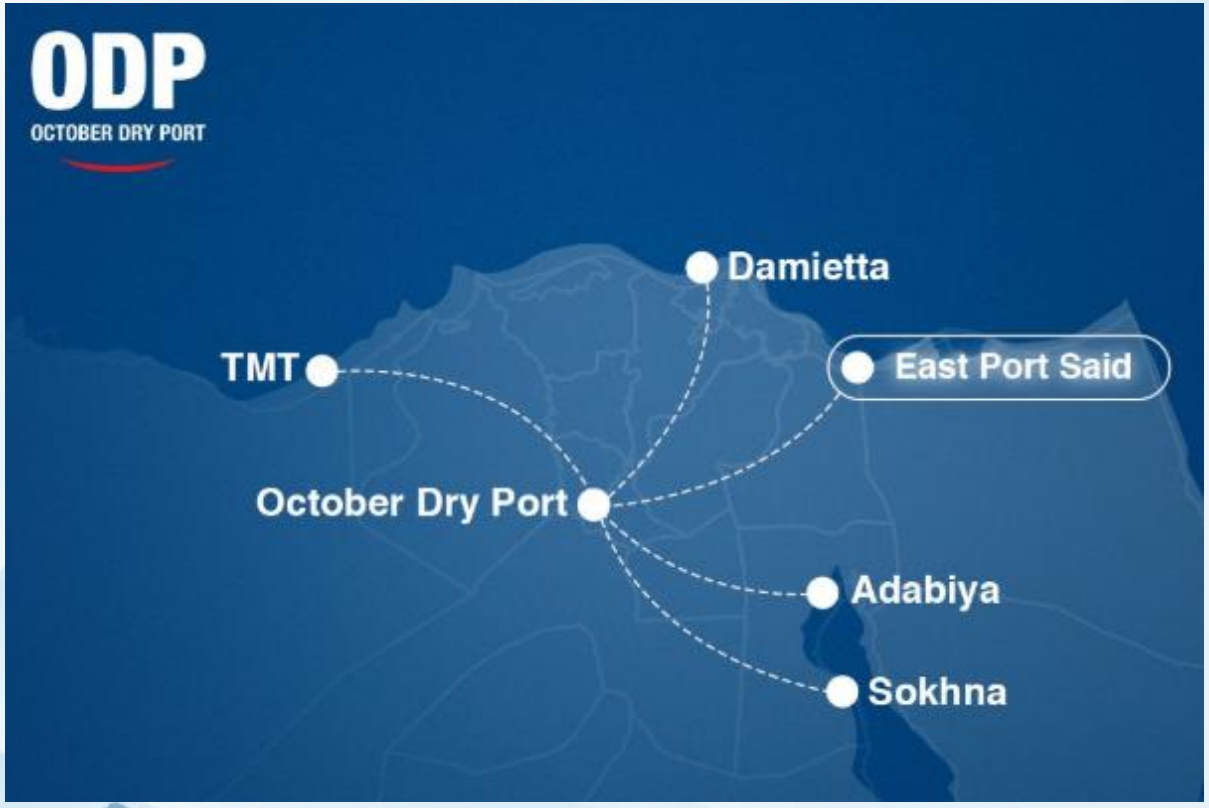
International transit

Egypt has the legal basis for TIR/eTIR and is progressing toward operational implementation; e-CMR is not yet established.

Egypt — Selected Multimodal Logistics Hub: 6th of October Dry Port

SELECTED MULTIMODAL LOGISTICS HUB

6 SELECTED HUB



Why selected

Egypt's first dry port integrates rail, road, customs, container handling and inland logistics within one facility near Greater Cairo.

Functional role

It operates as an inland extension of multiple seaports, decentralizing customs/container functions and bringing logistics closer to industrial and consumption centers.

Financing model

Developed under a 30-year PPP involving GALDP, Elsewedy Electric and CMA CGM.

6th of October Dry Port — Strategic Connectivity and Physical Capacity

SELECTED MULTIMODAL LOGISTICS HUB

Destination from ODP to Sea Ports	Km
Ain El Sokhna	Avg. 190 Km
Suez	Avg. 200 Km
Alexandria / El Dekheila	Avg. 200 Km
Damietta	Avg. 270 Km
Port Said	Avg. 280 Km

400,000 m²

Customs-bonded area

current

450k TEU

Designed annual capacity

design

5 tracks

Railway infrastructure

4,300 m total

5,050 TEU

Container yard

current

4/day

Alexandria/El-Dekheila trains

scheduled

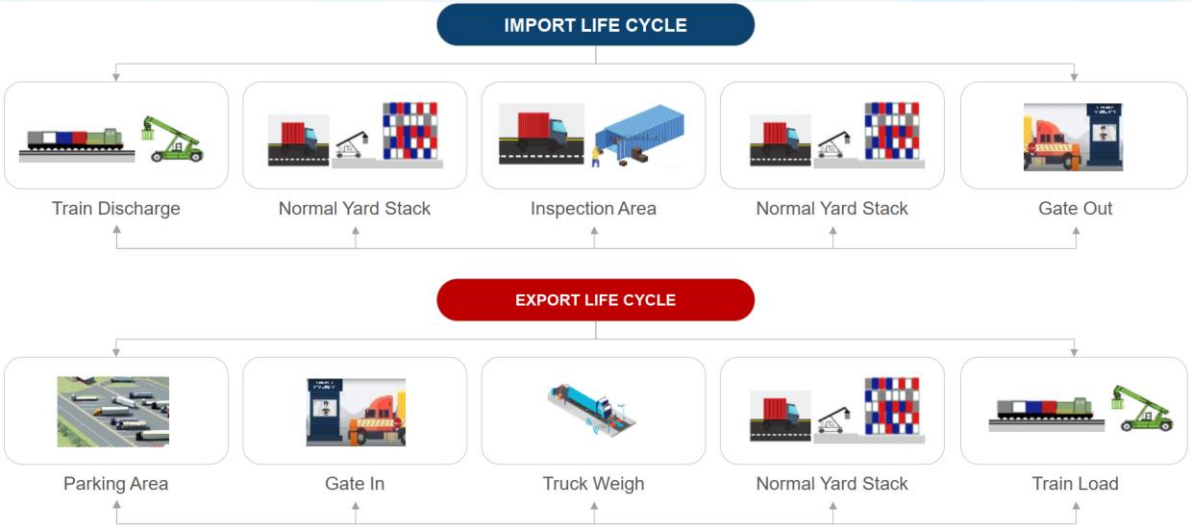
24/7

Truck gates

OCR automated

6th of October Dry Port — Operating Model and Freight Flows

SELECTED MULTIMODAL LOGISTICS HUB



Import cycle

Train arrives → containers discharged to yard → customs/inspection where required → returned to yard → released through truck gate for inland distribution.

Export cycle

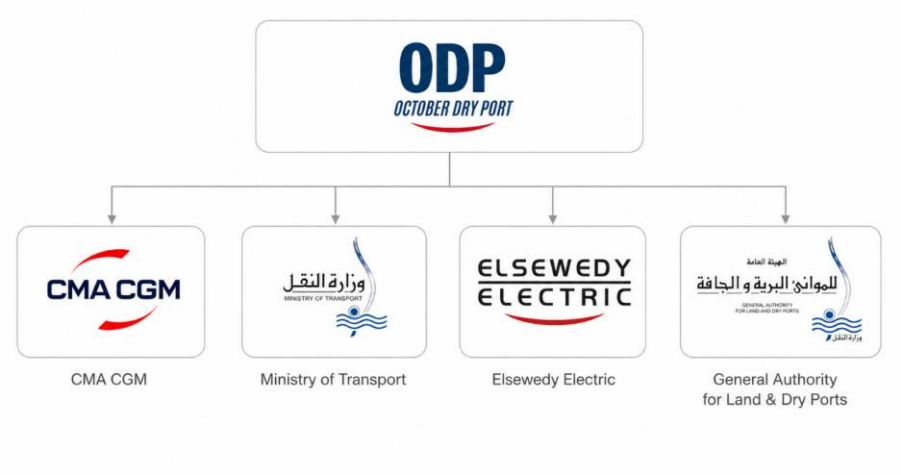
Truck arrives → gate/weighing → storage yard → containers assembled → loaded to scheduled freight trains for maritime ports.

Why the model matters

Customs, storage, consolidation and cargo preparation can occur inland rather than occupying scarce space at coastal gateways.

6th of October Dry Port — Digital Operations, Governance and PPP

SELECTED MULTIMODAL LOGISTICS HUB



Digital operations

OCR truck gates automate vehicle/container identification. Customs functions connect with NAFEZA.

PPP governance

GALDP provides public oversight; Elsewedy Electric and CMA CGM bring infrastructure/logistics expertise under a 30-year arrangement.

Multi-stakeholder coordination

Operational performance depends on coordination among Ministry of Transport, GALDP, Customs, Egyptian National Railways, inspection agencies, maritime ports, shipping lines, freight forwarders, truckers and cargo owners.

6th of October Dry Port — Selected Performance / Capacity Indicators

SELECTED MULTIMODAL LOGISTICS HUB

6 SELECTED HUB

450k TEU **Designed annual throughput** capacity	**5,050 TEU** **Container yard** capacity	**~4,300 m** **Total railway track** in-terminal	**4/day** **Alexandria / El-Dekheila block trains** scheduled
120 **Reefer plugs** current	**14,600 m²** **Bonded CFS warehouse** current	**3 + 3** **OCR gate lanes** entry + exit	**30 years** **PPP term** contract

Egypt — Key Field-Case Findings

FIELD SYNTHESIS

1	**Corridor strategy is replacing isolated modal expansion**	Ports, rail, roads, dry ports and logistics zones are increasingly planned as connected freight chains.
2	**6th of October Dry Port is the strongest operating example**	Scheduled rail + inland customs + road distribution turn physical connectivity into an actual multimodal service.
3	**Inland customs can relieve gateway concentration**	Selected inspection, storage and release functions can move closer to inland production and consumption areas.
4	**Digital building blocks are substantial**	Nafeza/ACI, port systems and ODP automation are in place; the next challenge is end-to-end interoperability.
5	**PPP and governance design matter**	The dry-port model combines public oversight, customs/regulatory functions and private investment/operations.

DESK-BASED CASE STUDIES

Türkiye • Netherlands • Vietnam

Türkiye

Additional desk-based OIC case

Shows how large maritime gateways require stronger last-mile access, rail interfaces and digital-system interoperability.

Netherlands

Desk-based non-OIC case

Shows mature port–rail–barge integration, corridor governance and stakeholder-wide digital data exchange.

Vietnam

Desk-based non-OIC case

Shows high-volume logistics growth, but also the risk that ICDs remain road-dependent without rail/barge integration.

Türkiye

DESK-BASED CASE STUDY

OIC CASE

85%	553.3 Mt	14.0m TEU	12 → 25	660 km
Road freight share	**Port cargo handled**	**Port container throughput**	**Logistics centres**	**Eastern Middle Corridor rail**
2025	2025	2025	operational → planned	upgrade project

What the case shows

- High-capacity maritime gateways, road-dominated inland freight and an expanding rail/logistics-centre network.
- The MIP Gate Project separated port truck traffic from urban traffic, showing the importance of terminal access and first-/last-mile design.
- Eastern and western corridor upgrades aim to strengthen Türkiye's role between the Middle Corridor and European rail networks.
- Single Window, BİLGE, NCTS, Liman Tek Pencere and U-ETDS form a strong digital base, but the main challenge is secure exchange across systems.

Lessons learned

- Port expansion should be synchronized with access roads, rail services and logistics-centre functions.
- A long concession can support successive investment cycles, but commercial success still requires performance monitoring.
- Digital systems should be linked into an interoperable freight-data chain instead of operating as separate platforms.
- Middle Corridor performance depends on cooperation among corridor countries, not only domestic infrastructure capacity.

KEY MESSAGE Türkiye demonstrates that high gateway capacity becomes multimodal performance only when terminal access, rail interfaces, customs/data systems and corridor cooperation are managed together.

Netherlands

DESK-BASED CASE STUDY

NON-OIC

13.8m TEU
Rotterdam throughput
2024

577 Mt
Maritime freight
2024

>40
Inland terminals
barge/rail links

331.5 Mt
Inland waterway freight
2024

7,200+
Portbase organizations
34,000 users

What the case shows

- The Netherlands demonstrates a mature national multimodal freight system across maritime, road, rail, inland waterways, air cargo, pipelines and inland hubs.
- Digital coordination through Portbase, NLIP, iSHARE and Nextlogic supports pre-arrival, release and hinterland movement across actors.
- Topcorridors links public authorities, ports, infrastructure managers and private operators around corridor performance.

Lessons learned

- Mature multimodality uses multiple inland modes where geography supports them: road, rail and barge are complementary.
- Digitalization should coordinate terminal slots, cargo release and inland dispatch—not only automate paperwork.
- Inland terminals reduce deep-sea port pressure when they offer customs, storage, empty-container and scheduled shuttle functions.

KEY MESSAGE The Netherlands shows that a port becomes a system when inland terminals, scheduled hinterland modes, digital data governance and corridor institutions operate as one network.

Vietnam

DESK-BASED CASE STUDY

NON-OIC

34.3m TEU	19.8%	75.1%	30–35%	70%
National container throughput	**Inland waterway share**	**Road freight share**	**ICD demand target**	**Workforce training target**
2025	2025	2025	import/export cargo	2025–2035

What the case shows

- Vietnam's system is shaped by fast trade growth, high seaport container volumes and a strong southern port–ICD–barge geography.
- Road remains dominant, but inland waterways carry a meaningful freight share and can support port-hinterland integration where schedules and access are reliable.
- VASSCM and Single Window initiatives improved documentation and customs processing, but integration remains uneven across actors.

Lessons learned

- High seaport throughput does not automatically create integrated multimodal chains.
- High container growth increases the need for gateway access, corridor planning and digital coordination.
- ICDs must be connected by reliable rail or barge services; otherwise they become additional road-based storage points.
- Fragmented responsibilities can weaken multimodal performance even where port capacity is strong.
- Workforce and digital targets should be planned with infrastructure so that operators can actually use new systems.

KEY MESSAGE Vietnam demonstrates that rapid gateway growth must be matched by inland-terminal connectivity, data interoperability, governance simplification and trained logistics personnel.

Thank You

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