

Designing Integrated Multimodal Transport Systems in OIC Member Countries

Survey Methodology and Key Findings



Survey Presentation Flow



Current situation → gaps → priorities → best practices → implications

Objective of the Survey

From expert insight to actionable multimodal freight policy

Main objective

Generate expert-based evidence on multimodal freight transport

- Current conditions
- Major constraints
- Development priorities
- Stakeholder perspectives



Survey Methodology

Survey design, sampling approach, and questionnaire structure.

1 Expert-oriented survey

Professionals with relevant transport and logistics knowledge

2 Purposive sampling

Targeted expert selection rather than random sampling

3 Online survey – Survey Monkey

Structured online administration

4 5-point rating & Likert scales

Assessment of conditions and agreement

5 Categorical readiness

Institutional and policy readiness questions

6 Top-3 multiple-response questions

Priorities, technologies, and barriers

7 Open-ended best practice

Concrete examples from respondents

8 73 valid respondents

Final expert sample

9 16 countries represented

Cross-country OIC perspective

Respondent Profile

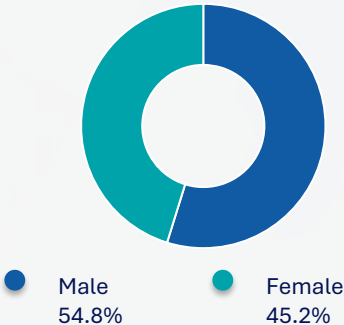
73 valid respondents

16 countries

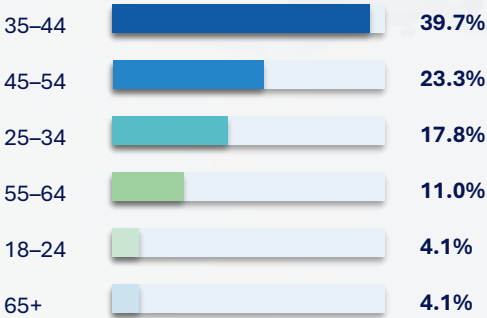
Country Group Distribution



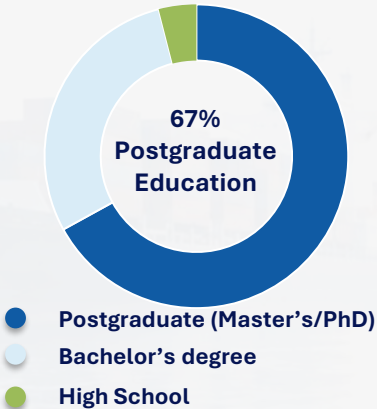
Gender



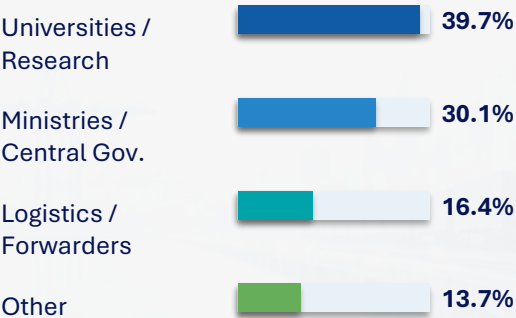
Age Distribution



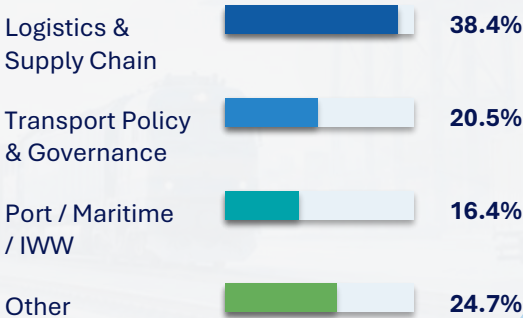
Education



Affiliation



Expertise



Position / Experience



Current Situation of Freight Transport Modes

Average score (1 = Very Low, 5 = Very High)



Key Takeaway

Maritime freight transport has the highest average score (4.00), followed by road (3.93) and air (3.79). Rail (2.74) and inland waterways (2.39) are notably weaker. Overall multimodal integration remains moderate (3.28).

Level of Agreement with Statements on Multimodal Freight Transport Conditions

Perceived Challenges

Significant regional disparities exist in access to multimodal freight infrastructure



There is a lack of up-to-date data and analysis for multimodal transport planning



Operational Conditions

Real-time tracking and tracing of multimodal freight shipments is available and reliable



Transit times for multimodal freight shipments are predictable and consistent



Customs clearance procedures for multimodal freight shipments are fast and predictable



Key Takeaway Regional disparities and data gaps are notable concerns, while customs clearance is the weakest operational condition.

Current Status of Integrated Multimodal Freight Transport

Assessment of the six integration dimensions.



Key Takeaways

- Human Capacity is the strongest dimension (3.47).
- Financial & Commercial Viability is the weakest dimension (2.90).
- The remaining dimensions cluster around moderate levels (3.10–3.21).



Key Takeaway

Human capacity is a relative strength; financial and commercial viability represents the clearest gap.

Logistics Hub Development and Performance

Scale: 1 = Very Low, 5 = Very High.

Major logistics hubs are strategically located and well connected



Major logistics hubs improve hinterland connectivity and reduce congestion and delays



Operations and cargo flows are effectively coordinated within major logistics hubs



Digital systems support data exchange and cargo visibility

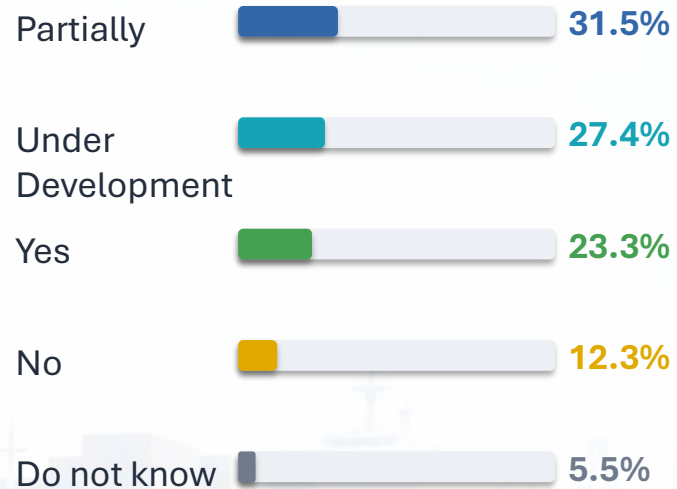


Key Takeaway

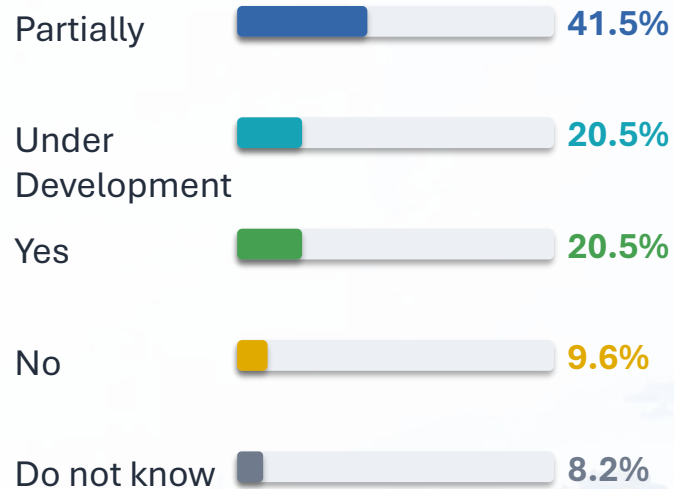
Logistics hubs are generally viewed positively, especially for connectivity and hinterland access, while digital integration remains the weakest—though still moderate—dimension.

Institutional and Policy Readiness

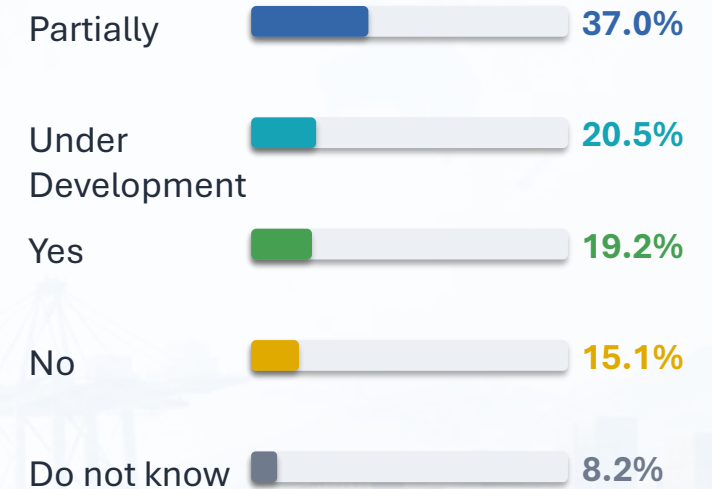
National multimodal freight transport strategy or policy framework



Dedicated coordination body or mechanism for multimodal freight transport



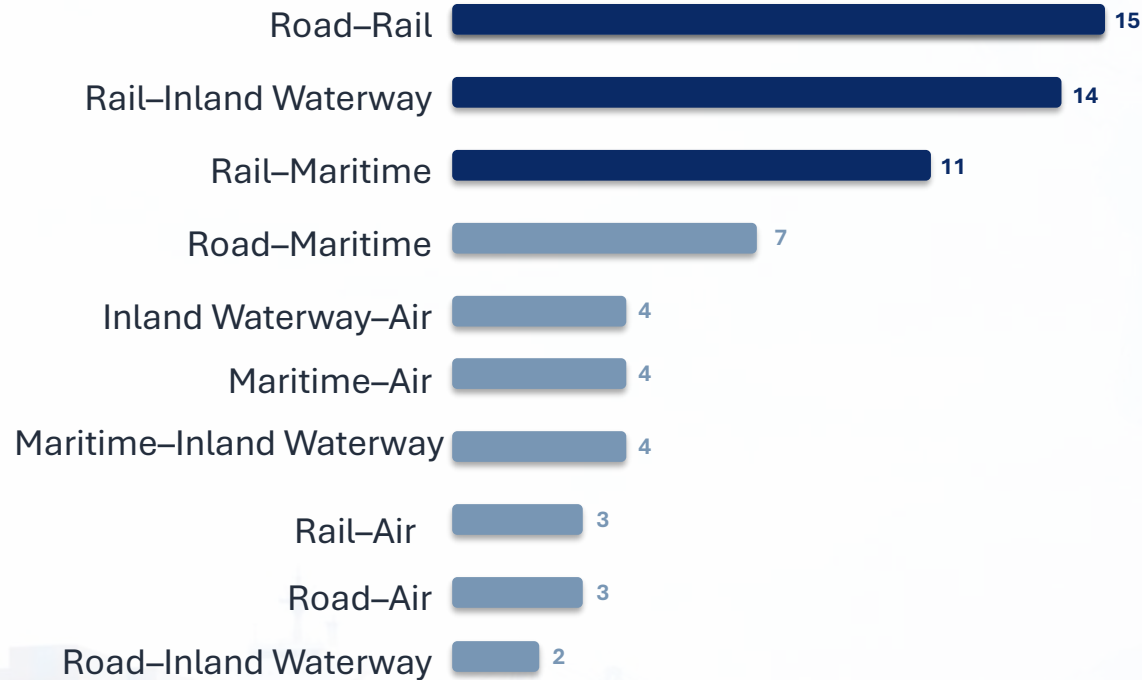
National digital or data-sharing framework for freight transport



Key Takeaway

Across all three areas, “Partially” and “Under Development” responses dominate, indicating that readiness is progressing but remains incomplete.

Transport Mode Combinations Facing the Greatest Challenges in Multimodal Integration

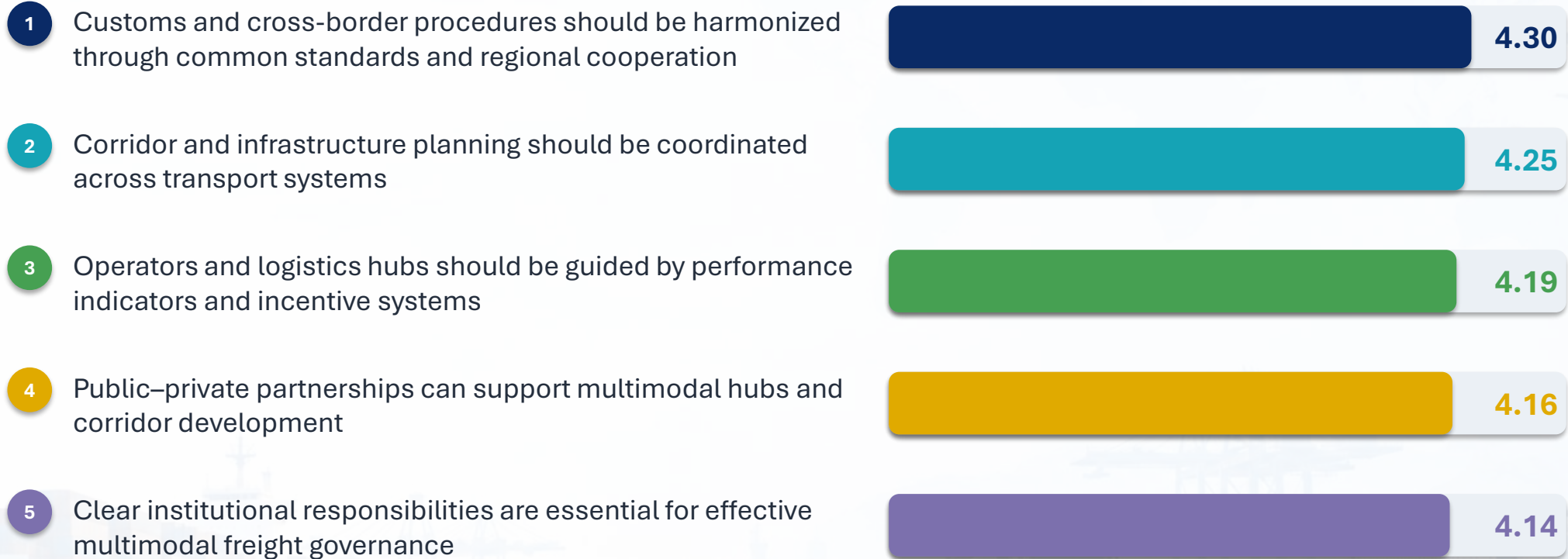


Key Takeaways

- Rail is involved in all three of the most challenging transport-mode combinations.
- Inland waterways also appear frequently among the challenging combinations.
- The key issue is often the interface between modes rather than the performance of a single mode.
- Respondents could select up to two combinations.

Policy and Governance

Scale: 1 = Strongly Disagree, 5 = Strongly Agree.

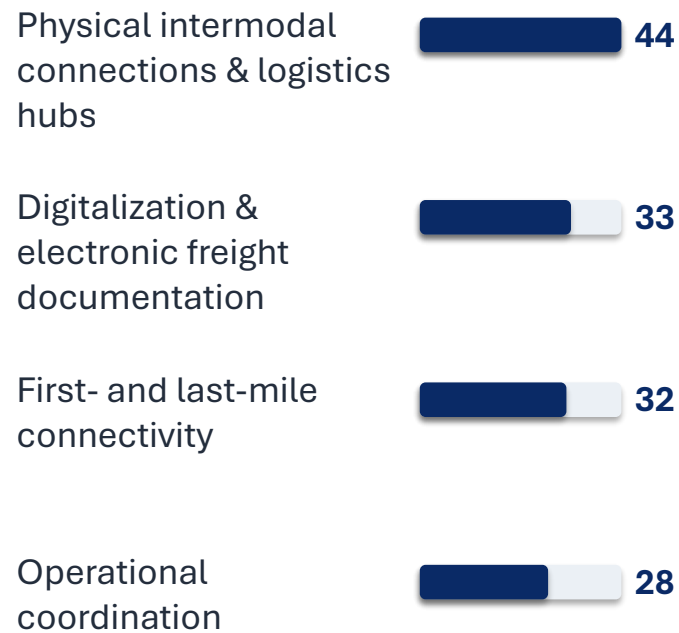


✓ Key Takeaway

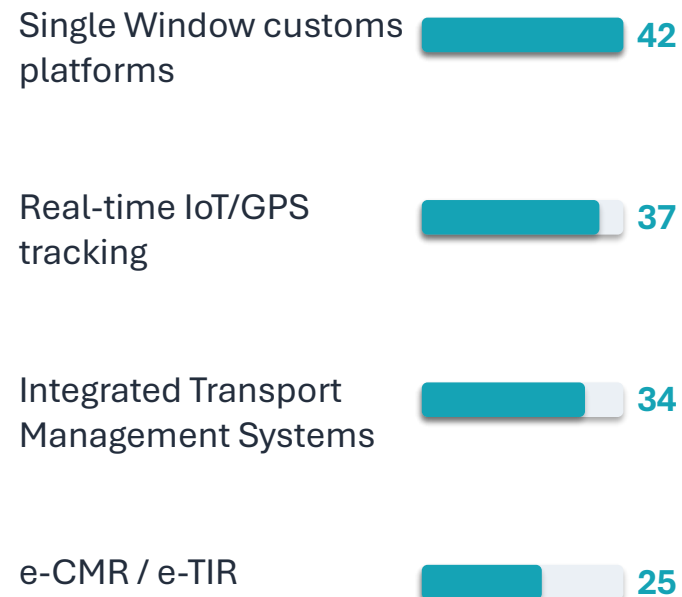
All items score above 4.0, indicating strong consensus around coordinated planning, harmonized cross-border procedures, performance management, and clear governance roles.

Strategic Priorities and Barriers

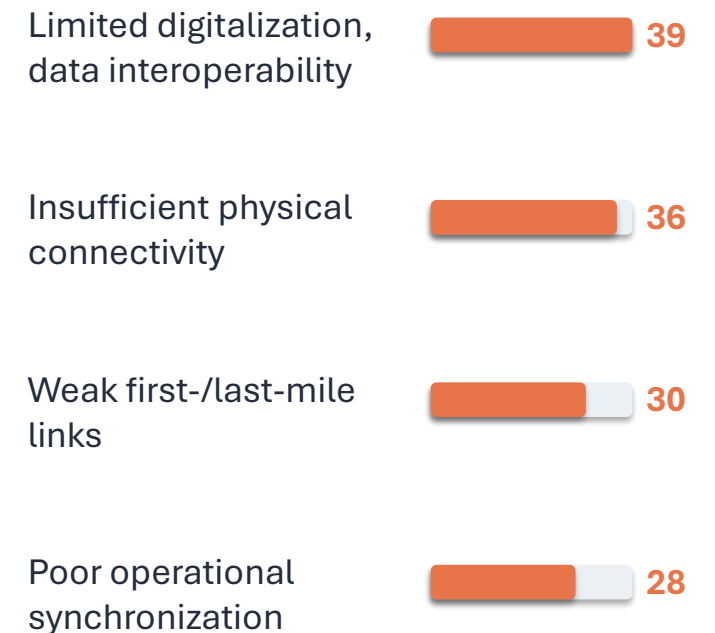
Top Policy Priorities



Top Technologies & Practices



Most Critical Barriers



Alignment across findings:

Digital gaps → Single Window / tracking / e-documentation | Physical gaps → intermodal hubs | Operational gaps → integrated TMS + coordination

Open-Ended Best Practices

Most frequently cited examples and common themes

Most Frequently Cited Examples



Other Recurring Examples

- ☐ TITR / Middle Corridor
- ☐ Betuweroute Freight Railway
- ☐ Alameda Corridor
- ☐ Port of Antwerp-Bruges
- ☐ Dubai Logistics Corridor
- ☐ 10th of Ramadan Dry Port
- ☐ Oman Port Community System

Common Best-Practice Themes

Port and logistics hub integration

Rail–port and multimodal corridor connectivity

Dry ports and inland logistics hubs

Digital platforms, Single Window, and data sharing

Survey Results — What We Learned

From expert evidence to an implementation agenda for integrated multimodal freight systems

Key survey signals

3.28 integration score

2.90 weakest dimension

2.99 customs clarity

44 top priority votes

39 digital barrier votes

42 Single Window votes

Core message

The survey points to one clear result: OIC multimodal systems need to move from partial readiness to connected, data-enabled, corridor-based implementation.

1

Fix the interfaces, not only the modes

Rail appears in the three most challenging mode combinations; the priority is port–rail, road–rail and rail–IWW coordination.

2

Build continuous freight chains

Intermodal connections, logistics hubs and first/last-mile links are the strongest infrastructure priorities identified by respondents.

3

Make digitalization interoperable

Single Window, real-time tracking, integrated transport systems and e-documents should work as one freight data environment.

4

Coordinate corridors across institutions

High agreement on harmonized customs, coordinated corridor planning and clear institutional responsibilities signals a governance agenda.

5

Link funding to performance

Financial/commercial viability is the weakest dimension; PPPs, KPIs and incentive systems should be tied to measurable results.

6

Use capacity as an implementation asset

Human capacity is the relative strength; training should focus on corridor operations, data use, intermodal planning and performance monitoring.

Thank You

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