

Policy Brief

Series Information:

This policy brief is part of the EPINOVA Policy Brief Series on Strategic Competition, AI-Enabled Warfare, and Information Conflict.

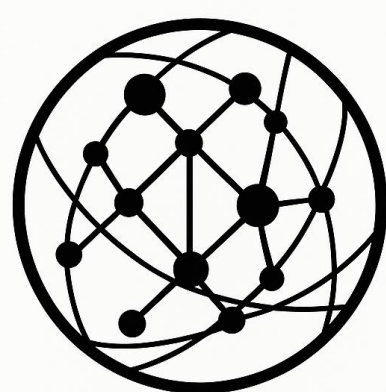
Recommended Citation:

Wu, Shaoyuan (2026), Caspian Logistics Shock: Monitoring Russia–Iran Supply Stress after the Anzali Strike, Policy Brief No. EPINOVA-2026-PB-44, Global AI Governance and Policy Research Center, EPINOVA LLC.

DOI: To be assigned after Crossref membership approval.

Disclaimer:

This policy brief is an institutional publication of EPINOVA, prepared by Dr. Shaoyuan Wu in his capacity as Director of the Global AI Governance and Policy Research Center, EPINOVA LLC. The analysis is based on publicly available information and scenario-based analytical estimates and does not represent the official position of any government. The publication is intended solely for research and policy discussion purposes and does not constitute legal, military, operational, or sanctions-compliance advice.



GLOBAL AI
GOVERNANCE
RESEARCH CENTER

Caspian Logistics Shock:

Monitoring Russia–Iran Supply Stress after the Anzali Strike

Author: Shaoyuan Wu

Affiliation: Global AI Governance and Policy Research Center, EPINOVA LLC

Date: April 29, 2026

Key Judgments

- **The Anzali strike disrupted, but did not sever, the Caspian corridor.** It shifted the route from routine movement toward a higher-risk operating rhythm.
- **Visible Russian cargo and tanker activity contracted sharply after mid-April.** Monitored cargo vessels fell from roughly 18–19 to 7–8 by April 28, while visible tanker activity declined to near zero, indicating a contraction in observable traffic rather than a verified halt in all movement.
- **The Caspian port system shows a structured disruption pattern.** Data indicate an April 18 flow inversion, an April 23 window-opening signal, an April 24 surge, and an April 28 contraction.
- **The late-April anomaly is best read as post-strike risk management, not a confirmed new strike.** The pattern fits port clearance, risk avoidance, short-window movement, and post-surge contraction.
- **The Caspian route remains a threshold-delaying corridor, not a Hormuz substitute.** It can preserve minimum flows under pressure, but cannot provide stable surge-capacity logistics.

Executive Summary

The March 2026 Israeli strike on Iranian naval assets near Bandar Anzali marked one of the clearest public indicators that the Iran conflict had extended into the Caspian maritime theater. The immediate tactical damage remains difficult to measure from public sources, but subsequent vessel-composition and port-system data suggest that the Caspian corridor entered a higher-friction operating mode after the attack.

This brief evaluates two indicators from April 8 to April 29, 2026: visible Russian vessel composition in the Caspian Sea and Caspian port arrivals and departures. Together, these indicators show a structured disruption sequence rather than ordinary commercial fluctuation. Around April 18, departures and arrivals moved in opposite directions, suggesting port clearance or risk-management behavior. Around April 23, a second inversion appeared, with departures rising before arrivals, indicating preparation for a short inbound cargo window. Around April 24, arrivals and departures surged simultaneously. By April 28, port activity and visible Russian tanker movement had sharply contracted.

Policy Brief

The evidence does not confirm a new late-April kinetic strike. It does, however, show that the Caspian logistics system was no longer operating under a normal commercial rhythm. The corridor remained functional, but its operating mode shifted from steady low-visibility sustainment toward window-based, risk-managed movement.

The strategic implication is that the Caspian Sea has become a contested rear corridor. It is not a full substitute for the Persian Gulf and Strait of Hormuz system, but it remains important because it can preserve minimum viable flows of grain, industrial inputs, selected dual-use goods, and limited military-relevant cargo. The Anzali strike therefore matters less as a single tactical event than as a signal that Iran's northern logistics buffer is now exposed to direct pressure.

Why This Matters

The Caspian Sea has long been treated as a relatively insulated logistics space: geographically enclosed, distant from U.S. naval reach, and connected to Russian and Iranian ports through a low-visibility maritime network. The Anzali strike weakened that assumption.

The central policy question is not whether Israel cut off the Russia-Iran route. It did not. The more important question is whether the strike increased friction, reduced confidence, altered vessel behavior, and exposed the northern corridor to future coercive pressure. The monitoring data suggest that it did.

This matters because Iran does not need a full replacement for Hormuz to remain resilient. It only needs enough continuity to slow depletion, sustain critical inputs, preserve selected industrial flows, and prevent rapid systemic collapse. Prior EPINOVA analysis placed Russia-Iran northern capacity at roughly 3,800–29,000 tons per day, with a realistic constrained working range of 10,000–15,000 tons per day. That level is meaningful for continuity, but insufficient for Gulf-scale replacement or major wartime surge.

Methodological Note

This brief relies on two author-compiled monitoring indicators: visible Russian vessel composition in the Caspian Sea and Caspian port arrivals/departures from April 8 to April 29, 2026. The dataset captures observable vessel behavior and port rhythm rather than verified cargo content. Counts should therefore be interpreted as indicators of system stress, not as a complete audit of Russia-Iran cargo movement.

1. Background: From Bandar Anzali to the Caspian Logistics Shock

Public reporting confirms that Israel struck Iranian naval assets in the Caspian Sea. Reuters reported that an Israeli military spokesperson said the Israeli Air Force carried out strikes against Iranian naval assets in the Caspian. Xinhua reported that Russia condemned the attack on Bandar Anzali and warned that expanding the conflict into the Caspian region could heighten regional tensions and affect other Caspian states.

The Wall Street Journal framed the strike as an attack on a Russia-Iran weapons-smuggling route used to move ammunition, drones, and other military goods. That interpretation is consistent with the broader strategic logic of the Caspian corridor. The route links Russian and Iranian ports while remaining difficult to monitor because of AIS gaps, mixed civilian-military cargo patterns, opaque ownership structures, and regional enforcement limits.

Policy Brief

The importance of the event lies less in immediate physical destruction than in the system behavior that followed. A strike on a port, naval outpost, command center, or shipyard can affect logistics through more than direct damage. It can change vessel risk perception, insurance behavior, port scheduling, cargo prioritization, and the willingness of operators to enter or remain in contested nodes.

In this sense, the Anzali strike should be understood as a logistics-confidence shock. It did not need to close the Caspian corridor to matter. It only needed to make the corridor less predictable.

2. Evidence from Vessel Composition: Russian Activity Contracts

The vessel-composition data show three patterns.

First, Russian cargo activity declines steadily after mid-April. This does not imply that the corridor closed, but it does suggest a visible reduction in routine commercial movement.

Second, tanker activity approaches zero by the end of the observation period. This is notable because tankers are especially sensitive to insurance risk, sanctions exposure, port security concerns, and interdiction pressure.

Third, special craft and tug counts remain broadly stable. This suggests that the maritime support environment did not disappear. Instead, the system appears to have shifted away from normal cargo and tanker circulation toward a lower-visibility, support-heavy operating pattern.

The most plausible interpretation is not complete shutdown, but risk-induced contraction.

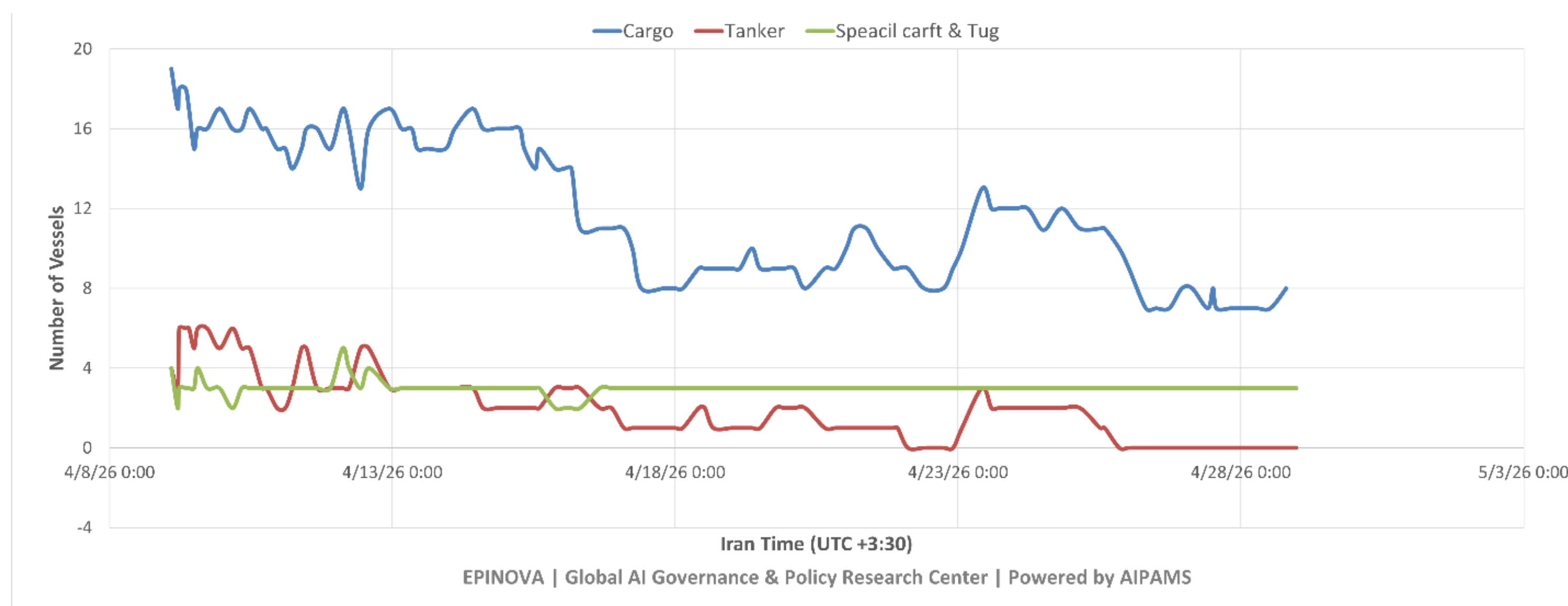


Figure 1. Russian Vessels in the Caspian Sea, April 8–29, 2026

Caption: The figure tracks visible Russian cargo vessels, tankers, and special craft/tugs in the Caspian Sea. Cargo vessels decline from roughly 18–19 vessels early in the period to approximately 7–8 by April 28. Tankers fall from about 5–6 to near zero, while special craft and tug activity remains broadly stable around three vessels.

Source: Author’s Caspian vessel-monitoring dataset.

Note: Visible vessel counts only; AIS gaps and classification limits may affect totals.

Policy Brief

3. Evidence from Port Rhythm: Flow Inversion, Surge, and Collapse

The port data are more revealing than the vessel counts because they show how the system moved.

Around April 18, the data show a flow inversion: departures rise while arrivals weaken, followed by a reversal. This suggests that the port system may have entered a clearance or risk-management phase. Vessels already in or near the port system may have been released while new inbound movement was temporarily constrained.

Around April 23, a second inversion appears. Departures rise first, while arrivals lag. This pattern is consistent with berth or anchorage clearance ahead of a short cargo window.

Around April 24, arrivals and departures surge together. This does not resemble ordinary port flow. It looks more like a compensatory movement: a short operational window in which vessels and cargo were processed quickly after earlier disruption.

By April 28, the system contracts sharply. The post-surge decline, combined with the fall in Russian cargo and tanker visibility, suggests that the corridor entered a lower-flow risk-control phase.

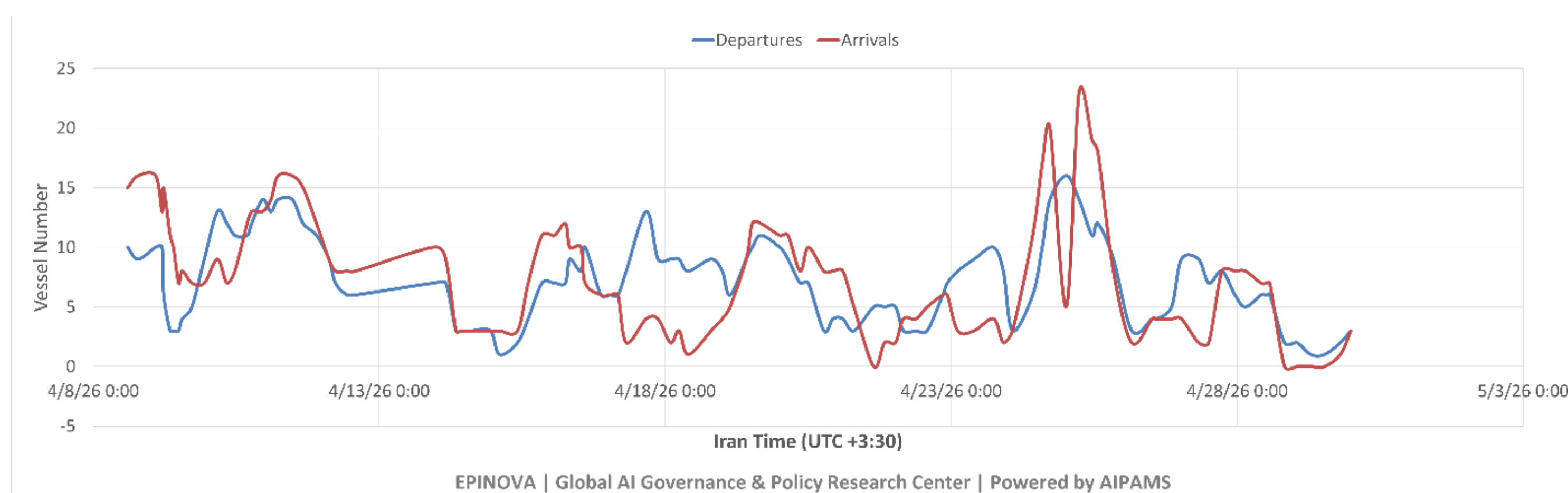


Figure 2. Caspian Port System Monitor: Arrivals and Departures, April 8–29, 2026

Caption: The figure compares Caspian port departures and arrivals. It shows a flow inversion around April 18, a second window-opening signal around April 23, a sharp arrivals/departures surge around April 24, and a rapid contraction by April 28.

Source: Author's Caspian port-monitoring dataset.

Note: Arrivals and departures are system-rhythm indicators, not direct cargo-composition evidence.

Policy Brief

4. Mechanism: From Strike Shock to Window-Based Logistics

The observed sequence can be summarized as a four-phase mechanism.

Table 1. Four-Phase Mechanism of the Caspian Logistics Shock, April 18–28, 2026

Phase	Approx. Date	Observed Signal	Analytical Interpretation
Phase I	Around Apr. 18	Departures rise while arrivals weaken	Clearance, risk avoidance, or post-strike reconfiguration
Phase II	Around Apr. 23	Departures rise before arrivals	Berth/anchorage preparation; opening of a short inbound window
Phase III	Around Apr. 24	Arrivals and departures surge together	Compensatory cargo movement or concentrated processing
Phase IV	Around Apr. 28	Port activity and visible Russian tanker movement contract	Post-surge exhaustion, risk withdrawal, rerouting, or security control

Source: Author's Caspian port-monitoring and vessel-composition dataset, April 8–29, 2026.

Note: The table summarizes observed system-level movement patterns rather than verified operational intent. Dates are approximate and based on visible arrivals, departures, and vessel-composition indicators. The sequence supports a logistics-shock interpretation but does not independently confirm a new late-April kinetic strike.

This sequence matters because it does not resemble ordinary port fluctuation. Normal commercial flow usually shows lagged continuity: arrivals increase, cargo is processed, and departures rise afterward. Here, the rhythm is more irregular and event-driven. The system appears to clear capacity, open short windows, process traffic quickly, and then contract.

That behavior is consistent with a corridor under pressure. It also suggests that the Caspian system remains usable but is no longer operating as a stable rear logistics space.

5. Strategic Assessment

The Caspian corridor remains functional, but its strategic character has changed.

Before the strike, the corridor could be understood as a low-visibility northern sustainment line. After the strike, it became a monitored and politically exposed logistics space. Russia and Iran can still use it, but they must use it under higher friction.

The most important strategic effect is not interdiction but confidence degradation. If port operators, vessel owners, insurers, military planners, and cargo managers no longer view the Caspian as a protected rear corridor, then the system becomes less reliable even when physical infrastructure remains partly functional.

This fits the logic of a threshold-delaying network. The northern supply system is valuable because it preserves continuity under pressure, but it is structurally bounded by port concentration, vessel size, shallow-water limits, berth availability, and coordination friction. Effective throughput is therefore lower than the simple sum of sea, rail, and road capacity because node constraints and channel coupling create nonlinear failure dynamics.

In this sense, the Anzali strike did not need to destroy the Caspian route to matter. It only needed to make the route slower, costlier, riskier, and less synchronized.

Policy Brief

6. Policy Implications

- **Monitor system rhythm, not only individual vessels.** Analysts should track arrivals, departures, vessel mix, port congestion, and post-surge contraction as combined indicators of logistics stress.
- **Prioritize Caspian nodes in logistics-risk monitoring.** Northern Iranian ports, Russian Caspian ports, shipyards, command centers, berth capacity, and maritime support craft should be treated as indicators of Iran's northern resilience.
- **Distinguish corridor survival from corridor reliability.** The Caspian route can remain open while becoming less reliable. A corridor that operates through short windows and risk-managed surges is not equivalent to a stable logistics backbone.
- **Use network-degradation analysis.** The operational objective may not be to stop all cargo. It may be to raise cost, delay movement, disrupt prioritization, and force inefficient rerouting.

7. Limitations

This assessment is based on visible vessel and port-system monitoring data. It cannot verify cargo composition, ownership structure, military content, or final destination. Vessel counts may understate activity if ships disable AIS, change identifiers, operate through opaque ownership chains, or move outside visible monitoring windows.

The data also do not prove a new late-April kinetic strike. Public reporting currently supports the earlier Anzali strike and subsequent Russian concern, but not a confirmed second Caspian attack in late April. The late-April anomaly should therefore be described as a Caspian logistics shock, not as a confirmed new strike.

Finally, the analysis measures system behavior, not intent. The observed sequence is consistent with risk clearance, short-window movement, congestion, rerouting, and security control, but the precise causal mix remains uncertain.

Conclusion

The Caspian Sea has moved from the background of the Iran conflict to its logistics frontier. The Anzali strike did not cut the Russia–Iran northern corridor, but monitoring data show that the corridor's operating rhythm changed significantly afterward. Visible Russian cargo and tanker activity contracted, port arrivals and departures displayed repeated inversion patterns, and the system moved through a surge-collapse sequence between April 18 and April 28.

The most defensible conclusion is that the Caspian corridor has entered a high-friction operating mode. It remains functional and strategically useful, but less predictable and less protected. Its value lies in threshold delay, not surge replacement.

For policymakers and analysts, the lesson is straightforward: the next phase of pressure on Iran's logistics system will not be measured only by whether ships move. It will be measured by whether those movements become slower, costlier, riskier, less synchronized, and more dependent on short operational windows.