

STRAIT OF HORMUZ MONITOR

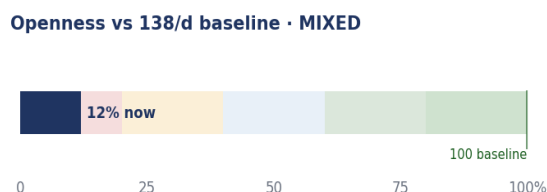
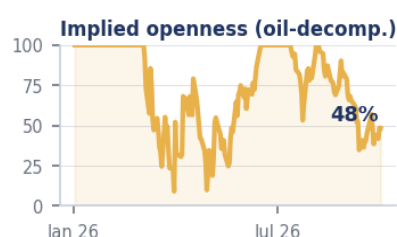
How open · how fast

The headline question: how open is Hormuz, and how fast is it reopening? We lead with what we can OBSERVE; dark-share hides the rest.

Hormuz ~12% open (observable) · Phase 2/5 — Fragile · MIXED +0.0 pts/wk

Backing out SPR releases, OPEC+ slack and demand destruction (\$2/bbl combined, per Global Oil S/D v13), today's Brent implies Hormuz is 48% open. Observed visible openness is 12%, total flow estimate 48%; the residual Hormuz risk premium in Brent is \$21/bbl. Forward Brent has the premium decaying to \$-3/bbl by 12m (100% implied openness).

Of the ships we can SEE, only 57% are AIS-off — but the visible count is itself a fraction of true flow: 17 transits/day vs 138 baseline (~12%), with most traffic running dark/unobserved (50-80% on an all-traffic basis). Estimated total ~48% of 20 mb/d throughput (est., low-confidence).



SYNTHESIS — three-sentence headline

HOLD — Phase 2 (Fragile), velocity **MIXED**, and the physics are improving on evidence that is monthly and multi-source rather than a single print. Kpler's preliminary September count puts Middle East crude exports at 16.3 mb/d, the highest month since the war began, Saudi Arabia at 5.4 mb/d against 2.45 in August, and crude through Hormuz at about 9.7 mb/d; a bank tracker's ten-day regional average reads 17.5 mb/d, 98% of pre-war, though that figure includes the Yanbu route and is not a Hormuz number. Yanbu loadings have **RESUMED** at roughly 2 mb/d with satellite imagery on 27 September showing some 10 million barrels loading; the pipeline is building toward 3-4 mb/d within days and 5.5 within a month. **FOUR** laden Qatari LNG carriers crossed in September against none visible in August, so the gas leg of our sustained-flow test is met for the first time. We **RE-SET** throughput 8.6 to 9.7 mb/d on the first new all-in estimate since 8 September; it still fails the >12 gate at about 49% of baseline. **THE DIPLOMACY IS UNRESOLVED, NOT DEAD**: indirect talks resumed on 28-29 September through Qatar in New York, Araghchi met the mediators on Monday and expects Washington's formal response today, and a US official now conditions any agreement on the nuclear programme. **THE VIOLENCE HAS NOT STOPPED**: a large crude tanker was struck overnight by an unknown projectile, a Kuwaiti tanker was hit on 25 September, explosions followed the rejection near Qeshm, Iran is threatening charterers on unapproved routes, and stranded vessels have risen to 258. Brent settled 102.59 on 29 September, down 2.6% on the exports story, 102.68 in Asia this morning. The badge holds on the physics; velocity stays **MIXED** because the 21 September **IMPROVING** call failed in two sessions and this one is written with an explicit upgrade condition. Day 213. **HOLD** — Phase 2 (Fragile), velocity **MIXED**, with the physics improving on monthly, multi-source evidence and the diplomacy unresolved pending today's US response. **THE FLOW DATA**: Kpler's preliminary September count — regional crude exports 16.3 mb/d, Saudi 5.4, Hormuz ~9.7 — is the first new all-in estimate since 8 September and the throughput scalar moves 8.6 to 9.7, still failing the >12 gate at about 49%; Yanbu is loading again at ~2 mb/d and climbing; four laden Qatari LNG cargoes crossed in September, so the gas leg of the sustained-flow test is met while the crude and war-risk legs are not. **THE DIPLOMACY**: talks resumed 28-29 September through Qatar, the formal US response is due today, and the US now conditions any deal on the nuclear file — the price of a deal went up while the channel reopened. **THE VIOLENCE**: a large crude tanker struck overnight, a Kuwaiti tanker hit on the 25th, explosions near Qeshm, 258 vessels stranded, war-risk 40x. **THE DARK PANEL**: the screened series is not published today; transit-basis

56% dark on 27 September and 35% on the 28th; only 4 of 55 Saudi liftings called with AIS on; all-traffic held 57.0. The badge holds because no Phase-1 trigger has physically fired and the corridor is clearing more, not less; velocity stays MIXED with the upgrade condition written down. Brent 102.59 settle on 29 September, 102.68 in Asia; CO6 86.73 and CO12 80.27 carried. Day 213. Base 55, bear 25, bull 20. Macro cross-reference: the US PCE, annual revision and Q2 GDP prints at 08:30 ET today — the energy leg is the removable premium in that inflation path; the Qatari trains are the level that is not. Three sources landed inside 48 hours. Kpler's preliminary September data put regional crude exports at 16.3 mb/d, the highest since the war began and against 19.5 in February; Saudi exports at 5.4 mb/d after 2.45 in August; and crude through the Strait itself at about 9.7 mb/d. A bank tracker's ten-day regional average reads 17.5 mb/d, 98% of pre-war, but that is a regional figure that counts the Yanbu route and cannot be read as a Hormuz figure. Visible-only trackers still print 3.7 mb/d and a Bloomberg-cited range runs 6-8 mb/d, which is what a corridor moving most of its crude with AIS off looks like from the outside. We held 8.6 mb/d for seven editions because no newer all-in estimate existed; one now does, so the scalar goes to 9.7 with a 7-10 band. It still fails the >12 mb/d gate at about 49% of the 20 mb/d baseline, and refined products lag at about 3 mb/d, 58% of pre-war.

As of 2026-09-30 · Sources: visible transits (Kpler, 2026-09-30) · dark-share (Kpler, 2026-09-30) · throughput (Kpler, 2026-09-30) · Brent (ICE) · diplomatic (analyst principal-scored). Baselines: 138 ships/day · 20 mb/d.

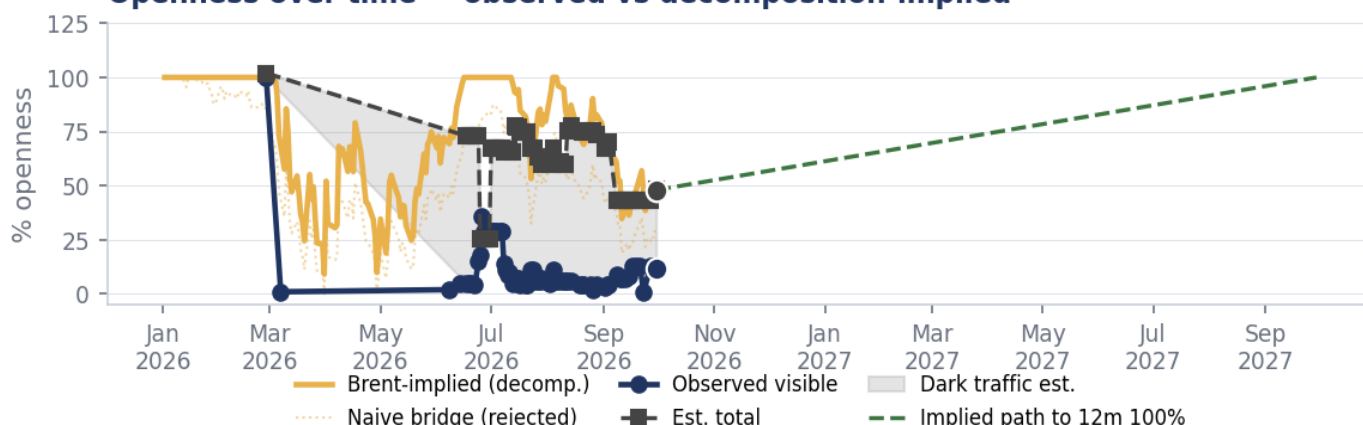
SYNTHESIS

What this means · oil-pricing consistency check

Two readings — the physical openness curve and the oil pricing curve — tell parallel stories. The gap between them is the central tension and the value of the monitor.

Backing out SPR releases, OPEC+ slack and demand destruction (\$2/bbl combined, per Global Oil S/D v13), today's Brent implies Hormuz is 48% open. Observed visible openness is 12%, total flow estimate 48%; the residual Hormuz risk premium in Brent is \$21/bbl. Forward Brent has the premium decaying to \$-3/bbl by 12m (100% implied openness).

Openness over time — observed vs decomposition-implied



Today's Brent decomposition (\$/bbl) — Delphic Global Oil S/D v13



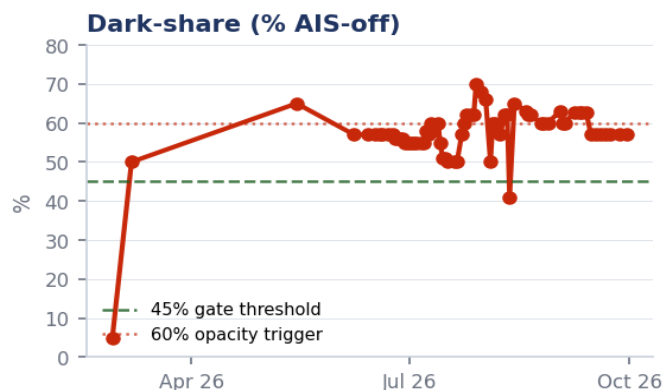
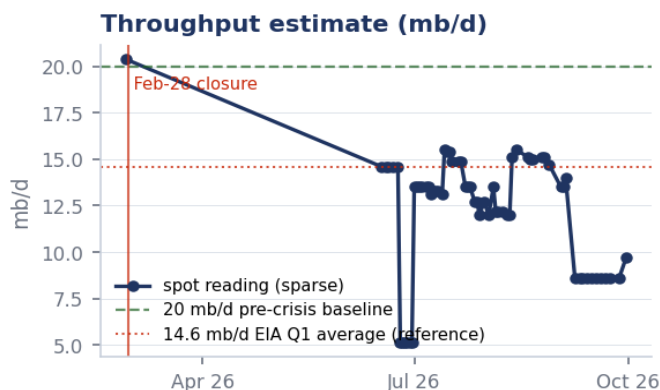
HOW BRENT TRANSLATES TO OPENNESS — Delphic decomposition

- **DECOMPOSITION** — $\text{Brent}_{\text{spot}} = \text{baseline} + \text{Hormuz}_{\text{premium}} - \text{non-Hormuz}_{\text{offset}}$. Baseline = \$84/bbl (Delphic 12m structural fair-value, full normalization). Peak Hormuz premium = \$40/bbl (Strike scenario vs baseline). Solving for premium and mapping linearly 0..peak gives implied openness 0..100%.
- **NON-HORMUZ OFFSETS TODAY** — \$2/bbl backed out of today's Brent (per Global Oil S/D v13): \$1 from active US/IEA SPR releases (172 mb US commitment, ~164 mb of 400+ mb deployed by May 8); \$1 from deployed OPEC+ slack (UAE coiled-spring flush, Saudi paper quota); \$0 from permanent demand destruction (~0.5-0.8 mb/d, teapot exits + electrification).
- **SPOT vs FORWARD** — SPOT \$103: implied premium \$21/bbl, openness 48%. 12m-FORWARD \$80: offsets shrink to \$1/bbl (SPR refill demand reverses release pressure above \$85; demand recovers +1.0 mb/d by 12m); premium \$-3/bbl, openness 100%.
- **WHY NOT THE NAIVE BRIDGE** — A linear bridge from observed crisis-peak (\$118) to pre-crisis avg (\$64) would imply 29% openness today — attributing 100% of Brent's decline to Hormuz reopening. That is analytically wrong: SPR / OPEC+ / demand destruction have done the heavy lifting. The decomposition method (48%) is the honest answer.

TRAJECTORY

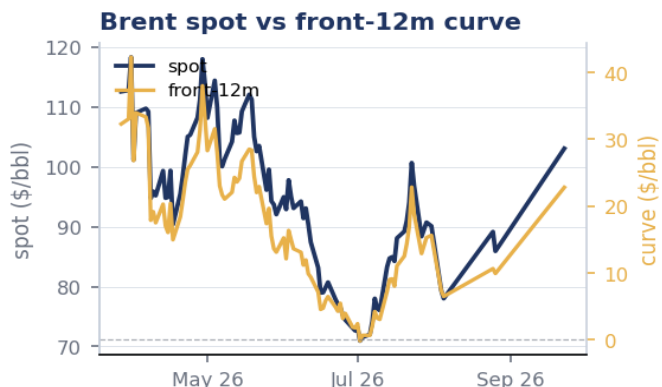
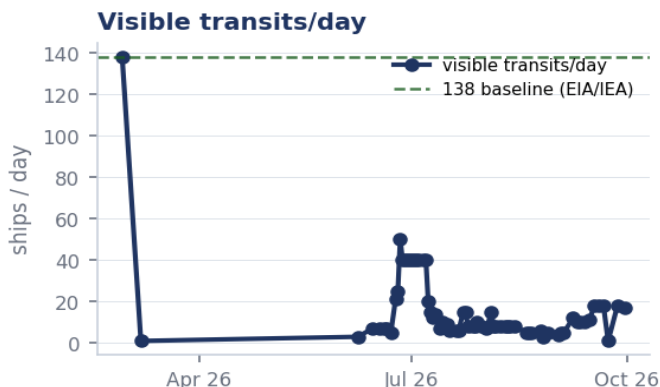
Where we are vs where we have come from

Dark-share and visible transits are the reliable trajectory signals. Throughput is shown as a reference (EIA Q1 average), not a daily spot.



Throughput estimate vs 20 mb/d baseline · 14.6 EIA-Q1 reference line is an average, not a spot. The line is sparse because daily spot is genuinely uncertain while dark-share is high.

% of vessels with AIS off — the observability gap (Vortexa). Falling = visibility returning. Gate clears below 45.



Visible transits/day vs 138 baseline — the reopening curve and the headline openness metric (Windward / hormuzmonitor). The slope is the reopening velocity.

Brent spot + front-12m curve over the last 6 months (ICE, parquet). Falling spot + flattening curve = war-premium discharging.

ANALYSIS

Read · triggers

Thesis. HOLD — Phase 2 (Fragile), velocity MIXED, and the physics are improving on evidence that is monthly and multi-source rather than a single print. Kpler's preliminary September count puts Middle East crude exports at 16.3 mb/d, the highest month since the war began, Saudi Arabia at 5.4 mb/d against 2.45 in August, and crude through Hormuz at about 9.7 mb/d; a bank tracker's ten-day regional average reads 17.5 mb/d, 98% of pre-war, though that figure includes the Yanbu route and is not a Hormuz number. Yanbu loadings have RESUMED at roughly 2 mb/d with satellite imagery on 27 September showing some 10 million barrels loading; the pipeline is building toward 3-4 mb/d within days and 5.5 within a month. FOUR laden Qatari LNG carriers crossed in September against none visible in August, so the gas leg of our sustained-flow test is met for the first time. We RE-SET throughput 8.6 to 9.7 mb/d on the first new all-in estimate since 8 September; it still fails the >12 gate at about 49% of baseline. THE DIPLOMACY IS UNRESOLVED, NOT DEAD: indirect talks resumed on 28-29 September through Qatar in New York, Araghchi met the mediators on Monday and expects Washington's formal response today, and a US official now conditions any agreement on the nuclear programme. THE VIOLENCE HAS NOT STOPPED: a large crude tanker was struck overnight by an unknown projectile, a Kuwaiti tanker was hit on 25 September, explosions followed the rejection near Qeshm, Iran is threatening charterers on unapproved routes, and stranded vessels have risen to 258. Brent settled 102.59 on 29 September, down 2.6% on the exports story, 102.68 in Asia this morning. The badge holds on the physics; velocity stays MIXED because the 21 September IMPROVING call failed in two sessions and this one is written with an explicit upgrade condition. Day 213.

READ — What changed * what it means

- **THE FLOW DATA TURNED MONTHLY, AND THE THROUGHPUT SCALAR MOVES FOR THE FIRST TIME SINCE 8 SEPTEMBER** — Three sources landed inside 48 hours. Kpler's preliminary September data put regional crude exports at 16.3 mb/d, the highest since the war began and against 19.5 in February; Saudi exports at 5.4 mb/d after 2.45 in August; and crude through the Strait itself at about 9.7 mb/d. A bank tracker's ten-day regional average reads 17.5 mb/d, 98% of pre-war, but that is a regional figure that counts the Yanbu route and cannot be read as a Hormuz figure. Visible-only trackers still print 3.7 mb/d and a Bloomberg-cited range runs 6-8 mb/d, which is what a corridor moving most of its crude with AIS off looks like from the outside. We held 8.6 mb/d for seven editions because no newer all-in estimate existed; one now does, so the scalar goes to 9.7 with a 7-10 band. It still fails the >12 mb/d gate at about 49% of the 20 mb/d baseline, and refined products lag at about 3 mb/d, 58% of pre-war.
- **YANBU IS LOADING AGAIN, AND THE BYPASS GOES FROM 'RESTARTING' TO 'RUNNING AT A THIRD'** — Tanker loadings at Yanbu resumed after the East-West pipeline restart, averaging about 2 mb/d since last week; satellite imagery over the Red Sea on 27 September shows close to 10 million barrels loading at Yanbu and Al Muajjiz. Pipeline throughput is 2-2.65 mb/d against a 7 mb/d nameplate, expected to reach 3-4 mb/d within days and the pre-attack 5.5 mb/d in about a month. The Houthis made a third attempt on the Yanbu terminal on 24 September, so the route is running under fire. Iraq has begun importing petrol through Syria's Baniyas port as its own bypass.
- **FOUR LADEN QATARI CARGOES CROSSED IN SEPTEMBER: THE GAS LEG OF OUR TEST IS MET** — Ship-tracking shows the GasLog Skagen loaded at Ras Laffan and off Sri Lanka by 28 September, the Al Ghashamiya delivered to India, the Shandong Redwood to Pakistan and the Al Daayen out of Hormuz bound for China, with the Al Mafyar entering empty on 22 September to load. No LNG crossing was visible in August. Our re-specified test needs four or more laden Qatari cargoes inside a rolling fortnight together with crude above 12 mb/d and war-risk falling from 40x: the gas leg is met, the other two are not, so there is no tip toward Phase 3. What does not move: two of fourteen Ras Laffan trains remain damaged on a three-year repair, Edison's force majeure now runs to early December with 35 cargoes missed since April, and Pakistan and Bangladesh are suspended through November. Qatar's energy minister says a pipeline around the Strait makes no economic sense. The trains are the level; the shipping premium is what is decaying.
- **THE DARK PANEL WENT DARK, AND WE SAY SO RATHER THAN CARRY A NUMBER** — The screened tanker series we have quoted since 19 September (14.2, 16.9, 29.0, 13.2) is not published today; the tracker shows 794 vessels with stale fixes 'not counted either way' and no dark-tanker section. There is therefore no screened print for the three-builds rule to act on, and the all-traffic scalar stays 57.0. What exists is the transit-basis count: 14 of 25 transits dark on 27 September, 56%, and 6 of 17 on the 28th, 35%, three of them tankers outbound, with staged dark tankers observed near Larak and Chabahar; and at the loading end only 4 of 55 tankers lifting Saudi Gulf crude between 1 and 27 September called with AIS on. The aggregator's 'last official count: one vessel on 27 September' is again a single Sunday PortWatch print, the same trap we fell into on 23 September; it is not used. Transits are re-set 18 to 17 on the Windward basis: 6, 13, 25 and 17 a day across 25-28 September.
- **TALKS RESUMED, THE RESPONSE IS DUE TODAY, AND THE PRICE OF A DEAL JUST WENT UP** — Indirect contacts resumed on 28 September through Qatar; Araghchi met the Qatari mediators in New York on Monday to discuss 'ideas and how to find solutions to fulfil Iran's conditions' and expects Washington's formal response on Tuesday through Doha. A US official told Al Jazeera there would be no agreement unless the nuclear programme is addressed, with sanctions relief traded for nuclear progress and the sides 'still apart on the timing' — which widens the gap the seven-day plan tried to sidestep by trading the Strait for the blockade alone. Iranian officials are privately pessimistic about a deal before the midterms; Khamenei warned foreign forces against entering the Arabian Sea and Admiral Sayyari said the Strait remains closed. We move the nuclear score to -1 and hold the rest; we do not pre-empt a response that has not arrived.
- **THE SHOOTING CONTINUES, AND THE MARKET SOLD THE FRONT MONTH ANYWAY** — A large crude tanker was struck overnight by an unknown projectile, attacker unidentified; a Kuwaiti tanker was hit north-west of Musandam on 25 September and its

crew put out the fire; explosions followed the rejection near Qeshm with anti-ship missiles and drones reported fired at vessels transiting against Tehran's wishes; Iran has threatened charterers using unapproved routes; eight US Marines were injured in an attack about two weeks ago, disclosed on the 28th. Stranded vessels rose from 203 to 258 and war-risk stays near 40 times pre-crisis. Against all of that Brent settled 102.59 on 29 September, down 2.6%, with the November prompt spread above \$7 a barrel, and 102.68 in Asia this morning: the market is pricing the flow recovery, not the incident count. Prediction markets: reopening by 31 October 3%, by year-end 20%, by July 2027 45%. CO6 86.73 and CO12 80.27 remain carried 23 September marks.

SCENARIOS — How this resolves * what we watch

- **BASE (~55%) — a throttled corridor clearing near 10 mb/d with no deal before the midterms** — Unchanged at 55%. Flows hold in the 7-10 mb/d band on Saudi and Iraqi VLCC clearances plus dark and ship-to-ship traffic, Yanbu climbs toward 4 mb/d through October, the Strait stays formally shut, the front month oscillates around 100-108 on headlines and the twelve-month barely moves. The US response keeps the channel alive without closing the nuclear gap. The premium bleeds slowly rather than resolving.
- **BEAR (~25%) — the response closes the channel, or a laden tanker goes down in-channel** — Down from 30%: the renewed bombing campaign the President was said to expect has not begun and the channel reopened instead. What remains is the nightly incident rate — a strike that sinks a laden tanker in-channel rather than damaging one, a Houthi round that reaches the Yanbu terminal on the fourth attempt, or a US response that ends the mediation — any of which tips the corridor toward Phase 1. The capacity is intact; the willingness to sail is what evaporates.
- **BULL (~20%) — a response with terms and a date** — Up from 15% on the resumed channel and the gas leg being met. Washington answers with terms, the nuclear sequencing is bridged rather than front-loaded, escorted traffic widens, war-risk decays off 40x and throughput clears 12 mb/d. What this still does NOT fix: 12.8 mtpa of Qatari liquefaction offline on three-year repair guidance. The shipping premium can decay on a diplomatic outcome. The trains cannot.
- **WHAT WOULD ACTUALLY MOVE THE PHASE — AND THE VELOCITY** — A tip toward Phase 3 requires all three of: four or more laden Qatari LNG cargoes inside a rolling fortnight (MET), crude throughput above 12 mb/d (9.7 — not met), and war-risk falling from ~40x (flat — not met). A tip toward Phase 1 requires loss of physical control over third-party transit — a third-party tanker sunk in-channel, a Kharg or terminal strike, a US strike on Oman, or all-in crude clearance at near-zero. None has fired: the overnight strike damaged a hull and did not sink it, and ~9.7 mb/d is clearing. VELOCITY goes to IMPROVING only if the US response today keeps the channel alive AND no laden tanker is struck in-channel across the next two builds; that condition is written here so the call cannot be made on one good print, which is how the 21 September upgrade failed.

Bottom line. HOLD — Phase 2 (Fragile), velocity MIXED, with the physics improving on monthly, multi-source evidence and the diplomacy unresolved pending today's US response. THE FLOW DATA: Kpler's preliminary September count — regional crude exports 16.3 mb/d, Saudi 5.4, Hormuz ~9.7 — is the first new all-in estimate since 8 September and the throughput scalar moves 8.6 to 9.7, still failing the >12 gate at about 49%; Yanbu is loading again at ~2 mb/d and climbing; four laden Qatari LNG cargoes crossed in September, so the gas leg of the sustained-flow test is met while the crude and war-risk legs are not. THE DIPLOMACY: talks resumed 28-29 September through Qatar, the formal US response is due today, and the US now conditions any deal on the nuclear file — the price of a deal went up while the channel reopened. THE VIOLENCE: a large crude tanker struck overnight, a Kuwaiti tanker hit on the 25th, explosions near Qeshm, 258 vessels stranded, war-risk 40x. THE DARK PANEL: the screened series is not published today; transit-basis 56% dark on 27 September and 35% on the 28th; only 4 of 55 Saudi liftings called with AIS on; all-traffic held 57.0. The badge holds because no Phase-1 trigger has physically fired and the corridor is clearing more, not less; velocity stays MIXED with the upgrade condition written down. Brent 102.59 settle on 29 September, 102.68 in Asia; CO6 86.73 and CO12 80.27 carried. Day 213. Base 55, bear 25, bull 20. Macro cross-reference: the US PCE, annual revision and Q2 GDP prints at 08:30 ET today — the energy leg is the removable premium in that inflation path; the Qatari trains are the level that is not.

TRIGGERS — open materiality list (name · status · rule · source)

NAME	STATUS	RULE	SOURCE
RE-STRESS	FIRED	brent_1m > +8%	brent.parquet (ICE)
OPACITY	ARMED	dark_share > 60%	dark_share.json (Vortexa)
DIPLOMATIC DETERIORATION	FIRED	durability < 0	diplomatic_scores.json (analyst)
NEAR-CONFIRM	DORMANT	throughput > 12 mb/d AND dark_share < 50%	throughput_mbd.json + dark_share.json
DOWNGRADE-RISK	FIRED	brent_1m > +8% OR durability < -0.5	brent.parquet + diplomatic_scores.json

METHODOLOGY & SOURCES

How the monitor works

Reference page: indicator families, baselines, computed metrics, sources, and the phase state-machine rules. All upstream data lives in the Dropbox store at delphic-market-data/store/.

INDICATOR FAMILIES

- **PRICING (leads / warns)** — Brent spot + front-12m curve from ICE (parquet). War-risk premia from manual entry. Pricing leads the call — can trigger downgrades alone but cannot trigger upgrades without physical confirmation.
- **PHYSICAL (confirms upgrade / lags)** — Throughput estimate (EIA Q1 average, reference only). Dark-share % (Vortexa). Visible transits/day (Windward / hormuzmonitor). The physical gate gates upgrades past Phase 2.
- **DIPLOMATIC (durability)** — Five milestones scored -2..+2 by the principal: navigation freedom, nuclear / ballistic, sanctions / reconstruction, ceasefire compliance, succession stability. Composite is the weighted average.

BASELINES

- **138 ships/day** — Pre-crisis steady-state visible transits (EIA / IEA 2025 reference). Denominator for visible_pct.
- **20 mb/d** — Pre-crisis throughput baseline (EIA). Denominator for est_total_pct.
- **Brent endpoints (Delphic Global Oil S/D v13)** — Structural fair-value baseline \$79/bbl (12m, full normalization, no Hormuz premium). Peak Hormuz premium \$34/bbl (Strike scenario \$113 vs baseline \$79). Non-Hormuz offsets today: SPR \$5 + OPEC+ slack \$4 + demand destruction \$3 = \$12/bbl. Used by the decomposition on the synthesis page.

COMPUTED METRICS

- **visible_pct** — = visible_transits / 138 — the OBSERVABLE openness headline.
- **est_total_pct** — = throughput_mbd / 20 — estimated total including covert flow. Labelled low-confidence whenever dark-share > 30%.
- **observability_gap** — = est_total_pct - visible_pct — the unobserved share.
- **velocity_pts_per_week** — = visible_pct now minus visible_pct ~7 days ago (nearest non-today entry within +/-3 days), normalised. Labels: ACCELERATING > +3, RECOVERING +0.5..+3, STALLED within +/-0.5, CLOSING < -0.5.
- **implied_openness (Delphic decomposition)** — Brent_spot = baseline + Hormuz_premium - non-Hormuz_offset. Solve for Hormuz_premium, then implied_openness = clamp(100 * (1 - premium / peak_premium), 0, 100). Same formula on 12m-forward Brent with shrunk offsets. The naive linear bridge (without backing out non-Hormuz factors) is REJECTED.
- **phase (state machine)** — UPGRADE requires physical confirmation (throughput > 12 AND dark-share < 45) AND durability >= 0 AND pricing momentum > 0. DOWNGRADE may fire on pricing or durability alone (asymmetric).

SOURCES

- **Visible transits** — Windward and hormuzmonitor public counts; written to store/soh/visible_transits.json
- **Dark-share** — Vortexa AIS-off coverage; written to store/soh/dark_share.json
- **Throughput estimate** — EIA Q1 2026 average mb/d; written to store/soh/throughput_mbd.json. Not a daily spot reading.
- **Brent + front-12m curve** — ICE daily prints, mirrored to store/commodity/brent.parquet and store/commodity/brent_co12.parquet.
- **Diplomatic scores** — Analyst principal-scored, store/soh/diplomatic_scores.json.
- **History** — store/soh/history.jsonl. Seeded with public-record anchors (EIA, Vortexa, Windward, press). Appended every build.