STRAIT OF HORMUZ MONITOR

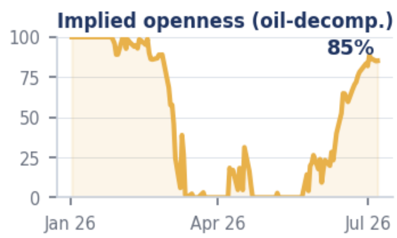
How open · how fast

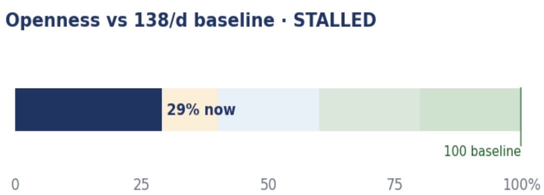
The headline question: how open is Hormuz, and how fast is it reopening? We lead with what we can OBSERVE; dark-share hides the rest.

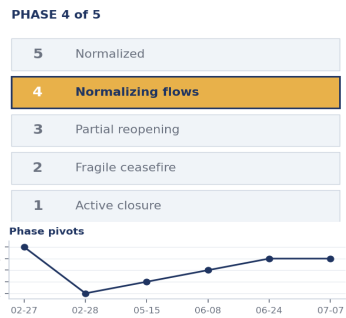
Hormuz ~29% open (observable) · **Phase 4/5 — Normalizing flows** · **STALLED** +0.0 pts/wk

Backing out SPR releases, OPEC+ slack and demand destruction ($12/bbl combined, per Global Oil S/D v12), today's Brent implies Hormuz is 85% open. Observed visible openness is 29%, total flow estimate 26%; the residual Hormuz risk premium in Brent is $5/bbl. Forward Brent has the premium decaying to $-3/bbl by 12m (100% implied openness).

Of the ships we can SEE, only 55% are AIS-off — but the visible count is itself a fraction of true flow: 40 transits/day vs 138 baseline (~29%), with most traffic running dark/unobserved (50-80% on an all-traffic basis). Estimated total ~26% of 20 mb/d throughput (est., low-confidence).







SYNTHESIS — three-sentence headline

Phase 4 Normalizing flows HOLDS — 7 Jul is a QUIETER, consolidation read: no fresh IRGC diversion and no new toll escalation on 6-7 Jul (the 4-5 Jul VHF diversions of ~6 vessels + Iran's 'we will DEFINITELY charge service fees' assertion remain the live, unrepeated frictions). The one real negative is the IAEA HARDENING: Gharibabadi extended Iran's sequencing demand to ALL 20 declared sites — no inspections until a FINAL deal + full sanctions relief, with the agency warning 'continuity of knowledge' on the uranium stockpile is now broken. Diplomacy sits in the Khamenei-funeral hiatus (3-9 Jul; successor Mojtaba a persistent no-show, a legitimacy overhang) — Doha to regroup 'at the earliest possible time' after 9 Jul, VP Vance calling the talks 'going well'. Counts recover (Windward 5 Jul: 36 transits, 20 in/16 out, ~35/day) and the dark sweep holds ~55% all-traffic (Vortexa ~57%, Lloyd's ~half of traced). Brent parked at $72.05 (~flat; WTI ~$69.1) on the glut + OPEC+ +188 kb/d -> ~85% implied openness, ~$5/bbl residual; gold EASES to ~$4,148 as the geopolitical-hedge bid softens with de-escalation. Gates intact and the kinetic stand-down holds — but the hardened IAEA line, the funeral hiatus and the unresolved toll keep the durability firmly capped. Phase 4 Normalizing flows HOLDS — 7 Jul is a QUIETER, consolidation read with one real negative: the IAEA HARDENED, extending Iran's access ban to ALL 20 declared sites (no inspections before a final deal + full sanctions relief; continuity-of-knowledge on the uranium stockpile now broken). No fresh IRGC diversion or toll escalation on 6-7 Jul — the 4-5 Jul diversions of ~6 vessels + the 'we will definitely charge service fees' assertion stand as the live, unrepeated frictions. Diplomacy sits in the Khamenei-funeral hiatus (3-9 Jul; successor Mojtaba a persistent no-show, a legitimacy overhang) — Doha to regroup after 9 Jul, Vance calling it 'going well'. Counts recover (36 transits on 5 Jul, ~35/day) and the dark sweep holds ~55% all-traffic (Vortexa ~57%, Lloyd's ~half of traced); we hold the conservative ~5.1 mb/d tracker over the official ~7 mb/d and the ~10 mb/d all-liquids framing. Brent parked at $72.05 (~flat; WTI ~$69.1) on the glut + OPEC+ +188 kb/d; gold EASES to ~$4,148 as the geopolitical-hedge bid softens; ~85% implied openness, ~$5/bbl residual. Gates intact and the kinetic stand-down holds — but a hardened IAEA line, a paused high-level track and the unresolved toll mean the durability underwriting moved BACKWARD this week; an imposed fee, an E3 snapback or a post-funeral Doha breakdown is the path that re-bids crude and puts the downgrade in play. Counts recover — Windward 5 Jul = 36 visible transits (20 in / 16 out) vs 25 on 4 Jul, ~35/day, roughly a third of a ~84-110 pre-war baseline; straits.live marks 'day 128' (its incident/'missile' claims are stale scraped content and are discounted). No NEW

IRGC diversion on 6-7 Jul after the 4-5 Jul pattern. Official/US figures run far higher (~7 mb/d 'trending up'; Vortexa all-liquids ~10.2 mb/d June), but the conservative tracker holds ~5.1 mb/d. Open-but-capped; the on-water assertion-of-control is quiet today.

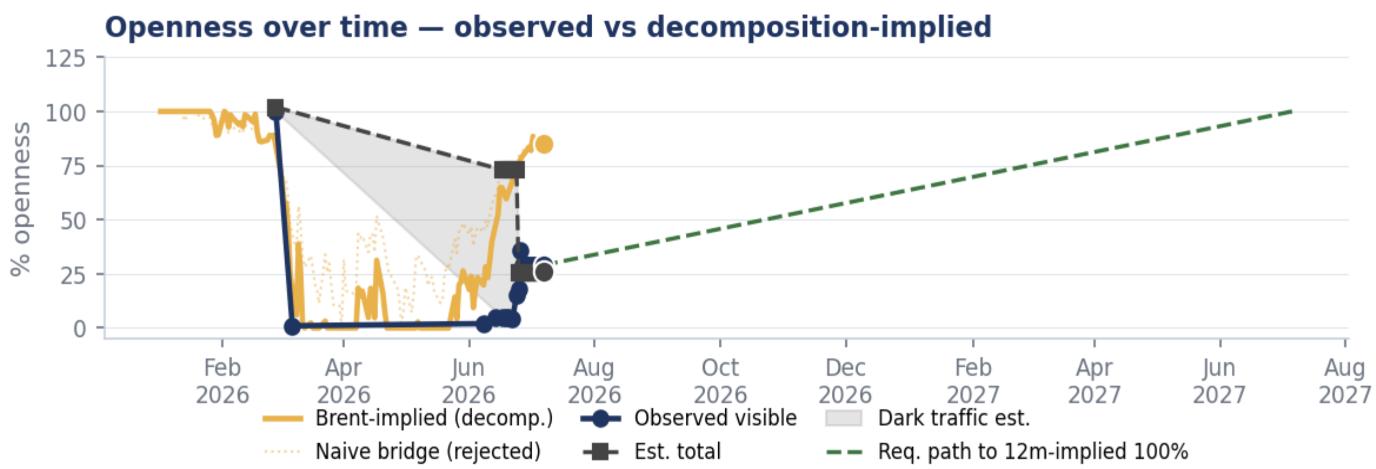
As of 2026-07-07 · **Sources:** visible transits (Windward / hormuzmonitor) · dark-share (Vortexa) · throughput (EIA Q1 avg) · Brent (ICE) · diplomatic (analyst principal-scored). Baselines: 138 ships/day · 20 mb/d.

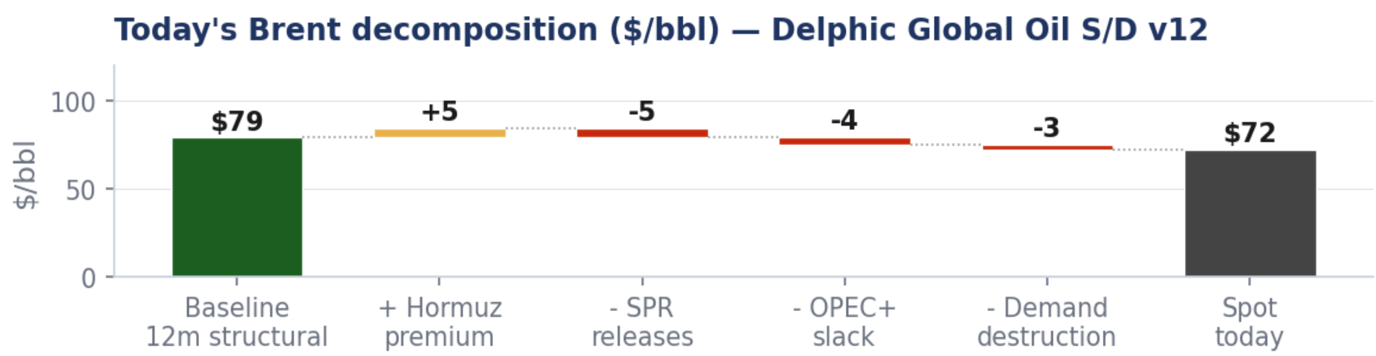
SYNTHESIS

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 ($12/bbl combined, per Global Oil S/D v12), today's Brent implies Hormuz is 85% open. Observed visible openness is 29%, total flow estimate 26%; the residual Hormuz risk premium in Brent is $5/bbl. Forward Brent has the premium decaying to $-3/bbl by 12m (100% implied openness).





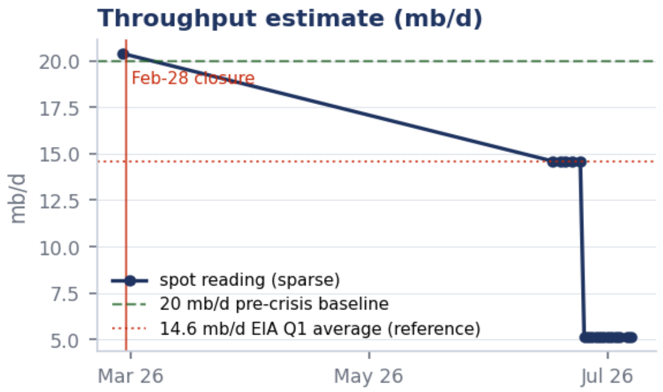
HOW BRENT TRANSLATES TO OPENNESS — Delphic decomposition

- **DECOMPOSITION** — Brent_spot = baseline + Hormuz_premium - non-Hormuz_offset. Baseline = $79/bbl (Delphic 12m structural fair-value, full normalization). Peak Hormuz premium = $34/bbl (Strike scenario vs baseline). Solving for premium and mapping linearly 0..peak gives implied openness 0..100%.
- **NON-HORMUZ OFFSETS TODAY** — $12/bbl backed out of today's Brent (per Global Oil S/D v12): $5 from active US/IEA SPR releases (172 mb US commitment, ~164 mb of 400+ mb deployed by May 8); $4 from deployed OPEC+ slack (UAE coiled-spring flush, Saudi paper quota); $3 from permanent demand destruction (~0.5-0.8 mb/d, teapot exits + electrification).
- **SPOT vs FORWARD** — SPOT $72: implied premium $5/bbl, openness 85%. 12m-FORWARD $71: offsets shrink to $5/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 85% 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 (85%) is the honest answer.

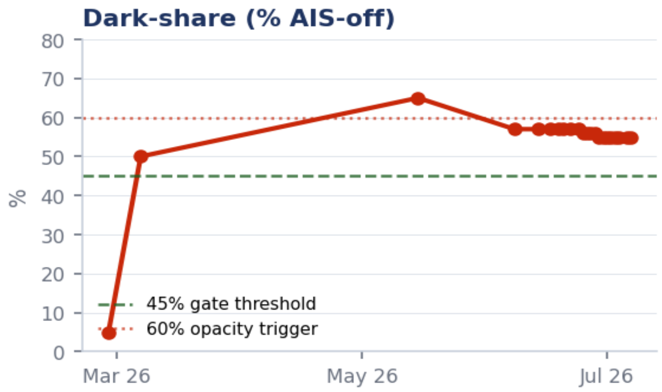
TRAJECTORY

Where we are vs where we have come from

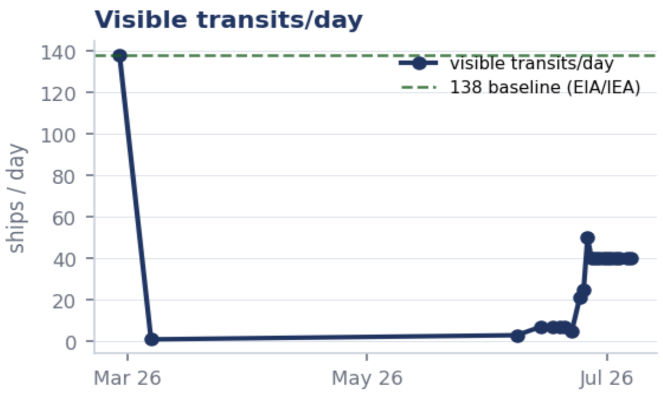
Dark-share and visible transits are the reliable trajectory signals. Throughput is shown as a reference (EIA Q1 average), not a daily spot.



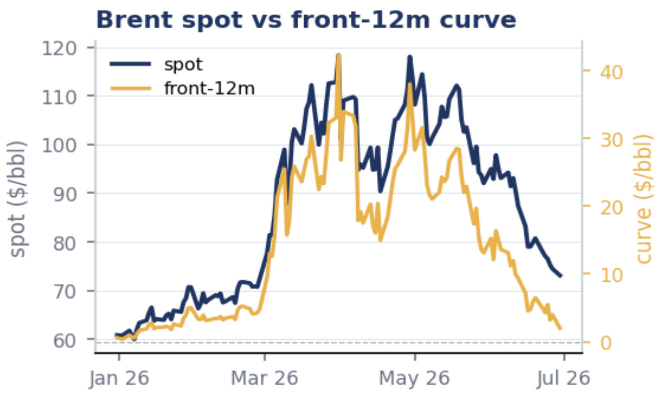
Throughput estimate vs 20 mb/d baseline · 14.6 EIA-Q1 reference line is an average, not a spot. The line is sparse because daily spot is genuinely uncertain while dark-share is high.



% 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. Phase 4 Normalizing flows HOLDS — 7 Jul is a QUIETER, consolidation read: no fresh IRGC diversion and no new toll escalation on 6-7 Jul (the 4-5 Jul VHF diversions of ~6 vessels + Iran's 'we will DEFINITELY charge service fees' assertion remain the live, unrepeated frictions). The one real negative is the IAEA HARDENING: Gharibabadi extended Iran's sequencing demand to ALL 20 declared sites — no inspections until a FINAL deal + full sanctions relief, with the agency warning 'continuity of knowledge' on the uranium stockpile is now broken. Diplomacy sits in the Khamenei-funeral hiatus (3-9 Jul; successor Mojtaba a persistent no-show, a legitimacy overhang) — Doha to regroup 'at the earliest possible time' after 9 Jul, VP Vance calling the talks 'going well'. Counts recover (Windward 5 Jul: 36 transits, 20 in/16 out, ~35/day) and the dark sweep holds ~55% all-traffic (Vortexa ~57%, Lloyd's ~half of traced). Brent parked at $72.05 (~flat; WTI ~$69.1) on the glut + OPEC+ +188 kb/d -> ~85% implied openness, ~$5/bbl residual; gold EASES to ~$4,148 as the geopolitical-hedge bid softens with de-escalation. Gates intact and the kinetic stand-down holds — but the hardened IAEA line, the funeral hiatus and the unresolved toll keep the durability firmly capped.

READ — Openness * phase * velocity

- **OPEN** — Counts recover — Windward 5 Jul = 36 visible transits (20 in / 16 out) vs 25 on 4 Jul, ~35/day, roughly a third of a ~84-110 pre-war baseline; straits.live marks 'day 128' (its incident/'missile' claims are stale scraped content and are discounted). No NEW IRGC diversion on 6-7 Jul after the 4-5 Jul pattern. Official/US figures run far higher (~7 mb/d 'trending up'; Vortexa all-liquids ~10.2 mb/d June), but the conservative tracker holds ~5.1 mb/d. Open-but-capped; the on-water assertion-of-control is quiet today.
- **PHASE** — Phase 4 Normalizing flows HOLDS (prev Phase 4). The opacity gate reads the ALL-traffic dark share (~55%: Vortexa ~57% conflict-avg off the 65.2% May peak, Lloyd's ~half of traced) — so the gate FAILS on BOTH legs (throughput 5.1 < 12 AND dark 55 > 45). Phase holds regardless (downgrade fires on pricing/durability, not the gate). No Phase-5 upgrade: it needs durable barrels, a falling all-traffic dark share, AND a clean inspector entry — and the IAEA line HARDENED today, pushing the wrong way on that last leg.
- **VELOCITY** — FLAT. Flow/price steady-to-soft (Brent $72.05 ~flat, glut capping) and process STALLED by the funeral hiatus (Doha regroups after 9 Jul). The physical vector is quiet (no fresh IRGC incident) but the DURABILITY vector took a knock — the IAEA extending its access ban to all 20 sites. The live movers are diplomatic/verification, not a fresh count or price move.
- **ESTIMATE** — VOLUME the lone caveat; the range stays wide. Kpler/Vortexa crude-VISIBLE reads just 226-330 kb/d (a heavy transponder-off undercount); Vortexa all-liquids ~10.2 mb/d June; US officials ~7 mb/d. We hold the conservative ~5.1 mb/d floor over both the official records and the hot all-liquids framing. Flow QUALITY normalised; durable VOLUME + verification remain the Phase 4->5 gap.

DARK TRANSITS * SHADOW FLEET — The shadow norm — tracker-by-tracker (the daily dark-transit sweep, re-searched 7 Jul)

- **WINDWARD** — 5 Jul = 36 transits (20 in / 16 out), the recovery trend intact (~35/day). Gulf-wide latest read: 861 cargo/tanker vessels, 112 DARK-ACTIVITY events, risk profile 132 high / 197 moderate / 546 low; 4 Jul had one inbound + one outbound fully AIS-dark and an unidentified dark tanker imaged near Kharg. 50-60% of all traffic dark; GPS interference persists region-wide. 'Transparency back' holds only for the AIS-on population.
- **VORTEXA** — Dark transits ~57% of all recorded crossings over the conflict, PEAKING 65.2% in May (now receding). Two-thirds of the dark movers are NON-Iranian operators moving Emirati / Iraqi / Qatari / Saudi-linked barrels — the shadow norm is a broad commercial response to conflict + GPS-jamming, not merely sanctions evasion.
- **KPLER / LSEG** — Kpler + Vortexa crude-only AIS-visible = 226-330 kb/d in June — both stress this SUBSTANTIALLY undercounts on transponder deactivation. Most cargoes pass dark (UAE-origin crude prominent); ~2-2.5 mb/d on the dark channel; the fleet skews shadow (older hulls, no IG P&I) and largely runs OFF the formal IMO lane.
- **LLOYD'S LIST INTELLIGENCE** — The shadow FLEET DOMINATES Hormuz crossings — about HALF of all >10,000-dwt tanker/gas transits run dark as Iran ramps bypass loadings (laden exit, ship-to-ship in the Gulf of Oman, empty hulls back AIS-off). Non-Iranian dark transits scaled through Mar-May to >2/3 of all non-Iranian movements.
- **READ** — The gate reads the ALL-traffic dark share (~55%, re-confirmed by today's sweep — NOT carried forward), so the opacity leg FAILS the 45 line and OPACITY sits ~5pts under its 60 trip. The corridor's normal is a SHADOW normal. Today's tell is quiet — counts recovering, no fresh diversion — but the structural shadow share holds. The JMIC AIS-on reversal is the signpost that bends it back toward transparency; a break above 60 arms OPACITY.

OFFICIAL RECORD * SoH — Statements * decisions — as regards the Strait

- **IAEA — ACCESS BAN HARDENS (the day's negative)** — Gharibabadi EXTENDED Iran's sequencing demand to ALL 20 declared nuclear sites — no inspections until a FINAL deal + full sanctions relief; the IAEA warns 'continuity of knowledge' on the uranium stockpile is now BROKEN. The verification crack is not just unresolved but widening — the durability cap tightens; E3 snapback stays latent in the 60-day window.
- **FUNERAL / SUCCESSION** — The Khamenei state funeral runs 3-9 Jul (Tehran / Qom / Najaf / Karbala, burial Mashhad). Successor Mojtaba Khamenei (appointed 8 Mar) remains a persistent NO-SHOW — believed wounded — feeding succession-legitimacy questions. A leadership-transition overhang that adds durability risk without a fresh kinetic trigger.
- **DOHA — REGROUP AFTER THE FUNERAL** — The Doha round made 'positive progress' on maritime traffic + frozen funds (a goods-purchase mechanism agreed) and is PAUSED for the funeral, to regroup 'at the earliest possible time' after 9 Jul. VP Vance:

talks 'going well', the nuclear track to start 'soon'. MoU implementation clauses stay disputed; the high-level track is conditional, not sealed.

- **TOLL / IRGC — QUIET AFTER 4-5 JUL** — No NEW fee escalation or IRGC diversion on 6-7 Jul. Iran maintains it will levy 'maritime service fees' (not 'tolls'), with 'special treatment' for friendly nations, and the IRGC keeps enforcing the Iranian-coast northern route vs the US/Oman/IMO southern corridor — the 4-5 Jul diversions of ~6 vessels stand as the live precedent. The toll stays the hardest open question for the post-Day-60 corridor.
- **PRICE — SOFT, GLUT DOMINATES** — Brent $72.05 (~flat off Mon's $72.10); WTI ~$69.1, near its lowest since late-Feb on the 2026 glut — OPEC+ +188 kb/d next month, Saudi exports ~90% of pre-war, record UAE flows. The war premium is bled out (oil model ~85% implied open, residual ~$5/bbl). Gold EASES to ~$4,148 (-0.4%) — the geopolitical-hedge bid softening as de-escalation holds, steadying ahead of the June FOMC minutes.

WHERE WE'VE COME FROM — Trajectory

- **2026-06-17** — Islamabad/Versailles MoU signed; toll-free 60-day reopening clause starts the recovery.
- **2026-06-22/26** — Switzerland Round 1 + Hormuz de-confliction -> UPGRADE to Phase 4; Brent curve flips to mild backwardation, Saudi Ras Tanura restart, the glut narrative takes over. Phase 4 HOLDS.
- **2026-06-30 / 07-03** — H1 mark; JMIC reverses its 'go dark' advisory; the Doha technical track advances (working groups, mine-clearance first); Brent slides $72.63 -> $71.52 on the glut; dark norm ~55%.
- **2026-07-04** — US Independence Day. Doha CONCLUDES with 'positive progress', then PAUSES for Khamenei's 3-9 Jul state funeral. Iran issues a fresh Tehran-routing warning; IRGC VHF warning diverts ~6 vessels. Phase 4 HOLDS.
- **2026-07-05/06** — IRGC repeats: ~6 more vessels diverted on 5 Jul. Iran's envoy to China says it 'will definitely charge' Hormuz service fees, 'special treatment' for friendly nations. Reopen: Brent firms to $72.10, gold ~$4,190. Phase 4 HOLDS; durability cap tightens.
- **2026-07-07** — Quieter consolidation: no new IRGC/toll move, but the IAEA HARDENS (access ban extended to all 20 sites, continuity-of-knowledge broken). Counts recover (36 on 5 Jul); Brent ~flat $72.05, gold eases to ~$4,148 on de-escalation. Doha regroups after the 9 Jul funeral end. Phase 4 HOLDS.

WHERE IT'S HEADED — Direction * accelerants * reversers

- **DIRECTION** — FLAT-to-softening on durability. Flow + pricing steady (Brent low-70s, glut, counts recovering) but process PAUSED (funeral) and the VERIFICATION vector WORSENED — the IAEA extending its access ban to all 20 sites. No downgrade, but the durability cap is now double-anchored by the toll dispute AND a hardened inspector standoff.
- **ACCELERANT** — A post-funeral (>9 Jul) high-level Doha convening + a toll climb-down + a clean inspector entry inside the 60-day window + barrels catching counts (~5.1 -> 8-12 mb/d) + a falling all-traffic dark share — together, the Phase-5 Normalized path.
- **REVERSER (partly live)** — The named 'unilateral terms / verification collapse' reverser is no longer purely latent — the 4-5 Jul IRGC diversions, the 'definitely charge' fee assertion and now the all-20-sites IAEA ban are the early expression. A step up — a fee actually imposed pre-Day-60, a boarding / detained tanker, an E3 snapback trigger, or a Doha breakdown post-funeral — re-arms durability fear, climbs dark-share back toward 65, re-backwardates the curve and snaps Brent +$5-8; Phase 4 un-confirms to 3/2.

CENTRAL TENSION — Flow/pricing-vs-verification/terms

- **PRICING** — Brent ~$72.05 (~flat, deep in the low-70s), WTI ~$69.1 near a 4-month low — the war premium is discharged (oil model ~85% implied open, residual ~$5/bbl) and the market trades the 2026 glut (OPEC+ +188 kb/d). Gold easing to ~$4,148 is the tell that the geopolitical-hedge bid is softening as de-escalation holds.
- **VERIFICATION / TERMS** — Normalised on the VISIBLE population (~35 transits/day, recovering) but the gate scores the ALL-traffic dark share (~55%), which FAILS the 45 line. And the TERMS/VERIFICATION legs WORSENED: the IAEA access ban extended to all 20 sites (continuity-of-knowledge broken) atop the unresolved toll. Both gate legs unmet; the reopening's underwriting is contested.
- **READ** — The divergence is FLOW/PRICING (normalised, premium out, oversupplied) vs VERIFICATION/TERMS (IAEA now HARDER, toll asserted, high-level track paused for the funeral). Markets and visible tankers say open and oversupplied; the diplomacy says the durability underwriting the reopening is moving BACKWARD this week — snapback + the toll the two sticks.

SCENARIOS — Base * Bear * Bull

- **BASE** — Phase 4 holds; the funeral hiatus ends and Doha resumes >9 Jul without a high-level breakthrough; the IAEA standoff stays a war of position; Iran keeps asserting fees rhetorically but imposes nothing binding pre-Day-60; the Gulf restart scales and barrels grind from ~5.1 toward 8-10 mb/d; Brent low-70s and soft on the glut.
- **BEAR** — The IAEA standoff triggers an E3 snapback, OR Iran IMPOSES a fee / boards a non-friendly-flag tanker pre-Day-60, OR the Doha track breaks post-funeral, OR a kinetic re-escalation returns during the transition; snapback fear rebuilds, dark-share climbs toward 65, the curve re-backwardates and Brent snaps +$5-8; Phase 4 un-confirms to 3/2.
- **BULL** — A post-funeral high-level Doha convening + Iran admits inspectors to the damaged sites inside the window + a non-discriminatory fee framework the US accepts; barrels back above 12 mb/d on the Gulf restart; the JMIC AIS-on guidance takes and the all-traffic dark share falls toward ~30-40; Phase 5 Normalized in 3-4 weeks.

Bottom line. Phase 4 Normalizing flows HOLDS — 7 Jul is a QUIETER, consolidation read with one real negative: the IAEA HARDENED, extending Iran's access ban to ALL 20 declared sites (no inspections before a final deal + full sanctions relief; continuity-of-knowledge on the uranium stockpile now broken). No fresh IRGC diversion or toll escalation on 6-7 Jul — the 4-5 Jul diversions of ~6 vessels + the 'we will definitely charge service fees' assertion stand as the live, unrepeated frictions. Diplomacy sits in the Khamenei-funeral hiatus (3-9 Jul; successor Mojtaba a persistent no-show, a legitimacy overhang) — Doha to regroup after 9 Jul, Vance calling it 'going well'. Counts recover (36 transits on 5 Jul, ~35/day) and the dark sweep holds ~55% all-traffic (Vortexa ~57%, Lloyd's ~half of traced); we hold the conservative ~5.1 mb/d tracker over the official ~7 mb/d and the ~10 mb/d all-liquids framing. Brent parked at $72.05 (~flat; WTI ~$69.1) on the glut + OPEC+ +188 kb/d; gold EASES to ~$4,148 as the geopolitical-hedge bid softens; ~85% implied openness, ~$5/bbl residual. Gates intact and the kinetic stand-down holds — but a hardened IAEA line, a paused high-level track and the unresolved toll mean the durability underwriting moved BACKWARD this week; an imposed fee, an E3 snapback or a post-funeral Doha breakdown is the path that re-bids crude and puts the downgrade in play.

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

NAME	STATUS	RULE	SOURCE
RE-STRESS	DORMANT	brent_1m > +8%	brent.parquet (ICE)
OPACITY	ARMED	dark_share > 60%	dark_share.json (Vortexa)
DIPLOMATIC DETERIORATION	DORMANT	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	DORMANT	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 v12)** — 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.