

Ship-to-Ship Operations with Russian Oil: Geography, Logistics, and Sanctions

By Oleksandr Petrenko, Anatolii Kravtsev, Benjamin Hilgenstock, and Yuliia Pavytska.

- STS transfers are an important but not dominant part of Russia's seaborne oil export logistics, averaging 15% of total volumes over 2025–26, with a temporary spike to 19% in Q1 2026 when US sanctions disrupted established transport patterns and forced adjustments in Russian oil shipping.
- STS activity involving Russian oil is highly geographically concentrated, with crude oil transfers centered on Nakhodka Light, EOPL, and Offshore Hong Kong, while oil product transfers primarily take place around the Suez Canal, Cyprus Light, and EOPL, reflecting distinctly different patterns.
- The geography has shifted noticeably since 2025, with Nakhodka Light and Offshore Hong Kong gaining importance for crude oil transfers, while oil product activity moved away from established Mediterranean locations and expanded at new hubs such as around Gibraltar and Nakhodka Light.
- STS transfers facilitate the consolidation of Russian oil cargoes onto larger vessels for more efficient onward transportation, with smaller tankers dominating the supplying side while larger vessels, particularly VLCCs/ULCCs, play a substantially greater role after the transfers take place.
- Sanctions coverage of the vessels involved in these operations is significantly higher for crude oil than for oil product STS transfers: in Q2 2026, designated tankers accounted for 94% of supplied and 55% of received crude volumes, compared with 20% and 17%, respectively, for oil products.
- The weaker sanctions coverage on the receiving side is particularly important as STS transfers facilitate consolidation onto larger vessels for onward transportation: of the 50 VLCC/ULCC tankers receiving Russian oil, 33 are shadow vessels, but only five are designated in any jurisdiction.
- STS transfers play an important role in separating Russia's heavily sanctioned crude oil export fleet from the onward transportation network, allowing cargo to move from designated tankers onto a substantially less-sanctioned and more diverse pool of vessels for onward delivery to final buyers.

The Geography of STS Operations with Russian Oil

Leading STS Locations for Russian Oil

For Russian crude oil, three locations—Nakhodka Light in the Pacific Ocean, Eastern Outer Port Limits (EOPL) off the coast of Malaysia, and Offshore Hong Kong—accounted for 62% (284 of 462) of all STS transfers involving Russian cargo between Q1 2025 and Q2 2026.¹

Nakhodka Light, located near the Russian port of Nakhodka, was the largest STS hub for Russian crude oil, accounting for 39% (179 operations) of all recorded transfers during the observation period (see Table 1). Activity at this location increased sharply from Q3 2025 onward. The location is also notable for the frequent use of dark activity during STS operations and transfers involving designated tankers.

EOPL was the second-largest STS location for Russian crude oil, accounting for 12% (54 operations) of all transfers. At the same time, EOPL is the world's largest STS hub, widely associated with cargo blending and

¹ The reported number of STS operations is likely underestimated as it does not include transfers between vessels below 5,000 DWT or transfers where one or more participating vessels could not be identified.

origin obfuscation. The number of Russian crude oil STS operations recorded in H1 2026 almost matched the total for the whole of 2025, underlining the importance of this location for Russian crude oil exports.

Offshore Hong Kong accounted for 11% (51 operations) of all Russian crude oil STS transfers and recorded a sharp increase in activity from Q4 2025 onward. The location is frequently used for transfers from designated Russian tankers to tankers managed by Chinese companies before the cargo reaches ports in mainland China. For an overview, see Map 1 and Table 1.

Table 1: Number of STS operations with Russian crude oil by location

Location	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Total	Share of total, %
Nakhodka Light	15	31	19	37	40	37	179	39%
EOPL	4	13	5	6	16	10	54	12%
Offshore Hong Kong	3	8	7	10	13	10	51	11%
Mediterranean Sea (Suez) ²	16	8	4	2	10	4	44	10%
Red Sea ³	1	4	6	12	11	8	42	9%
Gulf of Oman ⁴	3	3	4	1	9	-	20	4%
Western India ⁵	2	8	1	3	-	-	14	3%
Zarubino	-	4	1	5	1	3	14	3%
Kaliningrad	5	2	2	1	-	3	13	3%
Gibraltar ⁶	-	9	1	-	1	-	11	2%
Other	4	4	-	6	-	6	20	4%
Total	53	94	50	83	101	81	462	100%

Source: Kpler, KSE Institute

Table 2: Number of STS operations with Russian oil products by location

Location	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Total	Share of total, %
Mediterranean Sea (Suez)	66	91	49	39	45	69	359	29%
Cyprus Light	19	66	51	43	26	17	222	18%
EOPL	48	35	26	20	39	50	218	17%
Gibraltar	-	-	2	3	40	19	64	5%
West Africa ⁷	33	12	5	-	2	4	56	4%
Gulf of Guinea ⁸	12	7	9	9	8	5	50	4%
Aliaga Light	32	5	2	-	1	-	40	3%
Black Sea ⁹	4	4	1	16	6	4	35	3%
Nakhodka Light	-	-	10	7	7	10	34	3%
Kalamata Light	15	8	6	-	-	-	29	2%
Constanta Light	13	13	-	-	-	-	26	2%
Malta Light	3	4	6	5	-	-	18	1%
Other	12	16	13	12	22	24	99	8%
Total	257	261	180	154	196	202	1,250	100%

Source: Kpler, KSE Institute

For Russian oil products, three locations, the Mediterranean Sea (Suez zone), Cyprus Light, and EOPL, accounted for 64% (799 of 1,250) of all STS transfers between Q1 2025 and Q2 2026.

The Mediterranean Sea, specifically the **zone near the Suez Canal**, including Damietta Light and Port Said Light, accounted for 29% (359 operations) of all Russian oil product STS transfers during the observation

² "Mediterranean Sea (Suez)" includes Damietta Light and Port Said Light.

³ "Red Sea" includes Red Sea Light, Yanbu Light, Bashair, and Port Sudan.

⁴ "Gulf of Oman" includes Gulf of Oman itself, Shahid Beheshti Port, Bandar-e-Jask, Sohar Light, Ras Markaz, Khasab Light, Qalhat, Sultan Qaboos (Muscat) Light, Duqm, Gwadar, and Fujairah Light.

⁵ "Western India" includes Bhogat, D1, Cluster-7, Kutch Light, Mumbai Light, and Mormugao.

⁶ "Gibraltar" includes Arzew, Algiers, Oran, Algeciras Light, Ceuta Light, and Gibraltar Light.

⁷ "West Africa" includes Banjul, Monrovia, Dakar Light, and Freetown.

⁸ "Gulf of Guinea" includes Douala Light, Port Gentil, Tema Light, Baleine, Abidjan, Baobab, Espoir, FSO Yamoussoukro, Bonny Island, Lagos Light, Twon-Brass, Forcados Light, Antan, Cawthorne, Onongisuo, and Lome Light.

⁹ "Black Sea" includes Kerch Light, Novorossiysk Light, Tuapse, and Novorossiysk.

period. These locations function as a major transshipment hub for cargoes transiting the Suez Canal, with Russian oil products frequently transferred to other tankers before continuing their voyage.

Cyprus Light, located off the southern coast of Cyprus, accounted for 18% (222 operations) of all Russian oil product STS transfers during the observation period. Its role is distinctive, as the subsequent destination cannot be determined from the available data for a significant share of cargo transferred at this location. At the same time, STS activity at Cyprus Light has declined since Q1 2026.

EOPL was the third-largest STS location for Russian oil products, accounting for 17% (218 operations) of all transfers. STS activity involving Russian oil products at EOPL reached a period-high of 50 operations in Q2 2026, making it the second-largest STS location in 2026.

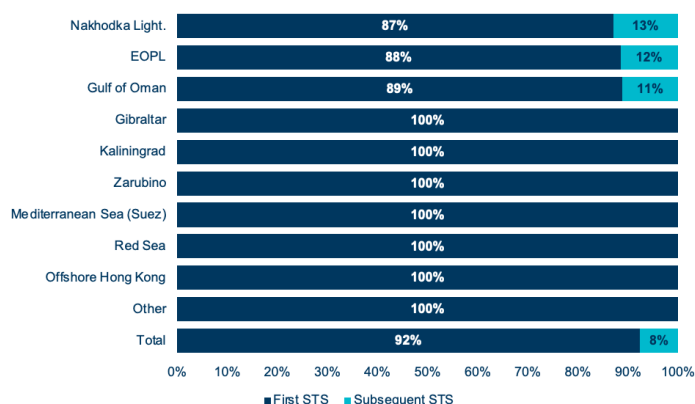
The geography of STS activity shifted between 2025 and 2026, with locations such as Kalamata Light and Malta Light in the Mediterranean, Aliaga Light in the Aegean Sea, and Constanta Light near Romania in the Black Sea recording little or no Russian oil STS activity in 2026 after being active during 2025. By contrast, STS activity emerged from Q3 2025 around Gibraltar and at Nakhodka Light in the Russian Far East, close to the key Russian port of Nakhodka. For an overview, see Map 2 and Table 2.

Activity Patterns: Single vs. Multiple Transfers¹⁰

For crude oil, most STS locations are used for a single STS transfer during a cargo's journey, after which it proceeds to its final destination. Across all STS operations, 92% involved a single transfer of Russian crude oil before onward delivery to the final destination country (see Figure 1). First STS transfers accounted for slightly lower shares of total activity at Nakhodka Light (87%), EOPL (88%), and Gulf of Oman (89%), showing only a marginally higher share of subsequent STS transfers at these locations.

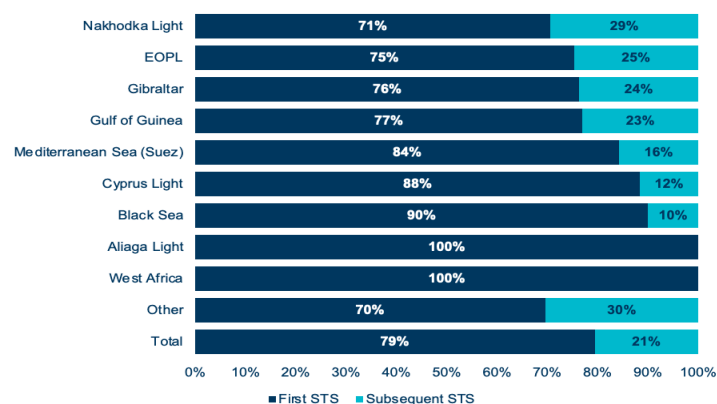
For oil products, subsequent STS transfers played a larger role than for crude oil, largely due to the greater diversity of destinations. Across all STS operations, 79% involved a single transfer of Russian oil products before onward delivery to the final destination country (see Figure 2). Nakhodka Light, EOPL, and Gibraltar had the highest shares of subsequent STS transfers, accounting for 29%, 25%, and 24% of activity at these locations, respectively. While subsequent STS activity at Gibraltar may reflect the variety of onward routes to different destination countries, its prevalence at Nakhodka Light and EOPL may reflect more complex transshipment patterns, including transfers to larger vessels or cargo blending.

Figure 1: Composition of crude oil transfers



Source: Kpler, KSE Institute

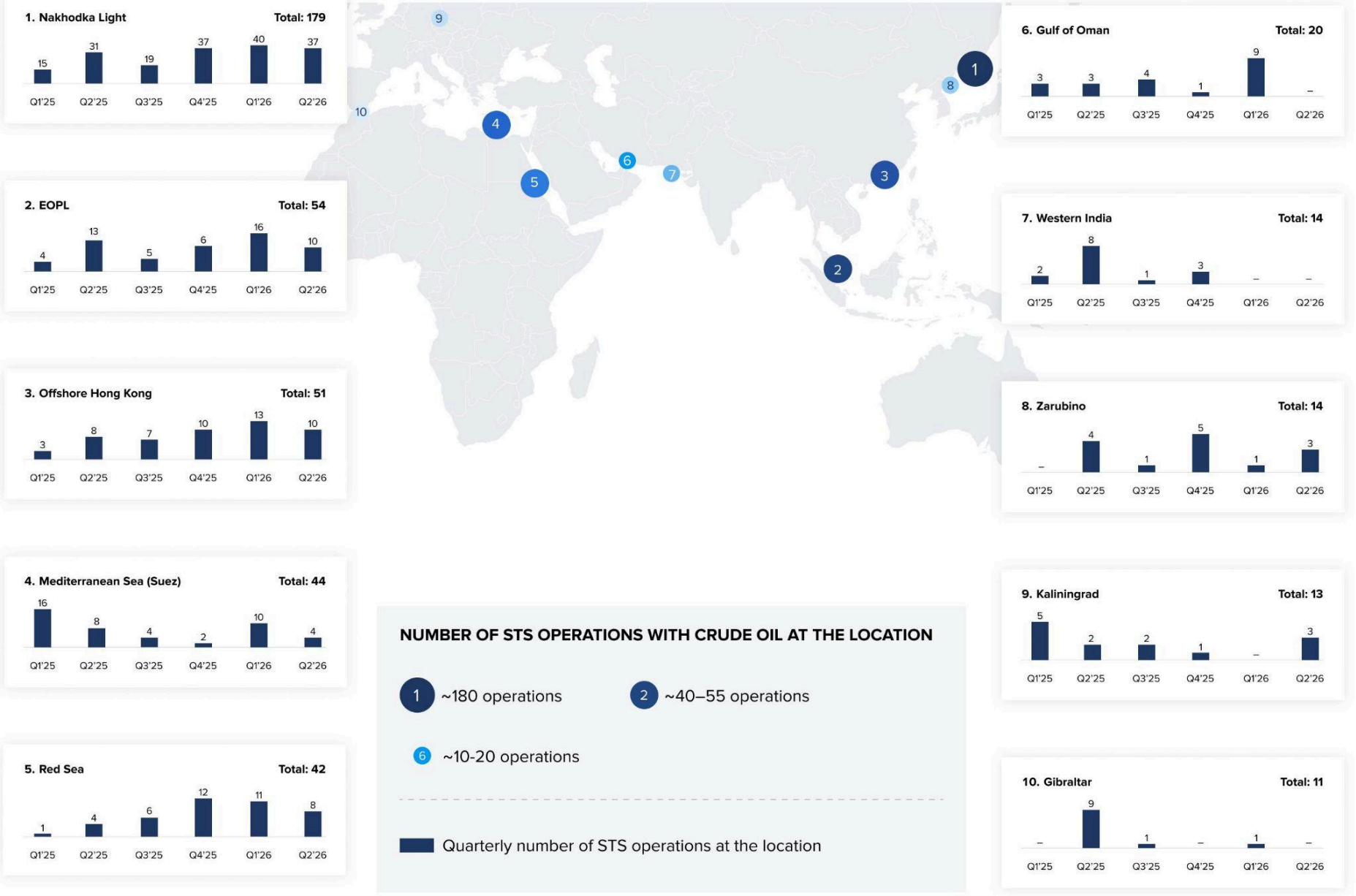
Figure 2: Composition of oil product transfers



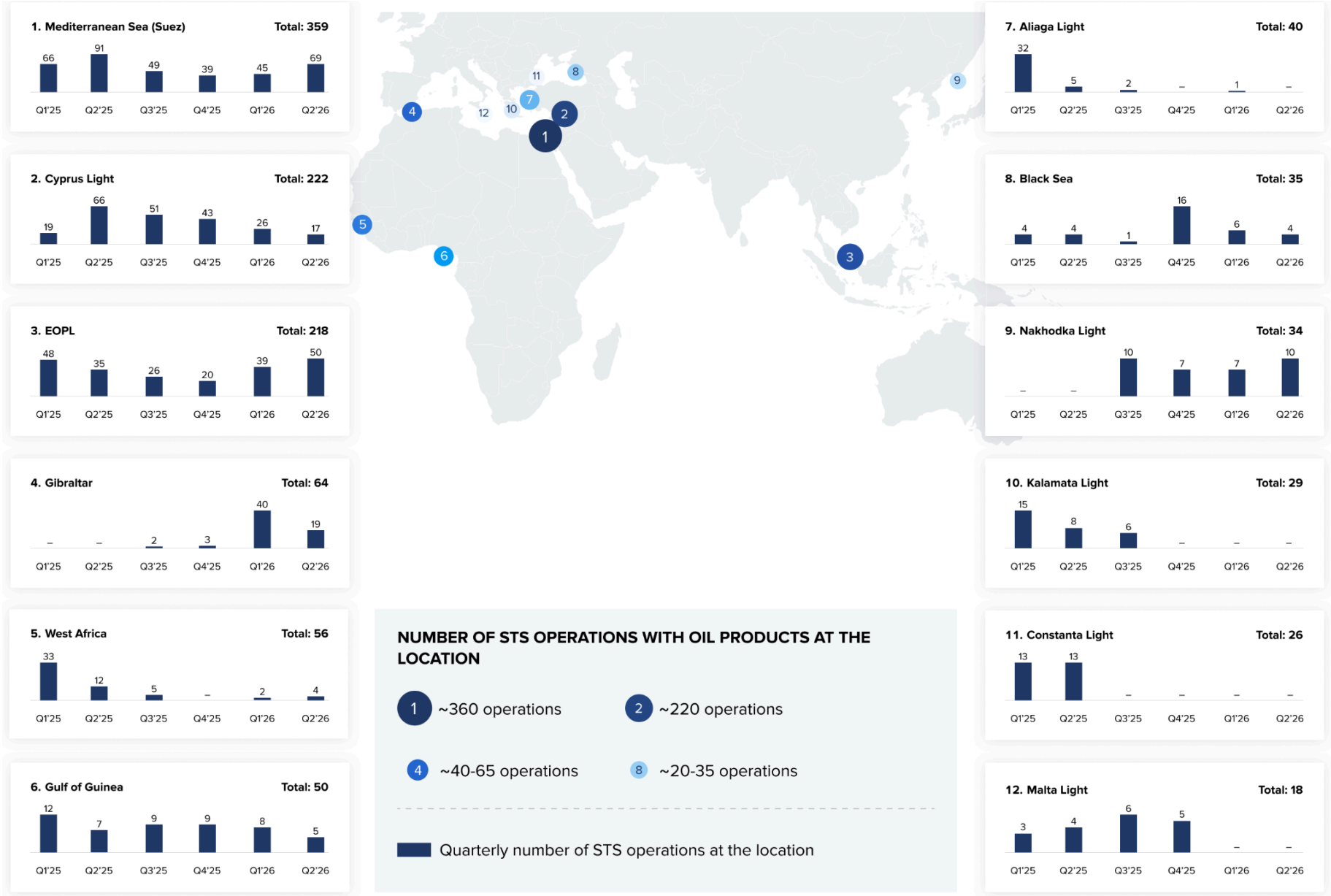
Source: Kpler, KSE Institute

¹⁰ This section uses two key definitions: "First STS" refers to the first ship-to-ship transfer a cargo underwent, i.e., from the vessel that loaded the cargo at port to a second vessel. "Subsequent STS" refers to any further transfer of the same cargo, regardless of the number of STS operations involved.

Map 1: STS operations involving Russian crude oil



Map 2: STS operations involving Russian oil products



The Role of Ship-to-Ship Transfers in Russian Seaborne Oil Exports

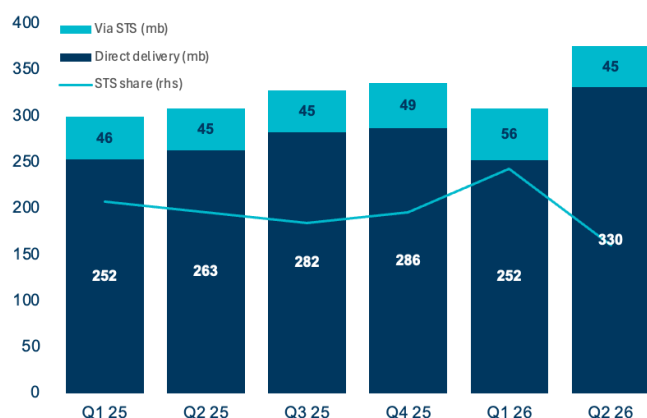
The following sections present quarterly statistics on the volumes of STS transfers involving Russian oil. Due to data limitations regarding the identification of volumes during subsequent transfers and to avoid possible double counting, the analysis includes only the first STS transfer for each cargo. STS volumes are assigned to the quarter in which the voyage commenced from the origin port, rather than the date on which the transfer took place. The reported STS volumes are likely slightly underestimated, as the analysis excludes transfers involving vessels below 5,000 DWT and cases where one or more participating vessels could not be identified.

Ship-to-ship (STS) transfers are an important instrument employed in Russian oil export logistics and their role has grown after the imposition of sanctions, including import embargoes and the oil price cap.¹¹ By conducting transfers at sea rather than at port, Russian exporters are able to obscure the origin of cargoes, consolidate smaller shipments onto larger tankers, and bypass restrictions tied to port-state jurisdiction. This makes STS operations an important element of Russia's post-sanctions oil export logistics.

The share of STS transfers in Russian seaborne oil exports remained broadly stable throughout Q1 2025–Q2 2026, except for a spike in Q1 2026 for both crude and oil products. For crude oil, the STS share remained broadly stable at ~14.5% throughout most of 2025 before rising to 18% in Q1 2026, when STS volumes reached 56 million barrels (mb), and decreasing back to 12% in Q2 2026 as STS volumes fell to 45 mb while total crude exports grew to 376 mb (see Figure 3). For oil products, the STS share was more volatile, declining from 19% in Q1 2025 to 11% in Q3 2025 before recovering to 20% in Q1 2026, when STS volumes reached 40 mb, and then falling back to 12% in Q2 2026 as STS volumes dropped to 20 mb (see Figure 4).

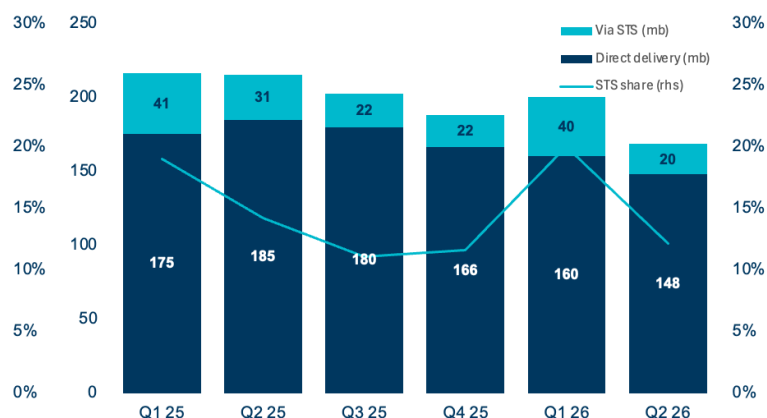
The Q2 2026 data may partly reflect the impact of Ukrainian drone strikes on Russian oil infrastructure: direct crude delivery surged to 330 mb as damaged refining capacity pushed additional unrefined volumes toward seaborne export, while oil product exports contracted to their lowest observed level across the period, at 168 mb total. Meanwhile, the sharp increase in STS volumes in Q1 2026 may have been driven by U.S. sanctions imposed on Rosneft and Lukoil in October 2025. Following these sanctions, STS transfers involving Russian oil sold by these companies approximately doubled, contributing to the overall rise in STS volumes.

Figure 3: Volume of Russian crude oil exports via STS and direct delivery, mb



Source: Kpler, KSE Institute

Figure 4: Volume of Russian oil product exports via STS and direct delivery, mb



Source: Kpler, KSE Institute

¹¹ See [here](#).

Geographical Distribution of STS Operations by Volume

Crude Oil

Nakhodka Light, EOPL, and Offshore Hong Kong were the top three locations for Russian crude oil STS volumes, together handling 63% of total volume (179.5 mb) over the observation period. Nakhodka Light alone represented the largest single share at 37% (104.7 mb), followed by EOPL at 15% (42.5 mb) and Offshore Hong Kong at 11% (32.3 mb) (see Map 3 and Table 3). The Mediterranean Sea (Suez zone) and Red Sea each accounted for a further 10% of total volume (29.5 and 28.7 mb, respectively), while the Gulf of Oman and Zarubino contributed smaller shares of 6% and 3% (17.3 and 9.7 mb, respectively). Altogether, the top 10 locations accounted for 97% of total Russian crude oil STS volume over the period, with the remaining 3% spread across a long tail of minor anchorages.

Map 3: Geographical distribution of STS operations involving Russian crude oil



Source: Kpler, KSE Institute

Nakhodka Light and Red Sea function as dedicated hubs for Russian crude, holding a share near 100% of total crude oil STS volumes at these locations throughout the period. The Mediterranean Sea (Suez) shows a similar pattern except in Q2 2026, when the Russian share fell to 67%. Zarubino shows a similar pattern from Q2 2025 onward, after starting the period with no recorded transfers (see Table 4). By contrast, EOPL stands out with a persistently low Russian share of just ~3–10%, indicating this location primarily handles non-Russian cargo alongside a small volume of Russian crude. Offshore Hong Kong and Gulf of

Oman show the most volatility, swinging between roughly 29% and 86% at Offshore Hong Kong and declining sharply at Gulf of Oman from 94% in Q1 2025 to just 1% in Q2 2026, suggesting a marked shift away from Russian cargo at this anchorage. Western India and Japan Sea, meanwhile, handled Russian crude only intermittently, with several quarters showing no recorded transfers at all.

Table 3: Russian crude oil STS volumes by location, mb

Location	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Total	Share of total, %
Nakhodka Light	11.3	17.8	14.6	19.4	19.0	22.6	104.7	37%
EOPL	5.1	9.2	3.9	11.9	5.6	6.8	42.5	15%
Offshore Hong Kong	4.2	4.1	3.9	7.1	7.5	5.5	32.3	11%
Mediterranean Sea (Suez zone)	11.9	2.7	3.4	3.5	6.0	2.0	29.5	10%
Red Sea	0.7	2.8	6.4	5.5	9.0	4.2	28.7	10%
Gulf of Oman	3.4	4.1	2.8	0.7	5.6	0.7	17.3	6%
Zarubino	-	2.1	4.6	1.0	1.4	0.7	9.7	3%
Western India	6.6	-	2.2	-	-	0.7	9.5	3%
Yeosu Light	-	2.1	-	-	-	-	2.1	1%
Japan Sea	1.3	-	0.7	-	-	-	2.1	1%
Other	1.7	0.1	2.7	-	1.8	1.9	8.3	3%
Total	46.3	45.1	45.2	49.1	55.9	45.1	286.7	100%

Source: Kpler, KSE Institute

Table 4: Russian crude oil as a share of total (all-origin) crude oil STS volumes at each location, %

Location	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026
Nakhodka Light	100%	100%	100%	100%	100%	100%
EOPL	4%	7%	3%	10%	5%	6%
Offshore Hong Kong	86%	38%	29%	51%	63%	82%
Mediterranean Sea (Suez zone)	100%	93%	100%	100%	100%	67%
Red Sea	100%	100%	100%	90%	100%	100%
Gulf of Oman	94%	62%	32%	25%	52%	1%
Zarubino	-	100%	100%	100%	100%	100%
Western India	97%	-	100%	0%	0%	11%
Yeosu Light	-	100%	-	0%	0%	-
Japan Sea	100%	-	100%	-	-	-

Source: Kpler, KSE Institute

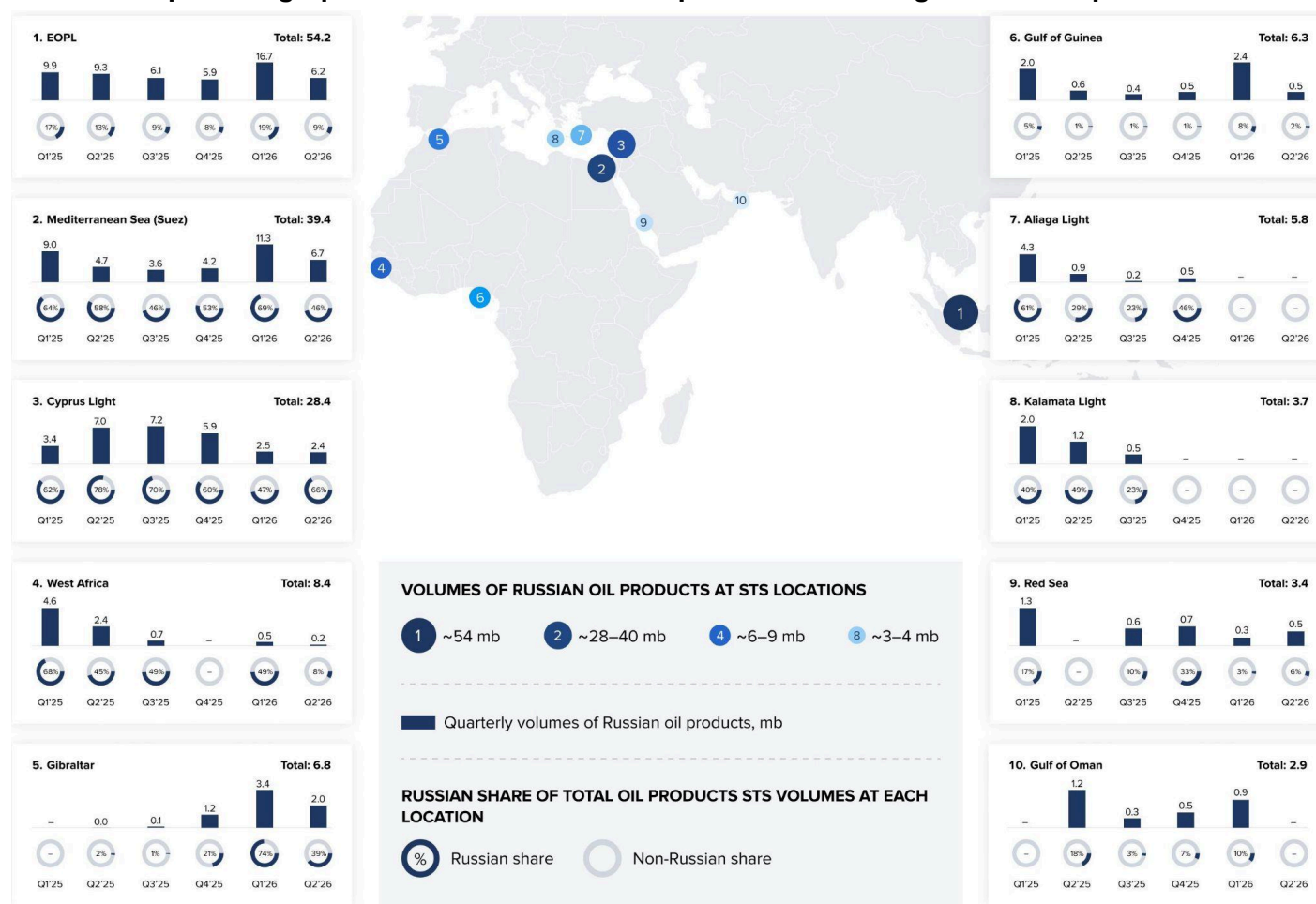
Oil Products

EOPL, Mediterranean Sea (Suez zone), and Cyprus Light were the top three locations for Russian oil product STS volumes, together handling 69% of total volume (121.9 mb) over the observation period. EOPL alone represented the largest single share at 31% (54.2 mb), followed by the Mediterranean Sea (Suez) at 22% (39.4 mb) and Cyprus Light at 16% (28.4 mb) (see Map 4 and Table 5). West Africa, Gibraltar, and Gulf of Guinea each accounted for a further ~4–5% of total volume (8.4, 6.8, and 6.3 mb, respectively), while Aliaga Light, Kalamata Light, Red Sea, and Gulf of Oman contributed smaller shares of ~2–3% each (5.8, 3.7, 3.4, and 2.9 mb, respectively). Altogether, the top 10 locations accounted for 90% of total Russian oil product STS volume over the period, with the remaining 10% spread across a long tail of minor anchorages.

The Mediterranean Sea (Suez zone) and Cyprus Light show a consistently high Russian presence, generally ranging between 46% and 78% of total oil product STS volumes at these locations. West Africa showed a similarly high Russian share through Q1 2026, before falling sharply to 8% in Q2 2026. EOPL, by contrast, stands out with a persistently low Russian share of just 8–19% despite being the single largest location by volume, meaning it primarily handles non-Russian product alongside a smaller flow of Russian cargo (see Table 6). Gibraltar shows the most dramatic shift, rising from a negligible Russian presence in 2025 to a period-high of 74% in Q1 2026 before easing to 39%, suggesting a growing but still

uneven role in Russian product logistics. The Gulf of Guinea maintains a consistently low Russian share throughout (~1–8%), while Aliaga Light, Kalamata Light, Red Sea, and Gulf of Oman all show high volatility with no clear trend and several quarters where Russian cargo was effectively absent.

Map 4: Geographical distribution of STS operations involving Russian oil products



Source: Kpler, KSE Institute

Table 5: Russian oil product STS volumes by location, mb

Location	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Total	Share of total, %
EOPL	9.9	9.3	6.1	5.9	16.7	6.2	54.2	31%
Mediterranean Sea (Suez zone)	9.0	4.7	3.6	4.2	11.3	6.7	39.4	22%
Cyprus Light	3.4	7.0	7.2	5.9	2.5	2.4	28.4	16%
West Africa	4.6	2.4	0.7	-	0.5	0.2	8.4	5%
Gibraltar	-	-	0.1	1.2	3.4	2.0	6.8	4%
Gulf of Guinea	2.0	0.6	0.4	0.5	2.4	0.5	6.3	4%
Aliaga Light	4.3	0.9	0.2	0.5	-	-	5.8	3%
Kalamata Light	2.0	1.2	0.5	-	-	-	3.7	2%
Red Sea	1.3	-	0.6	0.7	0.3	0.5	3.4	2%
Gulf of Oman	-	1.2	0.3	0.5	0.9	-	2.9	2%
Other	4.7	3.2	2.7	2.3	2.0	1.9	16.7	10%
Total	41.0	30.6	22.4	21.8	39.9	20.4	176.0	100%

Source: Kpler, KSE Institute

Table 6: Russian oil products as a share of total (all-origin) oil product STS volumes at each location, %

Location	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026
EOPL	17%	13%	9%	8%	19%	9%
Mediterranean Sea (Suez zone)	64%	58%	46%	53%	69%	46%
Cyprus Light	62%	78%	70%	60%	47%	66%
West Africa	68%	45%	49%	0%	49%	8%
Gibraltar	0%	2%	1%	21%	74%	39%
Gulf of Guinea	5%	1%	1%	1%	8%	2%
Aliaga Light	61%	29%	23%	46%	0%	-
Kalamata Light	40%	49%	23%	0%	0%	0%
Red Sea	17%	0%	10%	33%	3%	6%
Gulf of Oman	0%	18%	3%	7%	10%	0%

Source: Kpler, KSE Institute

Russian crude oil dominates its STS locations almost completely, with most locations showing a Russian share close to 100% and only EOPL standing out as a location handling mostly non-Russian cargo. Russian oil products, by contrast, share their STS locations far more evenly with non-Russian cargo, with even the top locations rarely exceeding ~60–70% and several showing Russian shares that vary widely across quarters. This suggests that Russian crude oil relies on a small number of STS locations where transfers are almost exclusively associated with Russian cargo, while Russian oil products move through a more shared set of locations alongside cargo from other origins.

Sanctions Coverage of the Russian STS Fleet

We identify 799 unique tankers involved in first-stage STS operations during Q1 2025–Q2 2026 (251 with crude oil and 580 with oil products). **55% (438) currently meet KSE Institute’s definition of “shadow fleet,”** i.e., they do not have links to G7+ services (e.g., ownership, management, flagging, or insurance).

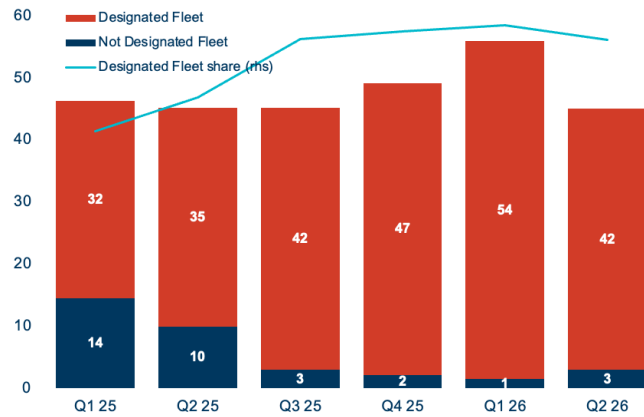
Crude oil

The share of designated¹² tankers supplying crude oil for STS operations increased sharply during 2025 and remained above 90% in every quarter from Q3 2025 onward. This share rose from 69% in Q1 2025 to a period-high of 97% in Q1 2026, before easing slightly to 94% in Q2 2026 (see Figure 5). Non-designated fleet participation, meanwhile, fell correspondingly, from 31% in Q1 2025 to just 3% in Q1 2026, before ticking back up marginally to 6% in Q2 2026, still a fraction of its starting level and consistent with the near-complete dominance of designated tonnage on the supplying side.

The designated fleet share among tankers receiving crude oil at STS locations declined in every quarter following its peak of 81% in Q3 2025. The designated fleet share on the receiving side stood at just 26% in Q1 2025 before rising sharply to a period-high of 81% in Q3 2025, then declining to 68% in Q4 2025, 58% in Q1 2026, and further to 55% in Q2 2026 (see Figure 6). This sustained decline and the persistently lower designation share compared to the supplying fleet suggest that the receiving side draws on a broader and less consistently sanctioned pool of tankers, reflecting the separation between the designated fleet supplying Russian exports from terminals and the more diverse fleet taking cargo onward to end buyers.

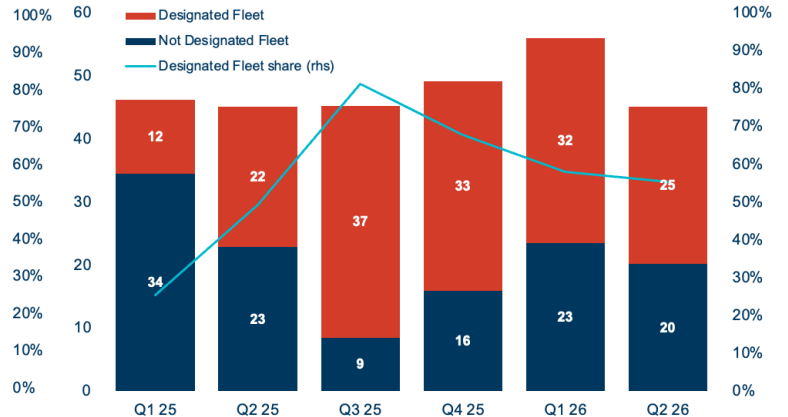
¹² “Designated” refers to tankers designated by at least one of six governments (EU, US, UK, CA, AU, and NZ)

Figure 5: Designated fleet share among tankers supplying crude oil to STS locations, mb



Source: Kpler, KSE Institute

Figure 6: Designated fleet share among tankers receiving crude oil at STS locations, mb



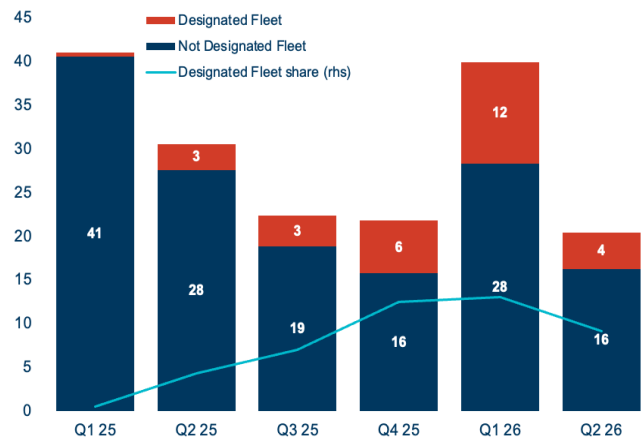
Source: Kpler, KSE Institute

Oil Products

The designated fleet share among tankers supplying oil products for STS operations remained below 30% in every quarter of the observation period. The designated fleet share rose from just 1% in Q1 2025 to a period-high of 29% in Q1 2026 before easing back to 20% in Q2 2026, levels significantly below those observed for crude oil (see Figure 7). Non-designated tankers correspondingly held above 70% of volume throughout, falling from 99% in Q1 2025 to a low of 71% in Q1 2026 before rising back to 80% in Q2 2026.

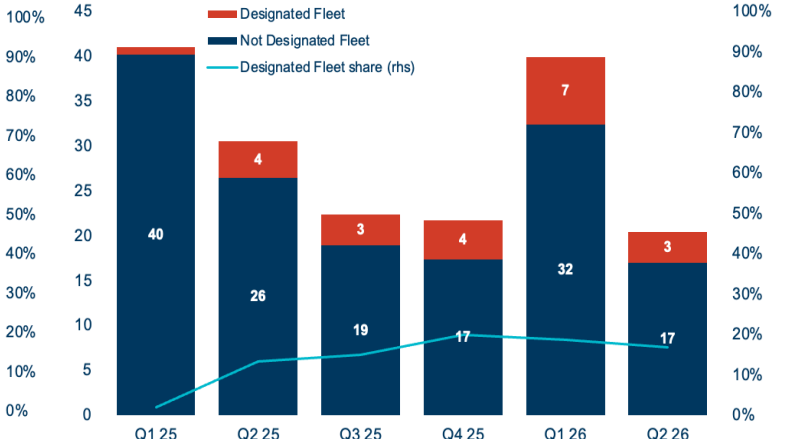
The designated fleet share among tankers receiving oil products at STS locations remained at or below 20% in every quarter throughout the observation period. The designated fleet share rose from 2% in Q1 2025 to a period-high of 20% in Q4 2025, before easing slightly to 19% in Q1 2026 and 17% in Q2 2026 (see Figure 8). This share stayed close to the equivalent supplying-side figure throughout, unlike crude oil, where a sharp divergence exists between the supplying and receiving fleet designation profiles, suggesting that both sides of oil product STS operations continue to draw on a similarly unsanctioned pool of tankers.

Figure 7: Designated fleet share among tankers supplying oil products to STS locations, mb



Source: Kpler, KSE Institute

Figure 8: Designated fleet share among tankers receiving oil products at STS locations, mb



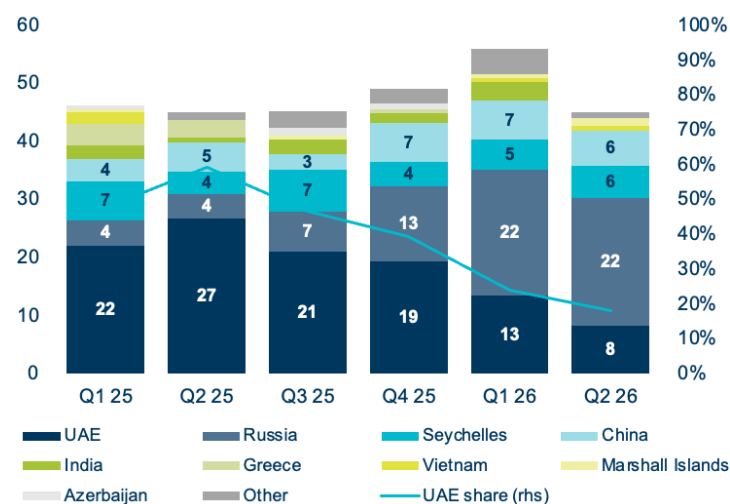
Source: Kpler, KSE Institute

Ship Management of Tankers Involved in STS Operations with Russian Oil

Crude Oil

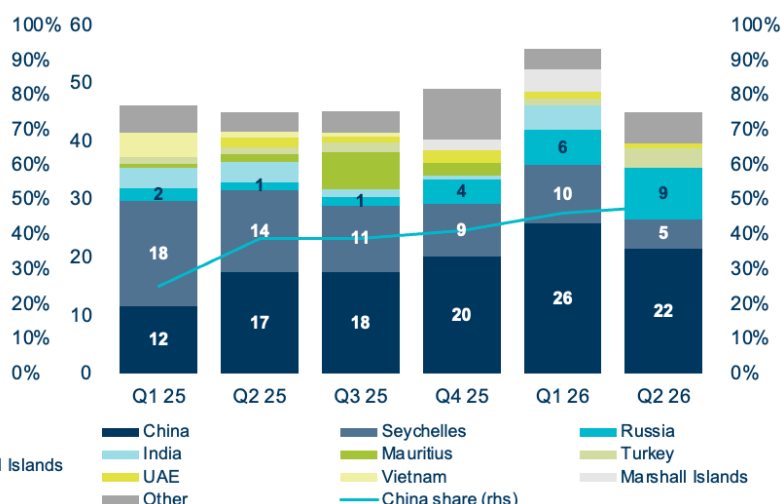
UAE-based ship managers dominated until Q1 2026, with a peak share of nearly 60%, before Russian-based ones became the leading group, reaching 49% in Q2 2026. The steepest decline occurred after Q4 2025, when the UAE share stood at 39% (19 mb) before dropping to 24% (13 mb) in Q1 2026 and 18% (8 mb) in Q2 2026 (see Figure 9). Russian-based managers grew over the same period from a 9% share (4 mb) in Q1 2025 to 39% (22 mb) in Q1 2026 and held at 49% (22 mb) in Q2 2026, overtaking the UAE as the largest single ship-manager country from Q1 2026 onward. Seychelles- and China-based ship managers held smaller and more stable roles throughout, ranging between 6% and 16% of total each (~4–7 mb).

Figure 9: Ship managers of tankers supplying crude oil to STS locations by registration, mb



Source: Kpler, Equasis, KSE Institute

Figure 10: Ship managers of tankers receiving crude oil at STS locations by registration, mb



Source: Kpler, Equasis, KSE Institute

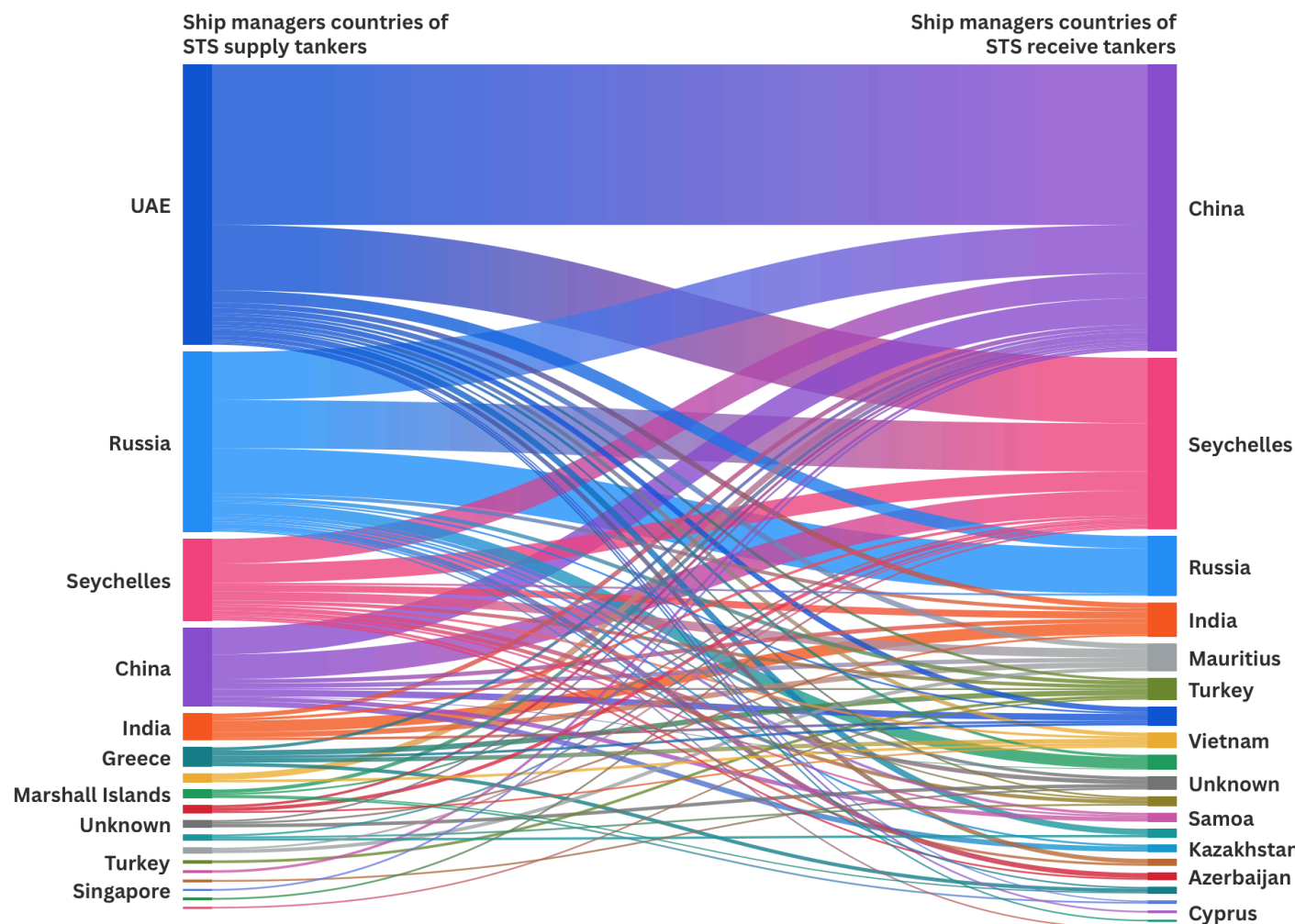
China-based ship managers steadily expanded their share of the fleet receiving crude oil at STS locations, rising from 25% (12 mb) in Q1 2025 to a period-high of 48% (22 mb) in Q2 2026, nearly doubling over six quarters (see Figure 10). Seychelles-based ship managers held the second-largest role for most of the period but declined sharply, falling from a 39% share (18 mb) in Q1 2025 to just 11% (5 mb) in Q2 2026. Russian-based ship managers grew from a 4% share (2 mb) in Q1 2025 to 20% (9 mb) in Q2 2026, nearly doubling their volume and overtaking Seychelles to become the second-largest ship-manager country on the receiving side by the final quarter.

Crude oil flows between supplying and receiving ship managers shift at the point of STS transfer, with the single largest flow, UAE to China, making up 22% of total volume. UAE- and Russia-based ship managers dominate the supplying side, while China- and Seychelles-based managers dominate the receiving side (see Figure 11). Of the volume supplied by UAE-based managers, 57% is transferred to China-based managers and a further 23% to Seychelles-based managers, meaning these two flows account for four-fifths of the volume handled by UAE-managed tankers.

Russia-based ship managers distribute their supplied volume more evenly across receiving managers. Of the volume supplied by Russian-managed tankers, 27% is transferred to Seychelles-based managers, 27% to China-based managers, and 25% remains under Russian management. In terms of the overall total, transfers

from Russian- to Seychelles-based managers and from Russian- to China-based managers each account for 7%, while transfers remaining under Russian management represent 6%.

Figure 11: Crude oil STS flows by ship managers, % of total volume, Q1 2025–Q2 2026



Source: Kpler, Equasis, KSE Institute

Oil Products

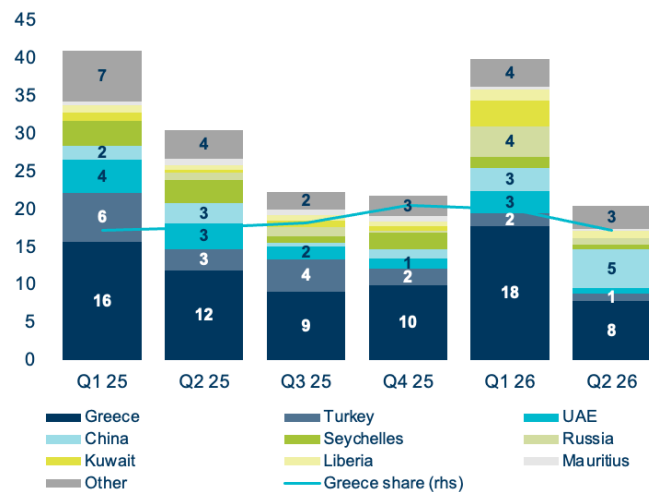
Greece-based ship managers remained the leading group managing the fleet supplying oil products to STS locations throughout the observation period, accounting for ~38–46% each quarter. Turkey- and UAE-based ship managers represented the second- and third-largest contributors for most of the period, both declining steadily, with Turkey falling from 16% (6 mb) in Q1 2025 to just 5% (1 mb) in Q2 2026, and UAE from 11% (4 mb) to 4% (1 mb) over the same period (see Figure 12).

Seychelles-based ship managers held a broadly stable but modest ~3–10% share (1–3 mb), while Russia-based ship managers grew from a 0% share in Q1 2025 to a peak of 10% (4 mb) in Q1 2026. China-based ship managers showed the most pronounced upward trend, rising from a 4% share (2 mb) in Q1 2025 to a period-high of 25% (5 mb) in Q2 2026, overtaking Turkey, UAE, Seychelles, and Russia.

Greece-based ship managers also led the fleet receiving oil products at STS locations throughout 2025, holding a ~16–37% share each quarter. Singapore-based ship managers, by contrast, grew from a

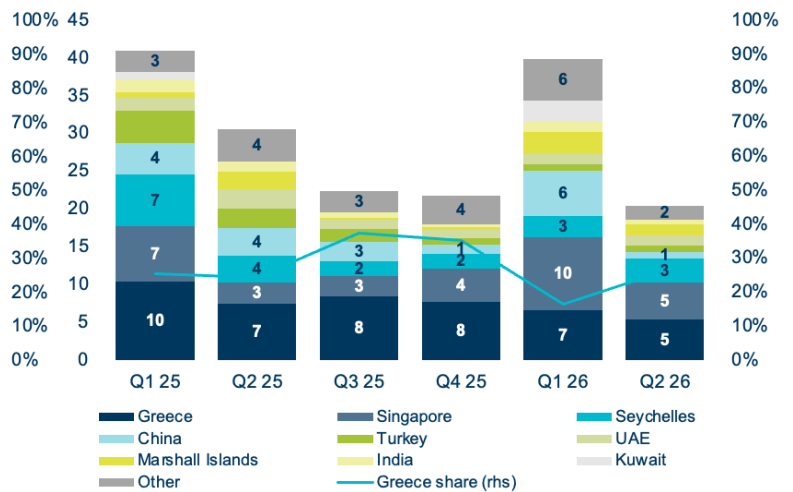
modest 18% (7 mb) in Q1 2025 to a period-high of 24% (10 mb) in Q1 2026, overtaking Greece's leading position that quarter. Singapore's share held at 24% (5 mb) in Q2 2026, matching Greece as joint-largest in the final quarter (see Figure 13). Seychelles-based ship managers contributed a broadly stable but modest ~7–17% (~2–7 mb) share throughout the period. China-based ship managers held a comparatively small presence through most of 2025, before rising to a period-high of 15% (6 mb) in Q1 2026, then falling back to 4% (1 mb) in Q2 2026.

Figure 12: Ship managers of tankers supplying oil products to STS locations by registration, mb



Source: Kpler, Equasis, KSE Institute

Figure 13: Ship managers of tankers receiving oil products at STS locations by registration, mb

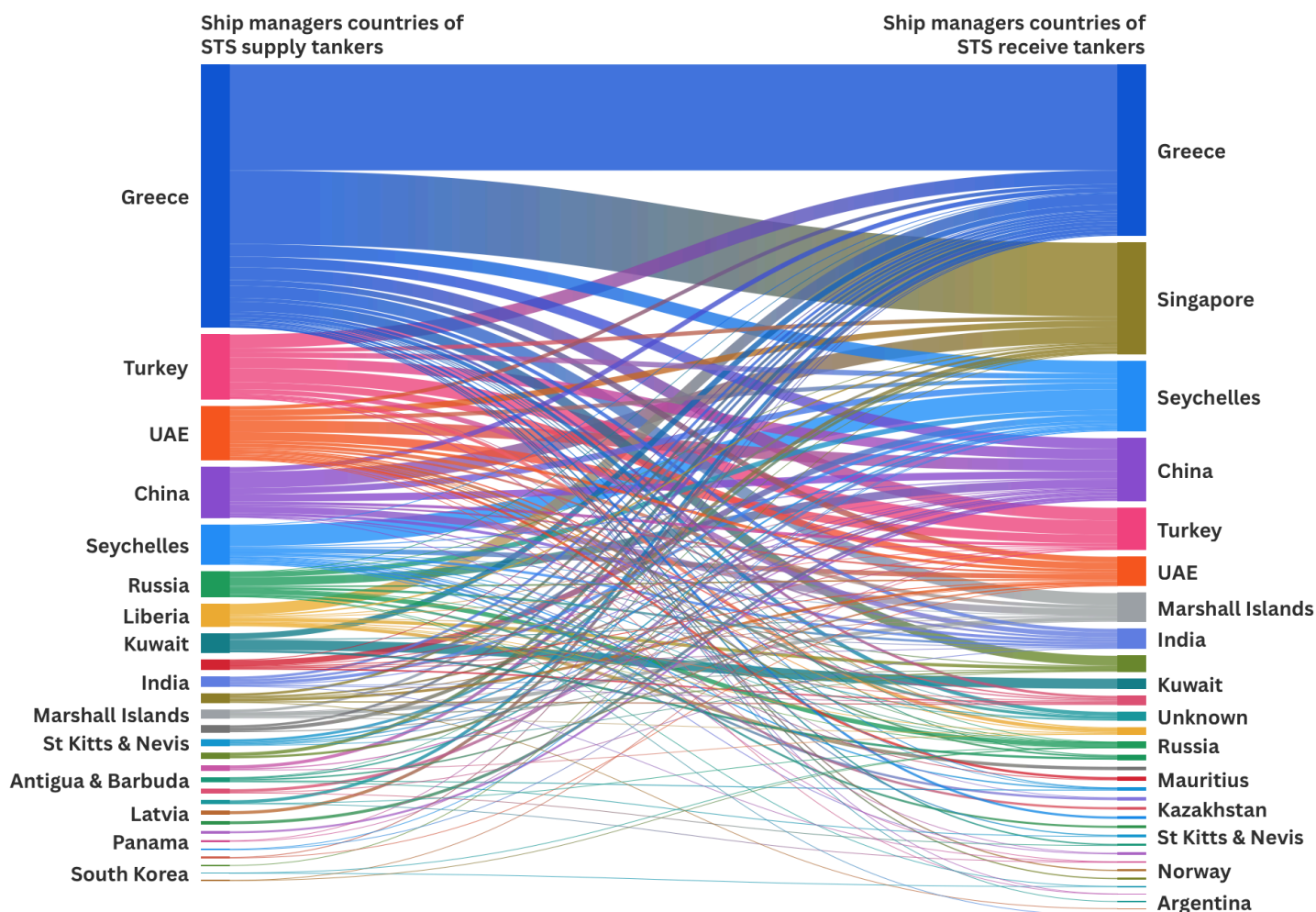


Source: Kpler, Equasis, KSE Institute

Oil-product flows between country-based ship managers are led by Greek-to-Greek transfers (17% of the total), followed by Greek-to-Singapore transfers (12%). Greek-based ship management companies dominate both the supplying and receiving sides, while Singapore-, Seychelles- and China-based companies are important recipients of transferred cargoes (see Figure 14). Of the volume supplied by Greek-managed vessels, 40% remains under Greek management, while a further 29% is transferred to Singapore-based managers. Together, these two flows account for over two-thirds of the volume handled by Greek-managed vessels. The remaining volume is primarily transferred to Turkish-, Seychelles-, and Marshall Islands-based managers, each accounting for around 5% of the volume supplied by Greek-managed vessels (2% of the overall total each).

Turkey-based ship management companies distribute their supplied volume more evenly across receiving managers. Of the volume supplied by Turkish-managed vessels, 22% remains under Turkish management, while 21%, 16%, and 11% is transferred to Greek-, China-, and UAE-based managers, respectively. Transfers from Turkish- to Turkish- and Greek-managed vessels each account for 2% of the overall total, with transfers to China-based managers contributing a further 2%.

Figure 14: Oil product STS flows by ship managers, % of total volume, Q1 2025–Q2 2026



Source: Kpler, Equasis, KSE Institute

Types of Tankers Supplying and Receiving Russian Oil via STS Operations

Crude Oil

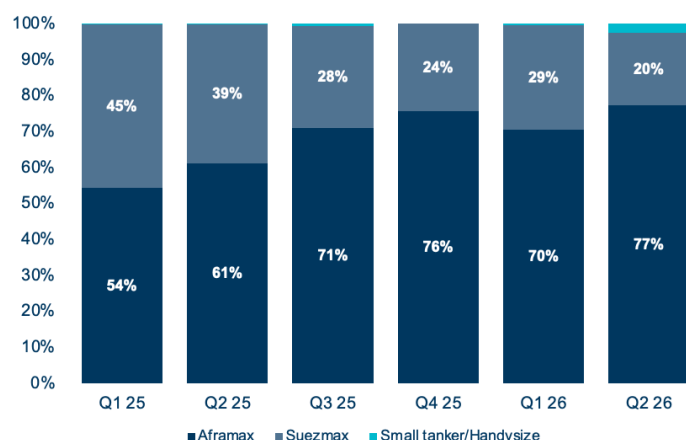
Aframax tankers have become dominant among the fleet supplying crude oil to STS operations, rising from 54% of volumes in Q1 2025 to 77% in Q2 2026. Suezmax tankers have moved in the opposite direction, falling steadily from 45% in Q1 2025 to just 20% in Q2 2026 (see Figure 15). Small/Handysize tankers have played a marginal but growing role, edging up to 3% of supply in Q2 2026.

Aframax tankers remained dominant among the fleet receiving crude oil at STS locations, with their share increasing from 41% in Q1 2025 to 61% in Q4 2025 before declining to 51% in Q2 2026. VLCCs have shown the most notable shift, falling to a low of 12% in Q2 2025 before climbing steadily to a period-high of 34% in Q2 2026 (see Figure 16). Suezmax tankers, by contrast, declined sharply from 35% in Q1 2025 to 11% in Q2 2026, while ULCCs emerged from Q4 2025 onward, reaching 3% by Q2 2026.

Aframax tankers dominate both sides of crude STS operations, but far more decisively on the supplying (77% in Q2 2026) than on the receiving side (51%). The clearest divergence is in tanker size at the top end: the receiving fleet has shifted markedly toward larger VLCC tonnage (34% in Q2 2026, from just 22% at the start

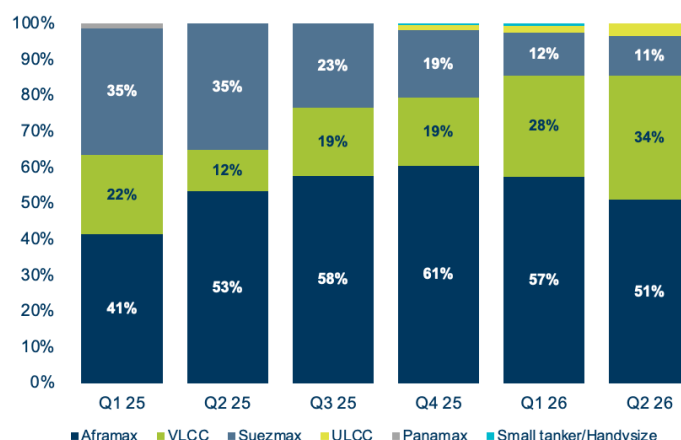
of the period), while the supplying fleet shows essentially no VLCC presence, consistent with consolidating cargo from smaller tankers loading at Russian terminals onto larger tankers for the onward voyage.

Figure 15: Type of tankers supplying crude oil STS operations, share of total



Source: Kpler, KSE Institute

Figure 16: Type of tankers receiving crude oil STS operations, share of total

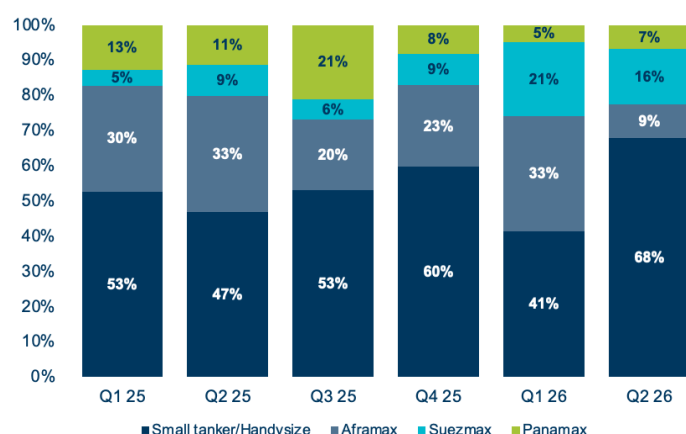


Source: Kpler, KSE Institute

Oil products

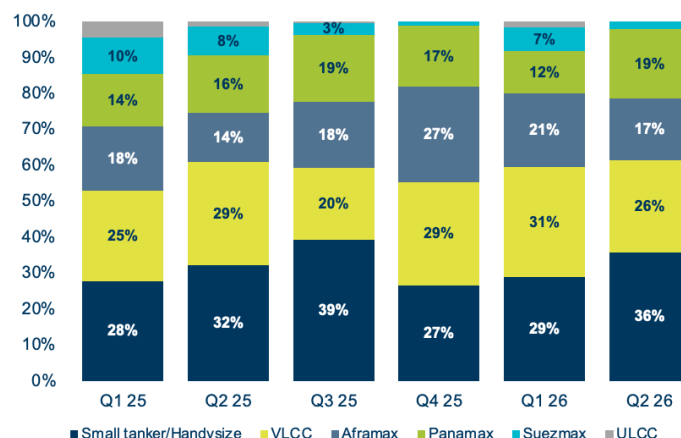
Small/Handysize tankers remained dominant among the fleet supplying oil products to STS operations, accounting for more than 40% in every quarter and nearly 70% in Q2 2026. Their share fell to 41% in Q1 2026 before rebounding to 68% in Q2 2026 (see Figure 17). Aframax tankers, by contrast, moved in the opposite direction: their share climbed to 33% in both Q2 2025 and Q1 2026 before collapsing to just 9% in Q2 2026, the lowest level observed. Suezmax tankers spiked notably to 21% in Q1 2026, well above their ~5–9% range in prior quarters, before easing back to 16% in Q2 2026. Panamax tankers showed no clear trend, fluctuating between 5% and 21% and falling to just 7% by the end of the period.

Figure 17: Type of tankers supplying oil products to STS locations, share of total



Source: Kpler, KSE Institute

Figure 18: Type of tankers receiving oil products at STS locations, share of total



Source: Kpler, KSE Institute

Small/Handysize tankers and VLCCs together transported more than half of all oil products received at STS locations, with their combined share ranging from 53% in Q1 2025 to 62% in Q2 2026. The share of Small/Handysize tankers ranged between 27% and 39%, reaching 36% in Q2 2026, while VLCCs peaked at

31% in Q1 2026 before easing to 26% in Q2 2026 (see Figure 18). Aframax held a fairly stable 14–27%, Panamax ranged between 12% and 19%, and Suezmax and ULCC played only a marginal, shrinking role.

The two sides differ structurally: the supplying fleet is dominated by Small/Handysize tankers (68% in Q2 2026), while the receiving fleet draws on a much broader mix, with VLCCs alone taking 26% of volumes despite having no presence on the supplying side, consistent with smaller tankers feeding cargo into STS locations for consolidation onto larger tankers headed to end markets.

Fleet Composition of Large-Class Receiving Tankers

Among the 50 large-class tankers (VLCC/ULCC) receiving Russian oil at STS locations, 33 (66%) are shadow fleet vessels, while 17 (34%) are not. Non-shadow tankers are insured through the following IG clubs: Ukpandiclub (10 vessels), West of England (5), Skuld (1), and Northstandard (1) (see Table 7).

The two groups also differ in ship manager country and flag. Shadow vessels are managed largely out of China (12 of 33) and Seychelles (6), with the remainder scattered across Marshall Islands, Samoa, Azerbaijan, Malaysia, Turkey, and Russia, and 5 vessels where the manager's country is unknown. Their flags lean toward smaller or flag-of-convenience registries such as Djibouti, Equatorial Guinea, Vanuatu, Cameroon, and Barbados, while several other vessels are recorded with falsified flags. Non-shadow vessels are managed mainly from Singapore (8 of 17) and China (5), with Marshall Islands (3) and Greece (1). Non-shadow tankers fly more conventional flags, including Marshall Islands, Hong Kong, Panama, and Bahamas.

Of the 33 shadow fleet vessels, 5 are also designated by at least one jurisdiction. Cross-jurisdictional sanctions remain limited: two vessels are sanctioned by the EU, UK, and Canada; two by the EU and the US; and one by the US, UK, and Canada.

Table 7: VLCC/ULCC tankers receiving Russian oil at STS locations

IMO	Type	Flag	Ship manager/Commercial manager	IG P&I	Shadow status	Designation
9267118	VLCC	Vanuatu	Marshall Islands. Dragon Linkage Ltd	-	Yes	-
9307645	VLCC	Vanuatu	China. Jieyun Ship Management Ltd	-	Yes	-
9302968	VLCC	Cameroon	China. Quorvem Mistcarrier Ltd	-	Yes	-
9253117	VLCC	Not Known	Singapore. Amarine Ship Management Pte	-	Yes	-
9227948	VLCC	Djibouti	Seychelles. Trident Symphony Ltd	-	Yes	-
9221918	VLCC	Djibouti	Seychelles. Trident Tenacity Ltd	-	Yes	-
9233789	VLCC	Barbados	China. Tomo Viki Ltd	-	Yes	-
9320843	VLCC	Curacao False	Unknown	-	Yes	-
9233739	VLCC	Equatorial Guinea	Samoa. Panaro Elith Ltd	-	Yes	-
9402732	VLCC	Russia	Unknown	-	Yes	✓
9246281	VLCC	Not Known	Samoa. Four Wood International	-	Yes	-
9409247	VLCC	Equatorial Guinea	China. Most Bright Investment Ltd	-	Yes	-
9311270	VLCC	Equatorial Guinea	Unknown	-	Yes	-
9297319	VLCC	San Marino False	Unknown	-	Yes	-
9245794	VLCC	Aruba False	China. Starcity International Ltd	-	Yes	-
9251602	VLCC	Equatorial Guinea	Seychelles. Galeran Service Corp	-	Yes	-
9237761	VLCC	Vanuatu	China. Nostalgia Co Ltd	-	Yes	-
9337195	VLCC	Tonga False	China. Blue Ocean Marine Co Ltd	-	Yes	✓
9216705	VLCC	Vanuatu	China. Katuska Marine Ltd	-	Yes	-
9285823	VLCC	San Marino	Marshall Islands. Polar Voyager Inc	-	Yes	-
9292187	VLCC	Not Known	China. Silver Star Ship Management	-	Yes	✓
9331244	VLCC	Barbados	China. Marinova Freight Ltd	-	Yes	-
9262754	VLCC	Cameroon	Seychelles. Grat Shipping Co Ltd	-	Yes	-
9294329	VLCC	Not Known	Unknown	-	Yes	-
9294331	VLCC	Mozambique False	China. Confident Apex Ltd	-	Yes	✓
9241102	VLCC	Djibouti	Seychelles. Trident Prosperity Ltd	-	Yes	-
9237072	VLCC	Djibouti	Malaysia. Ultra Shipping Sdn Bhd	-	Yes	-
9321304	VLCC	Djibouti	Turkey. Trident Dexterity Ltd	-	Yes	-
9230969	VLCC	Djibouti	Seychelles. Trident Agility Ltd	-	Yes	-
9288083	VLCC	Sierra leone	Azerbaijan. Sahlan Crest Llc	-	Yes	-
9322267	VLCC	Russia	Russia. Far Frontiers Llc	-	Yes	✓
9259343	VLCC	Cameroon	Azerbaijan. Beacon Driftscape Llc	-	Yes	-
9223887	VLCC	Vanuatu	China. Vast Mighty Ltd	-	No	-
9424261	VLCC	Malta	Greece. Minerva Marine Inc	Northstandard	No	-
9244623	VLCC	Panama	Singapore. Nathalin Shipping Pte Ltd	Skuld	No	-
9133850	VLCC	Marshall Islands	Marshall Islands. Ocasia Group Holdings Ltd	Ukpandiclub	No	-
9310654	VLCC	Hong Kong, China	China. Art Delight Investment Ltd	Ukpandiclub	No	-
9176981	VLCC	Marshall Islands	Singapore. Equatorial Marine Fuel Mgmt	Ukpandiclub	No	-
9387267	VLCC	Marshall Islands	China. Uperb Excel Ltd	Ukpandiclub	No	-
9169691	VLCC	Marshall Islands	Marshall Islands. Csha Shipping Co Ltd	Ukpandiclub	No	-
9315367	VLCC	Hong Kong, China	Singapore. Firm Shipping Services Pte Ltd	Ukpandiclub	No	-
9291286	VLCC	Hong Kong, China	China. Nanjing Changde Shipping Co	Ukpandiclub	No	-
9153513	VLCC	Panama	Marshall Islands. Cshb Shipping Co Ltd	Ukpandiclub	No	-
9237620	VLCC	Panama	Singapore. Itg Energy Singapore Pte Ltd	Ukpandiclub	No	-
9439058	VLCC	Gabon	China. Sino Navigation Ship Mgmt Ltd	Ukpandiclub	No	-
9295000	ULCC	Hong Kong, China	China. Scorpio International Invest	Ukpandiclub	No	-
9230878	VLCC	Bahamas	Singapore. Beyond Shipmanagement Pte Ltd	West Of England	No	-
9244867	VLCC	Bahamas	Singapore. Beyond Shipmanagement Pte Ltd	West Of England	No	-
9182318	VLCC	Bahamas	Singapore. Beyond Shipmanagement Pte Ltd	West Of England	No	-
9235268	ULCC	Bahamas	Singapore. Beyond Shipmanagement Pte Ltd	West Of England	No	-

Source: Kpler, Equasis, KSE Institute