Refinitiv Special Report: The Strait of Hormuz

Dubai - July 2019

Refinitiv Oil Research - MENA
Oil.Research.MENA@refinitiv.com

Giorgos Beleris
Oil Research Manager MENA
giorgos.beleris@refinitiv.com

Ranjith Raja
Senior Oil Analyst MENA
ranjith.raja@refinitiv.rom

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DATA IS JUST
THE BEGINNING

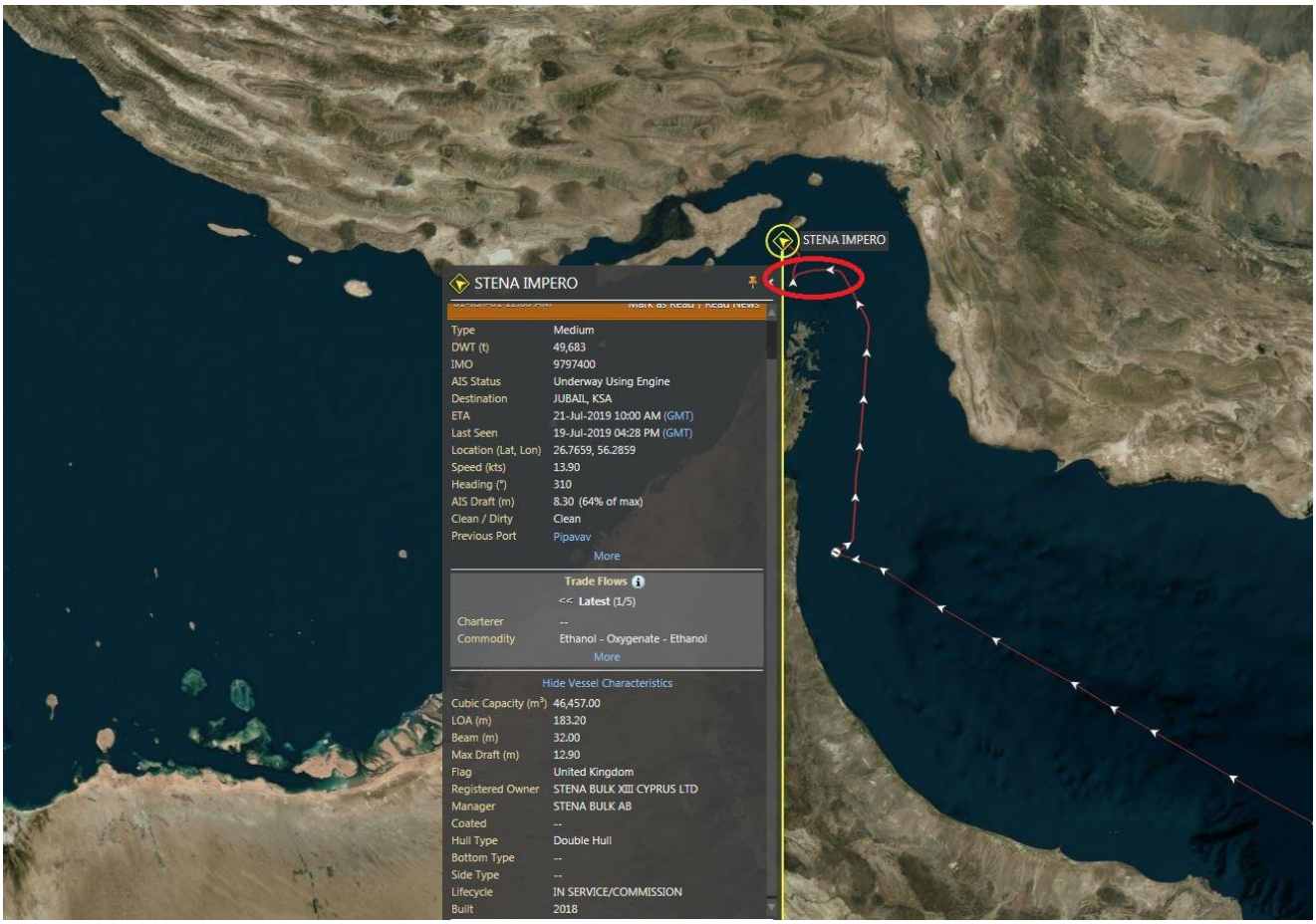
At just 21-nautical miles wide at its narrowest point, the Strait of Hormuz is considered the most important oil chokepoint in the world. More than a third of global seaborne crude oil exports travel through the Strait, which links the big Middle Eastern producers with customers worldwide.

While dozens of oil tankers travel through the Strait every day, their passage over recent months has become much more fraught. Recent developments, which include attacks on a number of vessels and the seizure of a British-registered tanker, undermine the right of transit passage and threaten the maritime security of all ships passing through the strait. A year on from analysing the potential for Iran to close the Strait of Hormuz, Refinitiv Oil Research continues to monitor the situation in the Gulf.

What has happened in the Strait of Hormuz?

Tensions in the Gulf escalated to new levels in July when the British-flagged Stena Impero, owned by Sweden's Stena Bulk, was seized by Iran's Revolutionary Guard.

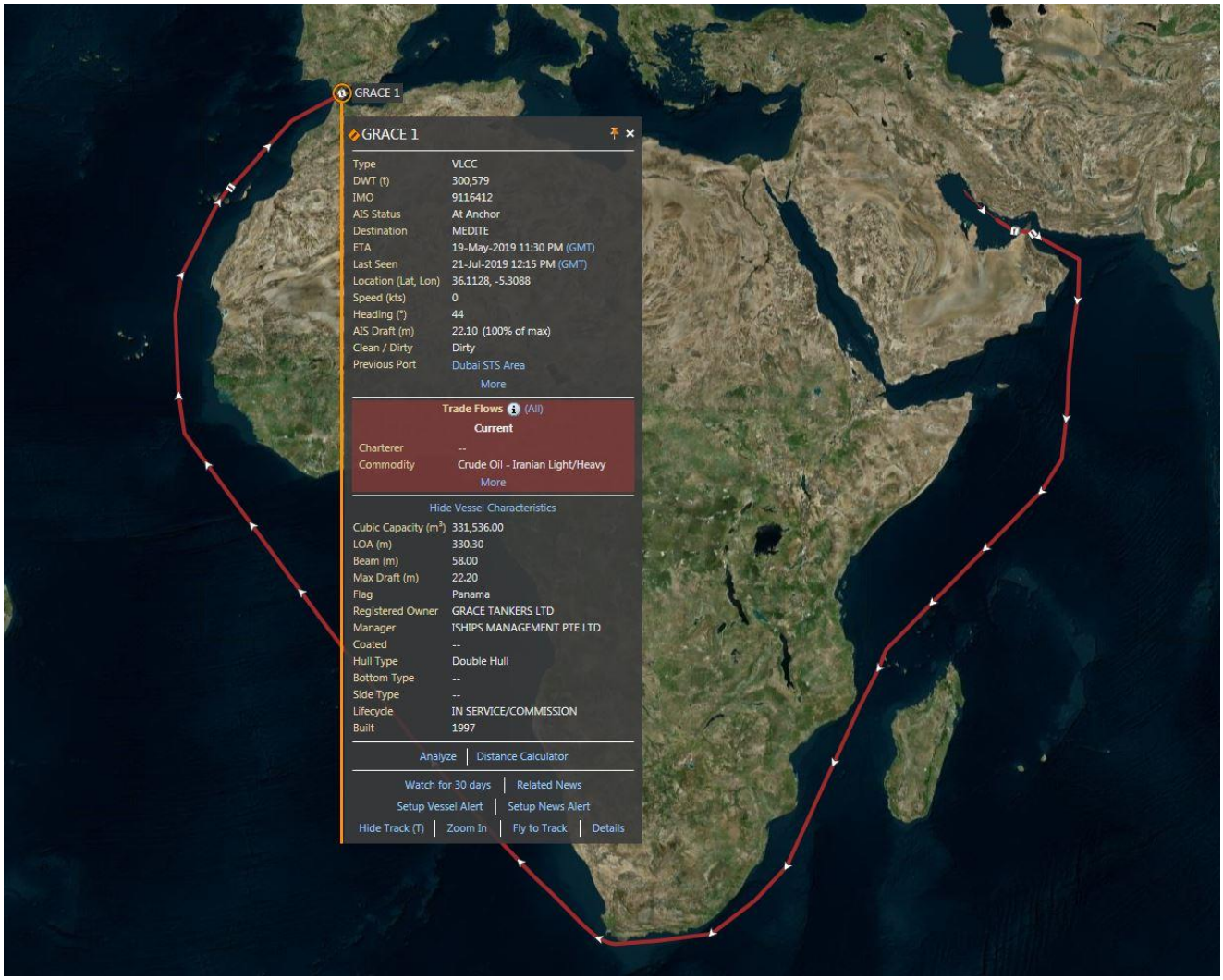
Refinitiv data show that the medium-range tanker was on its way to Saudi Arabia to pick up its next cargo, having previously been to India with a shipment of chemicals from the US. The British navy frigate HMS Montrose, which was patrolling in the area following a number of other attacks in the region, was unable to reach Stena Impero in time.



Tracking data from Refinitiv also show that the British vessel had not deviated from its passage through the Strait of Hormuz, where a strict traffic separation scheme is in operation under the rules of International Maritime Organization.

The move by Iran is likely to have been a retaliation for the seizure of oil tanker Grace 1, which British officials stopped in Gibraltar on suspicions of violating EU sanctions on Syria. Grace 1 had loaded her cargo in Kharg Island, Iran

back in April. Instead of crossing through the Suez Canal she went around Africa on a very slow journey before reaching Gibraltar for supplies, which is where she was seized by UK forces.

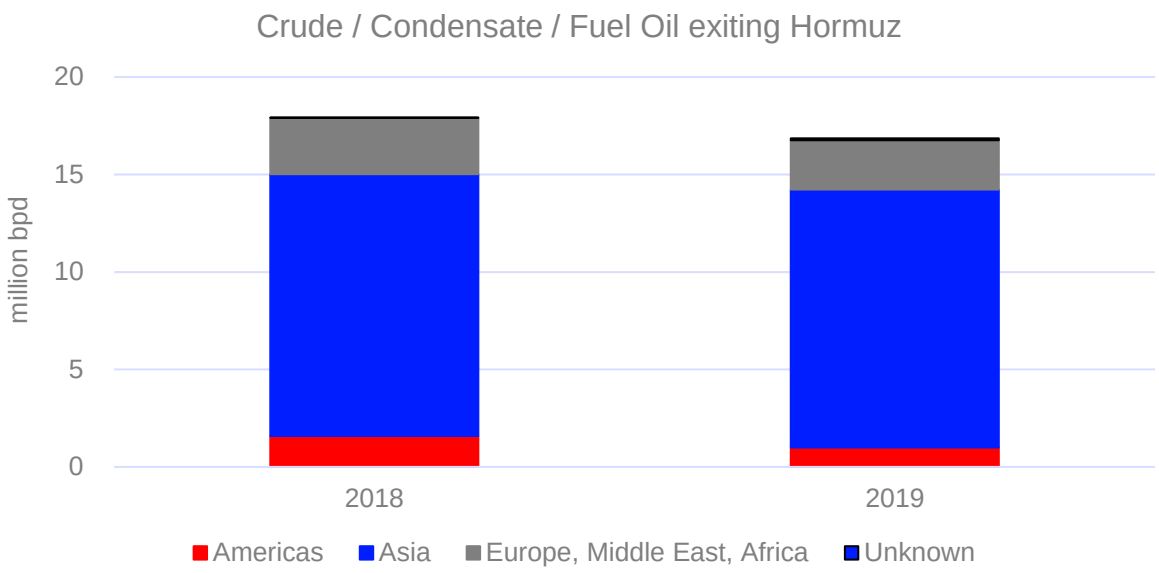


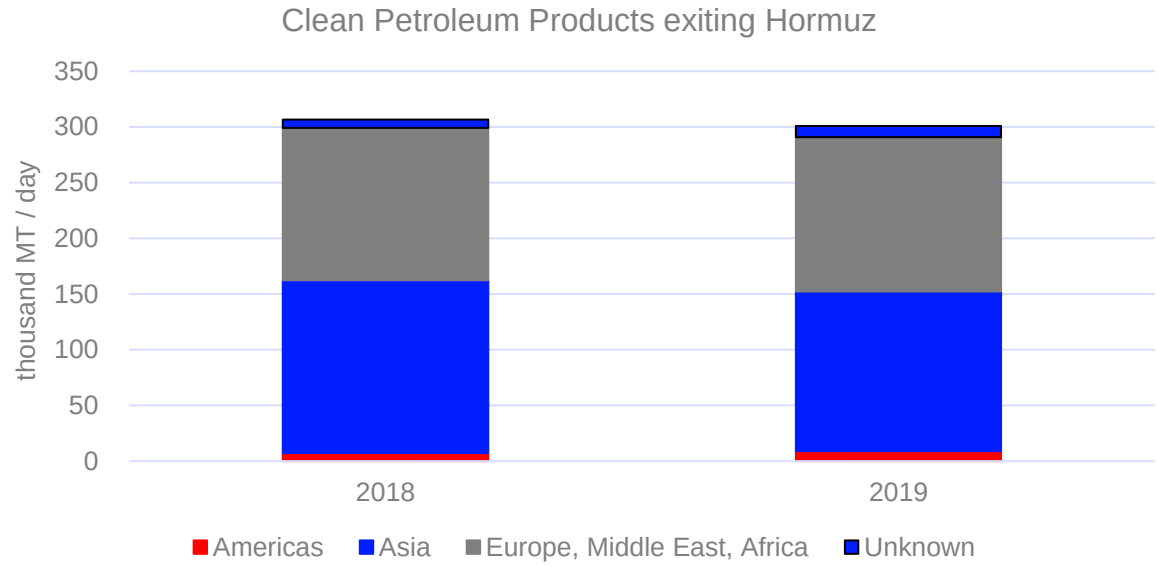
The developments involving Britain and Iran added to tensions in the Gulf after a spate of attacks, including four vessels within the UAE territorial waters, off Fujairah. Meanwhile, armed drone attacks on a pipeline and pumping stations in Saudi Arabia have also contributed in raising security concerns in the region.

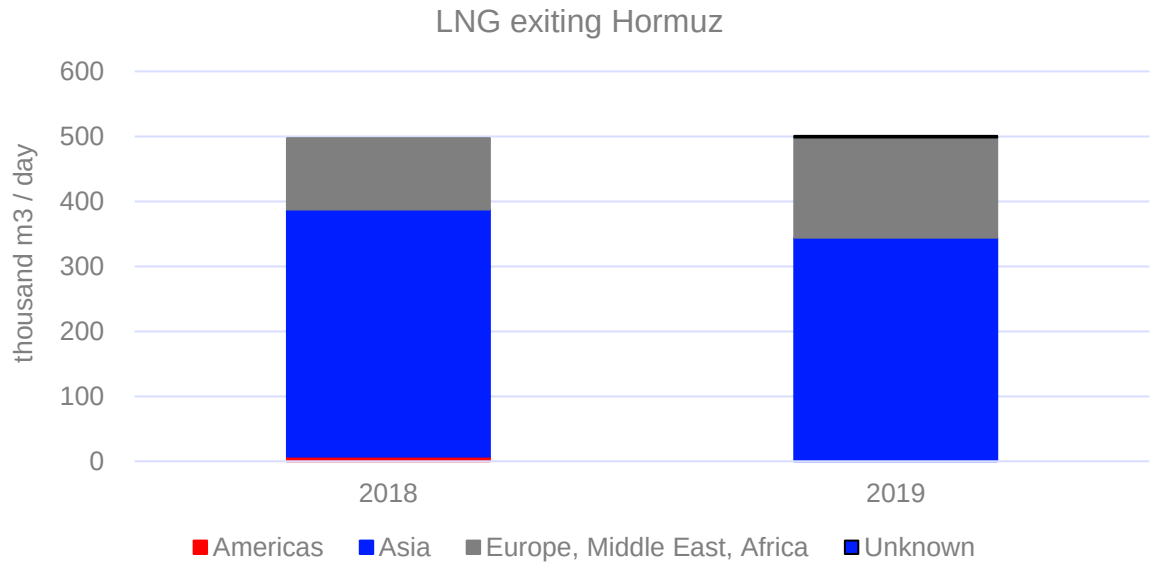
While Iran denied any links to these attacks, the exact nature and the group responsible still remains unclear. With the US mobilizing its fleet to ensure maritime and energy security through the Strait of Hormuz, the attacks highlight the potential for a full-frontal conflict in the region if the situation is not managed properly.

Why is the Strait of Hormuz so significant?

More than a third of global seaborne crude oil exports travel through the Strait of Hormuz, funnelling almost 21 million barrels per day (bpd) of crude, condensate and refined products from OPEC's five biggest members. The majority of this is bound for Asia, although the West also relies heavily on supplies from the Strait (refer to chart for the split in volumes).

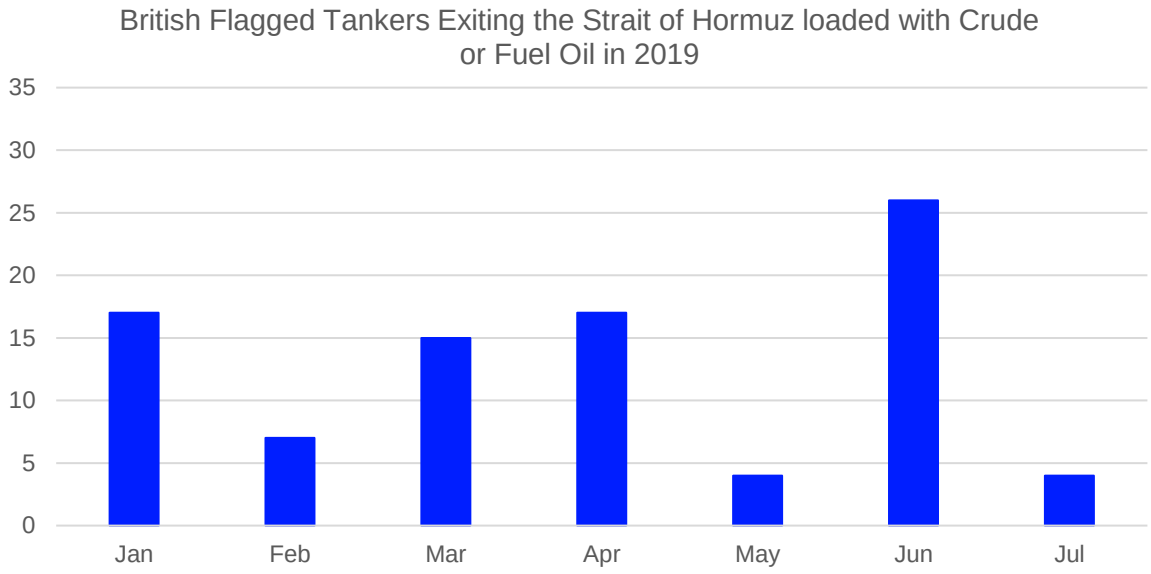

Crude / Condensate / Fuel Oil exiting Hormuz
million bpd
20
15
10
5
0
2018
2019
Americas
Asia
Europe, Middle East, Africa
Unknown


Clean Petroleum Products exiting Hormuz
thousand MT / day
350
300
250
200
150
100
50
0
2018
2019
Americas
Asia
Europe, Middle East, Africa
Unknown

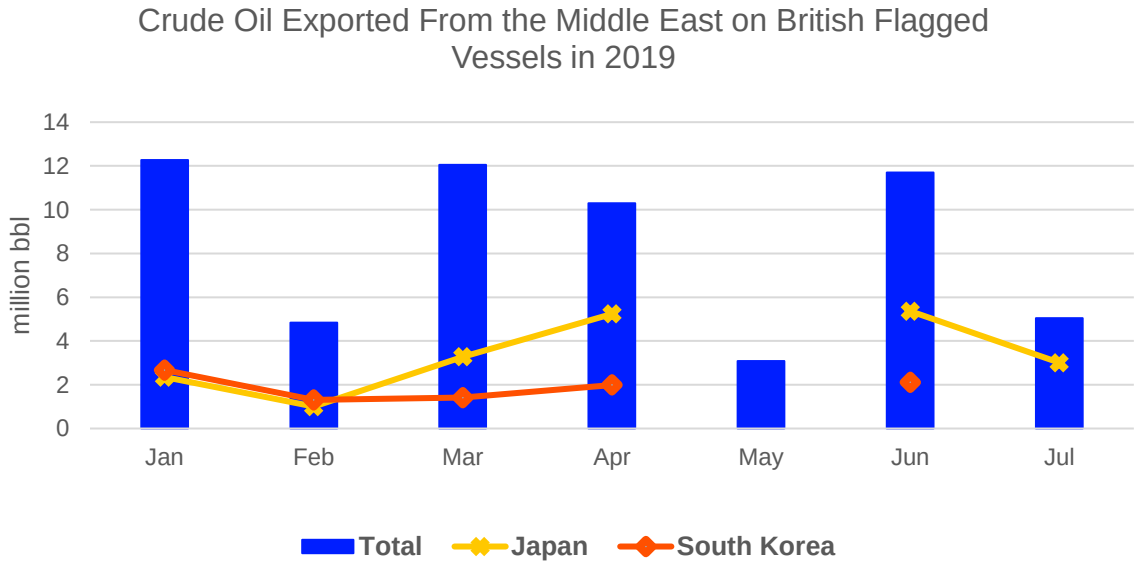

LNG exiting Hormuz
thousand m3 / day
600
500
400
300
200
100
0
2018
2019
Americas
Asia
Europe, Middle East, Africa
Unknown

Any disruption to this important shipping channel has the potential to impact oil market sentiment. This was shown in June when prices of crude oil surged as much as 4% following two attacks on tankers in the Gulf of Oman.

More than 11,000 oil & LNG tankers crossed the Strait in 2018, while for the first half of this year Refinitiv ship-tracking data shows around 5,250 ships to have passed the strait. Of the 2018 transits, an estimated 5,010 ships have been identified as fully laden Very Large Crude Carriers (VLCC's). Traffic out of the Gulf appears to have slowed slightly in 2019 as Iranian oil exports have collapsed, declining by 1.8 million bpd year-on-year in June, to just under 500,000 bpd.



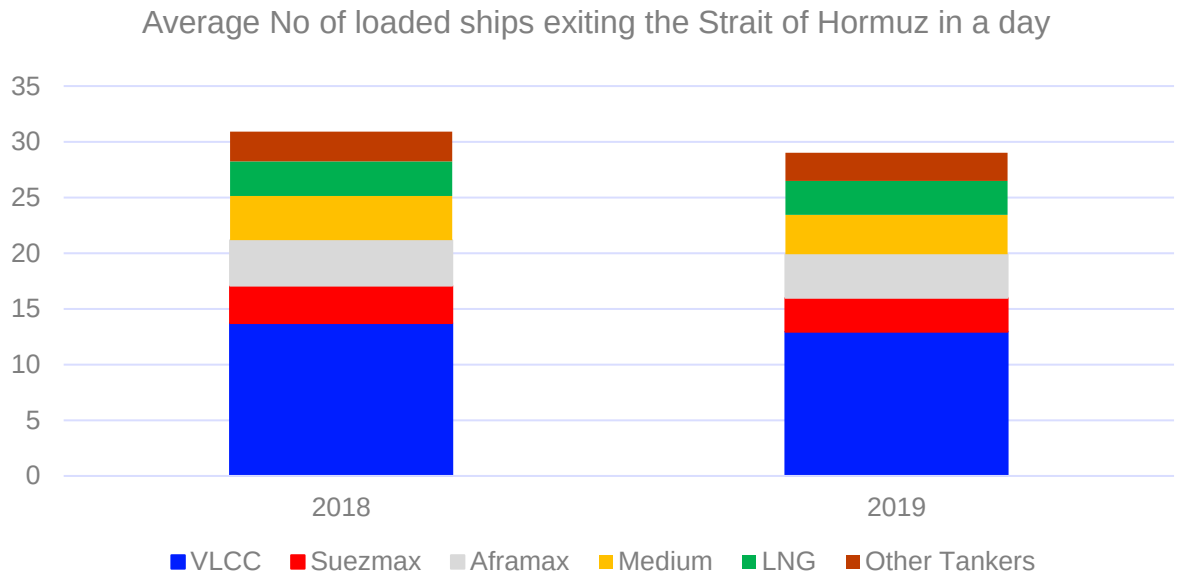
The risk of further Iranian retaliation means British-flagged tankers are now likely to be given convoy assistance by the British navy. 90 British-flagged ships have so far exited the Gulf this year, 26 of which made their passage in June. the number of vessels transiting are in steep decline after the Stena incident, with only 4 British-flagged vessels exiting the Strait in July.



What are the implications for the oil and shipping industries?

After the incidents in June, insurance premiums for ships passing the Strait of Hormuz jumped 10 percent overnight. The additional war risk premiums for ships calling the gulf have been quoted to be in the range of $100,000 for a VLCC on a seven day passage in the region. If maritime operators become more cautious about placing their ships in the region, there could be consequences for fuel oil markets such as the Fujairah bunker.

The spread between the Fujairah and Singapore bunkers had widened to a near $45 US dollar discount compared with Singapore following the Stena incident. Weekly bunker loadings from Fujairah storage since the June attacks on the tankers have dropped to an average of 108,950 MT, while the YTD weekly average prior to June was at 150,125 MT. Refinitiv Oil research also monitors the bunker barge activities in Fujairah, which have dropped to about 17 barge loadings/week since June compared to 23 barge loadings/week for the year prior to June.



Aside from short-term volatility, there's been a muted response in terms of the movement of crude oil prices. Although crude supplies from the Gulf have declined sharply from a year ago, the impact on oil market fundamentals is already priced in, especially as OPEC is in a mode of maintaining its supplies in check, following the roll-over of the production cut agreement.

Iran has already lost significant volumes of exports due to the imposition of US sanctions reducing trade from almost 2.5 million barrels a day last spring to fewer than 500,000 barrels a day in recent months.

Additionally, oil market participants are primarily focused on the demand-side impact of a slowing global economy and the US-China trade war. That said, the geopolitical risks and escalating tensions in the Gulf do provide a very strong floor for crude prices, which have recently trapped in a fairly narrow range.

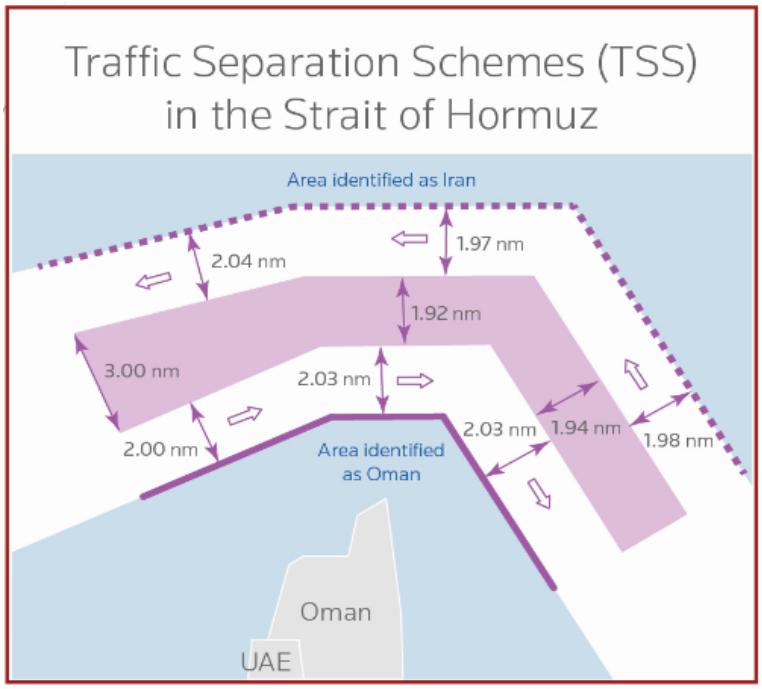
The possibility that security measures result in bottlenecks of vessels crossing the Strait could also slow down the flow of oil towards final buyers, creating an artificial supply shock.

While it is debatable whether Iran has the military capability to close the Strait, the failure of naval forces to ensure safe transit for international vessels would have a negative impact on shipping premiums and leave ship owners fearful about sending their assets into the Gulf.

Can the strait be closed?

In order to answer this question, it is important to understand how the United Nations' Convention on the Law of the Sea, signed on December 1982, perceives the Constitutions for the Oceans. This convention defines "territorial waters" to a maximum of 12 nautical miles beyond each country's coastline. Although, all foreign flagged vessels have the right of innocent passage in cases where territorial waters comprise of straits that are used for International navigation, such as the Strait of Hormuz. The right of transit passage for foreign flagged vessels are strengthened further placing fewer restrictions on such ships.

For ships transiting such areas, the International Maritime Organization (IMO) has established Traffic Separation Schemes (TSS), which regulate the direction of traffic for ships transiting with a separation zone between the main traffic lanes. For most TSS, the zone between the traffic lane and the coast is called the 'Inshore Traffic Zone' which is unregulated, and vessels are advised to avoid these zones for navigation except in cases of emergency.



Note. 'nm' = nautical miles

For the Strait of Hormuz, all waters to the North and East of the traffic lane will form part of the inshore traffic zone within the Iranian territorial waters, which can be easily closed for navigation by the Islamic Republic. However, waters to the South and West of the lane will form a part of Omani territorial waters, but due to the presence of small scattered islands and the lack of sufficient width and depth of navigable water, it will not be possible for big ships to transit, therefore forcing vessels to follow the traffic lane.

It will also be interesting to see how the UN convention is being interpreted by Iran and the US regarding the 'Right to Transit'. Although Iran's government has signed the 1982 UN convention, their parliament has not approved it. At the time of signing the convention, Iranian delegates had made a statement on the interpretative declaration on the subject of straits that the Right of Transit passage through straits used for international navigation shall apply only for states which are parties to the Law of the Sea convention. Since the US has not ratified the UN convention, the Islamic Republic could cite that as a probable cause for restricting vessels bound to the US, as well as US-flagged vessels transiting the strait. However, most of the vessels which carry the crude are not registered in the US and hence do not provide a valid reason for Iran to impede the Right to Transit, as the most common flag states are a party to the convention.

In terms of practical feasibility, although Iran has highlighted their readiness and capability to disrupt the regional oil shipments through the Strait of Hormuz, it must be clear that the Islamic Republic would be jeopardizing its own economy which is as much dependent on the strait, in spite of US sanctions. Most of the major ports for Iran are situated inside the Gulf and would face large-scale disruptions as other GCC members if the strait was to be closed.

As for Iran's capacity to physically challenge vessels transiting the strait, either in terms of an attack or stopping the transit, the extent of disruption or closure to impact oil trade will depend on the gravity of actions taken. A swift deployment of Iranian military assets would create a crisis, as we have already witnessed, but this is likely to be short-lived. The strait can probably be shut down temporarily on safety concerns from ship-owners or operators until the UN or other military forces stave off any immediate danger for the marine traffic. The global economy relies on the flow of oil out of the Middle East, therefore a long-term disruption is very unlikely.

In short, it is not possible for Iran to close the strait citing legal reasons. However, Iran has the ability to mobilize and implement alternate strategies if they decide to intentionally disrupt the flow of traffic through the strait, sign of which we saw in the case of Stena Impero.

Appendix

	2018	2019 (Till June)	Unit
Total volume of Crude / Condensate	17,159,676	16,104,341	bpd
Americas	1,537,795	974,377	bpd
Asia	13,135,208	12,960,592	bpd
Europe, Middle East, Africa	2,481,166	2,069,825	bpd
Unknown/Other	5,506	99,546	bpd
Total volume of Fuel Oil	751,679	753,533	bpd
Americas	46,236	17,961	bpd
Asia	302,402	277,293	bpd
Europe, Middle East, Africa	402,694	454,705	bpd
Unknown/Other	346	3,572	bpd
Total volume of CPP	306,664	300,976	MT/day
Americas	7,340	8,939	MT/day
Asia	154,972	143,502	MT/day
Europe, Middle East, Africa	136,836	138,338	MT/day
Unknown/Other	7,515	10,196	MT/day
Total volume of LNG	497,131	500,871	m^3/day
Americas	7,344	-	m^3/day
Asia	380,335	344,268	m^3/day
Europe, Middle East, Africa	109,451	154,258	m^3/day
Unknown/Other	-	2,344	m^3/day

Loaded Tankers	2018	2019 (Till June)
VLCC	5,010	2,343
Suezmax	1,224	550
Aframax	1,490	712
Medium	1,455	639
LNG	1,124	551
Other Tankers	974	456

Transiting of Oil & Gas through the **Strait of Hormuz (January to June 2018)**

Pipeline capacity for bypassing the Strait of Hormuz (As of 2016)

Pipeline Name	Country	Status	Capacity	Throughput	Unused capacity
Petroline (East-West Pipeline)	Saudi Arabia	Operating	4.8	1.9	2.9
Abu Dhabi Crude Oil Pipeline	UAE	Operating	1.5	0.5	1.0
Abqaiq-Yanbu Natural Gas Liquid Pipepline	Saudi Arabia	Operating	0.5	0.3	0.0
Total			6.6	2.7	3.9

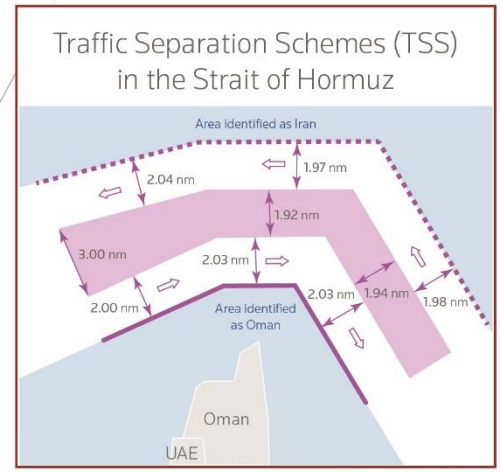
Note. All estimates expressed in million barrels per day (mmbpd).
Unused capacity is defined as pipeline capacity that is not currently used but can be readily available.
Sources. U.S. Energy Information Administration, Lloyd's List Intelligence.

Number of vessels transiting the Strait of Hormuz

VLCC	2,601
Suezmax	663
LNG	564
Other Tankers	2,192

Oil & Gas exports from the region

Crude/Condensate	18.29 million bpd
Fuel Oil	787,700 bpd
CPP	407,000 MT/day
LNG	506,355 m^3/day



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