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Iraqi Oil and the Iran Threat Network

By Michael Knights

The Iran threat network suffered grievous blows in Lebanon, Syria, Gaza, and Iran itself in 2024, and this has arguably made oil-rich Iraq even more important to the network. Facing renewed maximum pressure from the United States, Iran needs not only Iraq's terrorist fundraising potential but also its value as a "laundromat" through which Iranian energy products can be fraudulently relabeled as Iraqi exports. Using their control of the al-Sudani government, Iran-backed terrorist groups and militias are developing significant new strands of threat financing using Iraq's oil sector, which combine to provide billions of dollars of illicit value each year. Iraq is thus emerging as Iran's best bet for neutering the Trump administration's renewed maximum pressure campaign.

his study is the sixth in a series of CTC Sentinel articles since 2019 that have detailed the ongoing rise of the self-styled, Tehran-backed resistance (muqawama) factions in Iraq, and of Iran's growing dominance within the Iraqi state. The first three articles¹ in 2019-2020 focused on the how the muqawama had achieved one element of state capture by establishing, formalizing, and assuring Iraqi government funding for the Popular Mobilization Forces (PMF), Iraq's equivalent of the Iranian Islamic Revolutionary Guard Corps (IRGC).² The author's fourth³ and fifth⁴ co-authored CTC Sentinel studies in October 2021 and December 2023 focused increasingly on state capture by the militias. Iran-backed terrorists and militias lost the 2021 elections in Iraq yet ended up picking the prime minister anyway,⁵ taking charge of the world's fifth-largest oil producer.6 The December 2023 piece documented how the country's oil economy, its freedoms, and its intelligence services were being gutted by militias to ensure the permanence of their rule.7 The result has been the emergence of a terrorist-run state with greater resources than any of Iran's other proxy networks, hiding behind the façade of a sovereign country.8

This study will take forward the chronology of the evolution of the Tehran-backed *muqawama* factions in Iraq by drilling down specifically into the unparalleled terrorist threat financing potential of the Iraqi oil sector. Drawing on progressively larger networks of contacts, citizen journalism, and an enlarged analytic team, the

Dr. Michael Knights is the Jill and Jay Bernstein Fellow with the Military and Security Program at The Washington Institute for Near East Policy. X: @mikeknightsiraq author's online collection effort is strongly supplemented by the same kind of detailed interview process with U.S. and Iraqi subjects that underpinned the prior *CTC Sentinel* studies referenced above.^a To this has been added a growing body of detailed investigative journalism from 2024 on oil-smuggling in and through Iraq, undertaken by *The Wall Street Journal*,⁹ *Economist*,¹⁰ Bloomberg,¹¹ Reuters,¹² S&P Global,¹³ Middle East Economic Survey,¹⁴ and Iraq Oil Report.¹⁵ Documents regarding oil-smuggling, leaked from the servers of Iranian government and commercial entities, have also been collected online¹⁶ and informed this study. Marine vessel traffic analysis has also been utilized in the course of this report.^b

The overarching theme of this analysis is that closely monitoring Iraq's oil sector should be a priority for counterterrorism and sanctions analysts. The combination of Iraqi oil wealth, extraordinary corruption, and state capture by members of the Iran threat network has the potential to fatally undermine any maximum pressure effort on Iran's regime, most recently re-energized by the United States via NSPM-2.17 Part One of the study will briefly recap the history of Saddam-era and post-2003 militia appropriation of Iraqi oil, noting the recurrence of certain networks and methods across multiple periods. In Part Two, the article will then build on the author's co-authored December 2023 CTC Sentinel state capture piece by describing exactly how militias gained unprecedented full control of Iraqi oil since 2022 under the government of Prime Minister Mohammed Shia al-Sudani. After explaining in Part Three how U.S.-designated foreign terrorist organizations and other militias evolved a system for sharing control between themselves, Part Four of the study will look at the mechanisms for purloining energy products and exporting them outside Iraq. Part Five will outline how Iran then often directly benefits itself by comingling Iranian energy products into unsanctioned Iraqi flows in order to sidestep U.S. sanctions implementation efforts. The final section-Part Six-will highlight emerging issues for intelligence analysts and energy industry regulators to pay attention to.

a Militia Spotlight's online blog and group profiles were established to track this process in detail and produce evidentiary building blocks, using legal standards of proof and certainty. The project collects militia statements in Arabic and other languages, archives evidence that risks being taken offline at a later point, and uses a data fusion process to synthesize information and analyze trends. The Militia Spotlight blog is at https://www.washingtoninstitute.org/policy-analysis/ series/militia-spotlight and the Militia Spotlight profiles page is at https://www.washingtoninstitute.org/policy-analysis/series/militia-spotlight-profiles

b This category of services includes but is not limited to Automatic Identification System (AIS) vessel tracking sites such as MarineTraffic and VesselFinder. The AIS is a shipboard transponder, operating in the VHF maritime band, updating as often as every two seconds. When the system is working as designed, each ship "symbol" displayed by the system provides the actual ship name, course and speed, classification, registration number, size, position, and current loan of the vessel.



Figure 1: The key oil-smuggling and sanctions evasion locations in Iraq's Basra province. Ports are marked with anchors. Asphalt plants are indicated by blue triangles and concentrations of oil storage tanks and lakes are shown in red shading.

Part One: Historical Oil-Smuggling Patterns in Iraq

Oil-smuggling has a long and rich history in modern Iraq. Iraqi oil was either embargoed or sold by the United Nations under sanctions in the 1990s,¹⁸ so the Saddam regime ran a parallel "off-the-books" oil smuggling operation¹⁹ that did not utilize Iraqi ports or the State Oil Marketing Organization (SOMO). Instead, oil transited the predominately Kurdish border areas of northern Iraq and utilized a vast fleet of oil tanker trucks to enable flows that reached hundreds of thousands of barrels per day (bpd)²⁰ to Turkey, Iran, and Jordan.^c Smaller quantities of oil were exported by sea, outside the U.N. system, and were opposed by a dedicated

c Smaller illicit tanker flows went to Iran and Jordan, with the export of Iraqi crude being disguised within (then un-sanctioned) Iranian crude oil exports. Iraq was also able to cut deals with its erstwhile enemy, Iran, to disguise the origin of Iraqi oil shipments being shipped out of southern Iraq. Ghaith Abdul Ahad, "Oiling the wheels of war: smuggling becomes the real economy of Iraq," Guardian, June 9, 2007. See also Robin Wright, "Iran Opens Key Isle to Iraqi Oil Smugglers, U.S. Says," Los Angeles Times, July 3, 2000. multinational maritime intercept operation.^d

This system primed the pump for post-2003 oil smuggling in Iraq—no longer to allow the Saddam regime to circumvent U.N. sanctions, but instead to enable sub-state militias to exploit chaos in Iraq to smuggle stolen oil out of the country. Weak state control of oil infrastructure allowed numerous armed groups to purloin un-metered crude oil and oil products from oilfields and storage tanks²¹ and to transport it to oil bourses²²—informal trading markets—where it could be aggregated and sold to domestic users in fuel-hungry Iraq, or sold at a higher price in the more prosperous Kurdistan Region of Iraq or on international markets.²³

Unholy Alliance: Northern Smugglers and Iran-Backed Militias Even after 2003, the smuggling system retained a strong Iraqi Kurdish component, being that the 1990s smuggling networks, expertise, and infrastructure had primarily transited Kurdistan

d Maritime Intercept Operations lasted from August 1990 to March 2003, and were used to enforce U.N. Sanctions Resolutions 661 (economic embargo), UNSCR 665 (calling for naval forces to enforce the embargo), UNSCR 687 (the Gulf War cease-fire; authorizing imports of food, medical supplies, and U.N.approved goods), and UNSCR 986 (the so-called "Oil for Food" deal). See William H. Thiesen, "The Long Blue Line - 20 Years OIF: Coast Guard combat operations in Operation Iraqi Freedom," U.S. Coast Guard, March 19, 2023.

on its way to international markets.^{24 e} With the U.S.-U.K. military effort in 2003-2011 preventing mass-scale oil smuggling from the south,^f oil bourses in the Sulaymaniyah and Kirkuk provinces remained the most prolific aggregating hubs.²⁵ In the author's view, based on multi-year research,²⁶ this pedigree of oil-smuggling experience positioned Sulaymaniyah and Kirkuk businessmen as the ideal partners for Iran-backed militias as the latter gradually took over the Iraqi government during and since Prime Minister Nouri al-Maliki's second term (in 2010-2014).²⁷ Following the U.S. withdrawal in 2011, the power of Iran-backed militias such as Kataib Hezbollah (KH)28 and Asaib Ahl al-Haq (AAH)29 g grew steadily. AAH in particular entered the parliament (from 2014 onward)30 with a growing roster of MPs31h and gained control of the Ministry of Industry and Mines (MoIM) since 2014-2018³² when the MoIM had an acting, part-time minister-today's Iraqi Prime Minister Mohammed Shia al-Sudani, who has a demonstrated close working relationship with the AAH leader, Qais al-Khazali.33i AAH's well-documented exploitation of MoIM allowed it to corner the scrap metal market,^j then loot the Bayji refinery,³⁴ and finally dominate the private sector metals industry.k

- e The ongoing operation of oil bourses and the key role of Kurdish smuggling families is confirmed by multiple reporting networks canvassed by the author, to the point of this being common knowledge and widely accepted. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- f This was not a simple or uncontested process, with well-armed smuggler clans often going toe-to-toe in firefights with Western forces. See Ben Lando, "Analysis: Iraq's oil smuggling," UPI, December 15, 2006, which begins with a U.K.-Danish raid on a smuggler clan.
- g AAH was later designated by the United States as a foreign terrorist organization (FTO) in 2020. See "State Department Terrorist Designations of Asaib AhI al-Haq and Its Leaders, Qays and Laith al-Khazali," U.S. Department of State, January 3, 2020.
- h Asaib went from zero MPs in 2010 to one in 2014 and then to 15 in 2018.
- i In the assessment of the Militia Spotlight team, it is reasonable to conclude that al-Sudani received strong and early backing from Qais al-Khazali as al-Sudani sought to become Iraq's premier. The period of al-Sudani's acting ministership at MoIM coincides with the period when AAH made its biggest strides in the ministry, and the post-2022 al-Sudani premiership is the period when AAH again made unprecedented strides in controlling the oil sector.
- j Through these relationships, AAH cornered the market in scrap metal businesses, where AAH gained advantages that became increasingly useful as the counter-Islamic State war generated even larger quantities of scrap metal and large-scale looting opportunities—such as the wholesale removal of industrial metals and equipment from Bayji refinery, and the gathering of scrap metal in post-war Mosul. John Davidson, "Exclusive: Iran-backed groups corner Iraq's postwar scrap metal market – sources," Reuters, February 13, 2019.
- k Domination of scrap metal transitioned into domination of the broader Iraqi metals industries, including securing fraudulent import exemptions via investment licenses to allow AAH to bring vast quantities of duty-free Iranian steel into Iraq at market-beating prices. AAH also used its shadow control of MoIM to block the creation of private sector metals business that could compete with AAH and with Iranian imports. This assessment is based on a synthesized intelligence process and is confirmed by multiple reporting networks canvassed by the author, to the point of this being common knowledge and widely accepted. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

Once entrenched at MoIM,¹ it was a short and logical step for AAH to get into fuel oil theft, exploiting the huge surpluses of this lower value product that built up in Iraq at the time.^m This was logical because Iraqi state-run industries receive allocations of heavily-subsidized fuel oilⁿ primarily transported by the Ministry of Oil's distribution arm, the Oil Products Distribution Company (OPDC).^o Initially focused on gaining access to stolen or subsidized oil and taking it to Kurdistan-based oil bourses,^p AAH developed an oil trucking and security unit under a fighter Mustafa Hashem Hashim Lazem al-Bahadli, also known as Abu Zahra.^q This part of AAH developed a close working relationship from 2011 onward with Sulaymaniyah native Motassam Akram, the long-time dualhatted Iraqi Deputy Minister of Oil for Distribution and OPDC head, a central player feeding the oil bourses described above.^r

As Akram aged and faded away as a player in the late 2010s ahead of his retirement in 2020,^s the key partner to AAH became

- After al-Sudani came the 2018-2022 ministership of Saleh al-Jabbouri, a L confederate of Sunni politician Abu Mazen, a U.S.-sanctioned Salah al-Din province politician who is also close to AAH and who was designated on charges of political corruption and abetting Iran-backed militias. Al-Jabbouri is a Mosultrained chemical engineer and held a senior management position in the State Fertilizer Company of Iraq at Khor al-Zubayr, both of which may be interesting insights in relation to the description of AAH smuggling involving the port that is presented in this CTC Sentinel article. Multiple reporting networks claim that since losing the ministry in 2020. Saleh al-Jabbouri worked to protect subsidies and investment licenses granted to AAH-supported projects in the iron and steel industries, regularly lobbying government officials to expedite AAH-backed investment licenses. For the Abu Mazen designation, see "Treasury Sanctions Persons Associated with Serious Human Rights Abuse and Corrupt Actors in Iraq," U.S. Department of the Treasury, July 18, 2019. For the above insights on al-Jabbouri, see author interviews, multiple Iraqi and Western contacts, 2021-2025; exact dates, names, and places withheld at request of the interviewees.
- m The oversupply of fuel oil versus domestic demand hovered around 100,000 barrels per day in 2009-2014, and lacking sufficient storage, Iraq began mixing it with crude oil exports (which lowered the specifications of Basra Light crude oil, incurring penalties and damaging buyer relations) or reinjecting it into oilfields (which often damages reservoirs). By the time of the Integrated National Energy Strategy in 2013, Iraq was desperate for solutions to the fuel oil conundrum. This is the author's assessment but is a mainstream interpretation of the events.
- n This allocation process will be described in depth, but it is worth noting here that it is an open and longstanding Iraqi government policy and is widely understood.
- Some fuel oil is piped to end-users (such as refineries) by the Oil Pipelines Company (OPC), from whose depots the OPDC may then truck shorter distances to end-users close to the refinery. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- p AAH initially started in oil theft with small trucking operations. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- q This is an individual with recurring and current relevance to AAH's oil-smuggling arm. His real name is Mustafa Hashem Hashim Lazem al-Bahadli, and he is also known as "the magician" (al-Saher). Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- Motassam Akram is a legendary and widely recognized figure in the oil-smuggling scene, whose longstanding coordination of the industry is widely recognized.
 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- s Akram died in 2023. Author interviews, multiple Iraqi and Western contacts, 2020-2021; exact dates, names, and places withheld at request of the interviewees.

a different Sulaymaniyah Kurd known as Salim Ahmad Said^t was identified by a *Wall Street Journal* investigation in 2022³⁵ as a prolific smuggler and "the man behind the oil-blending operation."^{36u} Salim Ahmed Said was identified in the investigation as the owner (which he denied)^{37 v} of Al-Iraqia Shipping Services & Oil Trading FZE (AISSOT).^w In commercial prospectuses, Salem Ahmed Said has told potential partners that he controls a broader transportation network controlling more than a thousand trucks and 10 Very Large Crude Carrier (VLCC) oil tankers.^x

The AISSOT Scheme in 2017-2019

According to *The Wall Street Journal*, AISSOT was accused of "using ship-to-ship transfers of oil in waters that lie between Iraq and Iran and then forging documents to hide the origin of the cargo, according to corporate documents reviewed by *The Wall Street Journal*, shipping data and people familiar with the matter. By passing off the blended oil as Iraqi, those involved can avoid Western sanctions targeting Iranian oil."³⁸ According to multiple reporting networks spoken to by the author of this *CTC Sentinel* report, AISSOT would load a fifth of the amount of the authorized Iraqi fuel oil export onto tankers that arrived already loaded with four-fifths of the export cargo made up of sanctioned Iranian oil.⁹ The smuggling network is alleged to have received a "cut" from Iranian state oil smugglers each time this was done.³⁹ It was assessed by *The Wall Street Journal* that transactions of this nature represented around 25% of Iran's sanctions-busting oil exports in

t During the course of a multi-year research effort for this piece, including numerous interviews with Iraqi and Western oil industry experts, a consistent multi-sourced narrative has built regarding Salim Ahmed Said, giving the author the basis of evidence to reasonably believe that Salim Ahmed Said has been identified properly as the current oil-smuggling kingpin of Iraq. Based on consistent interviewee reporting, he is also known inside Iraq as Hajj Omaid Ahmad and sometimes as Dr. Salim. He holds Iraqi, British, and (unusually) Russian citizenships. He is the brother of Jalal Ahmad Said, the owner of the Kurdistan-based conglomerate, Rania Group. Like Motassam Akram, Salem Ahmed Said has an outsized reputation, and his name and influence is widely recognized by oil industry professionals working on Iraq. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

- u Muhanad Alwan, former Operations Director at AISSOT, publicly accused Salim (in *The Wall Street Journal*) of being the true head of AISSOT and stated that Iran had a financial interest in the company.
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- w AISSOT was a joint venture owned by the state-owned enterprise Iraqi Oil Tankers Company (IOTC) and the Arab Maritime Petroleum Transport Company (AMPTC), a pan-Arab company formed in 1973 in which Arab oil producers such as Saudi Arabia, the United Arab Emirates, and Kuwait hold a share. See Rania El Gamal, "Iraq sets up oil shipping, trading joint venture," Reuters, August 16, 2017.
- x The author has seen resumes and prospectuses forwarded by Salem Ahmed Said to potential partners. Multiple reporting networks state that Salem Ahmed Said also owns IKON Petroleum and Rhine Shipping DMCC. The Rania Group has extensive land transportation assets. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- y Thus, a 175,000-barrel allocation of Iraqi fuel oil might be split into five shipments of 35,000 barrels of actual Iraqi fuel oil, mixed each time with 140,000 barrels of Iranian oil already on the vessels. Author interviews, multiple Iraqi and Western contacts, 2024-2025; exact dates, names, and places withheld at request of the interviewees.

2020.40

The flow of Iraqi oil transported by AISSOT, into which Iranian oil was mixed, was itself controversial for a different reason. The Iraqi government of Prime Minister Adel Abdal-Mahdi, which was dominated by Iran-backed militias including AAH,^z switched the marketing of fuel oil away from the State Oil Marketing Organization and gave this task to the Iraqi Oil Tankers Company (IOTC).⁴¹ Multiple reporting networks claim that the IOTC then awarded AISSOT an exclusive, sole-source, no-bid, and low fixedprice contract to buy, transport, store, and export Iraqi fuel oil via the Khor al-Zubayr (KAZ) port in Basra.42 Minister of Oil Thamer Ghadban calculated that the net loss to Iraq of under-valuing the fuel oil sold to AISSOT was \$250 million per year.43 The AISSOT scheme was shut down in 2019, just as the comingling of Iranian crude was noticed by the first Trump administration.44 Despite death threats from AAH to Iraqi government figures,^{aa} the Ministry of Oil removed ministry officials implicated in the AISSOT scheme.^{ab} The government of Prime Minister Mustafa al-Kadhimi in 2020-2022 continued this trend, blocking the militias from gaining access to fuel oil or the marine export channels needed to export it.45

Part Two: The New Politics of Oil-Smuggling since 2022

The October 2022 appointment of Prime Minister Mohammed Shia al-Sudani breathed life back into the oil-smuggling schemes of Iranbacked terrorist groups and militias in Iraq. Two U.S.-designated terrorist movements, AAH and KH, were (and remain at the time of publication) key members of the Coordination Framework (CF) parliamentary bloc that nominated al-Sudani, with Asaib Ahl al-Haq having been his earliest backer for premier, dating back to al-Sudani's cooperation with AAH as acting industry minister.⁴⁶ The Iran-formed Badr Organization was (and remains at the time of writing) another of al-Sudani's coalition partners.⁴⁷ As was the case when Adel Abdal-Mahdi was appointed by the militias in 2018 (after which the AISSOT scheme gathered pace), the appointment of al-Sudani is alleged to have triggered a new acceleration of oil

- z In 2016-2018, the Ministry of Oil was led by Adel Abdal-Mahdi, who also had close relations with Qais al-Khazali, and who was then selected by the Iranbacked militias as Iraq's next prime minister in 2018. During Adel Abdal-Mahdi's tenure as Minister of Oil and then premier, AAH's power within government grew considerably, particularly after AAH went from one to 15 seats in Iraq's notoriously poorly monitored 2018 elections. See Michael Knights, "Embracing Asaib Ahl al-Haq: Pragmatism or Naiveté?" Hudson Institute, October 9, 2024.
- aa For instance, when the AISSOT scheme was shut down the scheme on Ghadban's orders, AAH threatened to kill one of Ghadban's deputies involved in the issue, and Ghadban was forced to intervene directly with AAH leader Qais al-Khazali and with two successive prime ministers (Adel Abdal-Mahdi and Mustafa al-Kadhimi) to protect the official. Multiple reporting networks relay that for three years afterwards, the official continued to receive death threats against himself and his daughter from AAH, through intermediaries and in text messages, and he had a protective watch put on him by Iraq's intelligence services. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- ab For instance, Khudair Abbas Abed, the director general of the Ministry of Oil Audit Directorate, was removed in 2019 for providing confidential information to Salim Ahmad Said and for falsifying audits to support AISSOT smuggling operations. Mohammed Mohsin Saadoun, the director of the shipping department at SOMO, was fired in 2020 for failing to report Iranian ship movements in the ship-to-ship transfer and fuel oil floating storage areas off Basra, after which Saadoun left Iraq to live in Iran. Author interviews, multiple Iraqi and Western contacts, 2023-2024; exact dates, names, and places withheld at request of the interviewees.

smuggling and Iran sanctions evasion schemes.^{48ac} But before oil smuggling could return at scale, the various armed factions within the CF needed to establish a pecking order and a way to share the spoils.

First-mover Advantage for Asaib Ahl al-Haq

When it comes to terrorist threat financing in Iraq, ministries are key terrain, and the most valuable "high ground" is the minister, his deputies, and the director-generals (DGs) who control the flow of authorization and paperwork.⁴⁹ In theory, within the late 2022 deal for government formation, former Prime Minister Nouri al-Maliki was the politician with "first rights" on decision-making within the Ministry of Oil.⁵⁰ Al-Maliki's close confidantes had sought to emplace an oil official called Laith al-Shaher as minister but had to compromise,^{ad} with him instead being appointed as the new deputy oil minister for distribution, the pivotal role for fuel oil smuggling that Motassam Akram had filled for well over a decade. Yasser Sukhail al-Maliki, Nouri al-Maliki's son-in-law, was unofficially positioned in late 2022 as a key overseer of the new oil minister Hayan Abdal-Ghani.⁵¹

Very quickly, however, it became apparent that AAH was unwilling to allow al-Maliki to dominate the oil portfolio. In early 2023, Laith al-Shaher was forced into retirement through a gambit engineered by AAH,⁵² being replaced as deputy minister by an AAH-adjacent oil ministry official called Ali al-Maarij.^{ae} This bureaucratic trick was allegedly suggested by Salim Ahmed Said, who had continued to build influence behind the scenes in Iraq during the two years since the collapse of the AISSOT venture.^{af} Maarij had built ties to Salim Ahmad Said and AAH during Maarij's tenure as the head of the parliamentary oil and gas committee in 2017-2018.⁵³ The balance of available evidence suggests that a financial partnership was formed from 2021 onward in which Salim

- ad Basra MPs in Iraq's parliament have begun to demand that oil ministers are Basrawi, as the oil sector is dominated by Basra output. Laith al-Shaher was set aside on these grounds, while Basrawis make up the current Minister Hayan Abdal-Ghani and the senior Deputy Minister Bassem Mohammed Khudair. Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- ae Ali al-Maarij is a Maysan-born oilman who was director of the Maysan Oil Company and then served on the Oil and Gas committee in parliament, before becoming head of contracts and licensing at the ministry of oil. Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- af Multiple independent interviewees describe the removal of Laith al-Shaher to have been hatched by Salim Ahmed Said and Ali al-Maarij, the latter being a direct beneficiary of Laith's removal. Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.

Ahmed Said agreed to provide multi-million dollar payments^{ag} to AAH in return for the government approvals and support necessary to reconstitute an oil-smuggling scheme on-par with, or exceeding, the scale and ambition of the AISSOT venture.^{ah}

Salim Ahmad Said, Ali al-Maarij, and AAH moved very quickly in the first quarter of 2023 to control the parts of the ministry that generated the paperwork for auditing, loading, transporting, and unloading fuel oil.⁵⁴ The OPDC, the state-owned subsidiary that moves fuel oil and other oil products around Iraq, fell under the control of Hussein Talib Abboud, an official sponsored and protected by Asaib Ahl al-Haq.⁵⁵ AAH also gained pole position in the oil ministry's Technical Directorate,^{ai} which recommends how much fuel oil to allocate to industry and which fell under the control of a second AAH-backed director, Hassanein Abdal-Latif.⁵⁶ The real power in the State Oil Marketing Organization began to move to a deputy director-general called Khudair Abbas Abed, an oil ministry official who previously lost his position heading the Audit Directorate (which accounts for the disposal of oil liquid) when the AAH-backed AISSOT scheme was shut down in 2019.^{aj}

Perfecting a Coordination Mechanism

By March 2023, a full-scale factional crisis was underway within the CF for control of the oil sector due to AAH's runaway success in dominating Prime Minister Mohammed Shia al-Sudani's government.⁵⁷ This triggered strong pushback from the other two major powers in the CF—former Prime Minister Nouri al-Maliki and Hadi al-Ameri, the head of the Iran-formed Badr Organization.⁵⁸ The answer was the creation of coordination councils at various levels to ensure other factions did not feel cut out by AAH and Salim

- ag In the author's view, as the result of a synthesized intelligence process, AAH intensified its historic relationship with Salim Ahmed Said in 2021, with both sides perhaps anticipating a major AAH win in the 2021 elections. AAH's partnership offer returned Salim Ahmad Said to the center of Iraq's illicit oil export mechanism. A single reporting network claimed that Salim Ahmad Said committed to pay \$200 million to AAH in commissions if it installed him as the "shadow oil minister" in Iraq. This was agreed. Multiple reporting networks concur that Asaib Ahl al-Haq leader Qais al-Khazali was the earliest backer of Prime Minister Mohammed Shia al-Sudani, and subsequently became the dominant influence over the premier, and therefore cabinet subordinates such as Minister of Oil Hayan Abdal Ghani, who has been fully deferential to Salim Ahmed Said since his appointment in November 2022. Abdal-Ghani's motivations are described by multiple reporting networks in a rather consistent manner: He is a soft character, keen to placate all interests, and somewhat sympathetic to pan-Shi`a movements including the PMF and the Iraqi muqawama. Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- ah A single reporting network claimed that Salim Ahmed Said proposed a \$200 million payment to AAH for the facilitation of \$3 billion worth of fuel oil exports, calculated at six million metric tons. As will be discussed later in the Iran sanctions evasion section, this fits with the parameters of a reported Iranian debt recovery program in Iraq. Author interview, Iraqi oil industry contact, 2024; exact date, name, and place withheld at request of the interviewee.
- ai The Technical Directorate of the Ministry of Oil recommends allocations of fuel oil to domestic users based on their assessed needs. This is the key directorate that must be controlled to ensure the flow of subsidized fuel oil to industries that, in reality, cannot justify the allocations and instead send the oil to smuggling. Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- aj Khudair Abbas Abed had been removed as director general for audit in 2019 on suspicion of leaking ministry documents to Salim Ahmed Said in relation to the AISSOT scheme. Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.

ac Multiple independent interviewees describe the access of oil-smuggling businessmen and militias to have increased greatly after the November 2022 government formation, with the rapid relaxation of al-Kadhimi-era controls on oil-smuggling and the well-orchestrated return of conditions that were highly conducive to profitable smuggling operations, as described in this CTC report.

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Ahmed Said. Salem Ahmed Said is alleged by multiple reporting networks to have created a talking shop for oil smugglers^{ak}—or perhaps a loose kind of cartel^{al}—in which he was the first among equals but other smugglers (and their political sponsors) were able to air grievances and negotiate for market share. This oil smuggling council then communicates its orders to government agencies via intermediaries who are alleged to include Abdul-Qadr Abdal-Ghani, the personal secretary and close relative of Minister of Oil Hayan Abdal-Ghani,⁵⁹ Yasser Sukhail al-Maliki,⁶⁰ Deputy Minister of Oil for Upstream Bassem Mohammed Khudair,⁶¹ and Majid al-Saadi, the director general of security permits at the Ministry of Oil.^{am}

Alongside the creation of the smuggler cartel, changes in ministry decision-making have also aided power-sharing: For instance, the Economic Directorate of the Ministry of Oil lost most of its oversight function of sales prices, commercial models, bidding and sole-source contracting, and joint ventures—precisely the kind of oversight intended to detect and block AISSOT-type schemes.⁶² Since June 2023, the Ministry of Oil instead manages such issues on a case-by-case basis via hand-picked, closed-door committees of deputy ministers, DGs, and managers that include officials controlled by each of the major CF factions.⁶³ Further balancing of faction interests is done at the Prime Minister's Office, where Chief of Staff Ihsan al-Awadi and the PM's brother, Abbas al-Sudani,⁶⁴ an have both been highly active in oil matters.⁶⁵

These collective forums appear to have added a degree of stability to militia exploitation of the oil sector, with strenuous efforts made to keep the system in place.^{ao} This is not to say that

- al The Merriam-Webster definition of a cartel is "a combination of independent commercial or industrial enterprises designed to limit competition or fix prices: a combination of political groups for common action." In the assessment of the author, it is reasonable to conclude on the basis of multiple independent interviewees that the oil council led by Salim Ahmed Said is seen by all its members as providing some value, albeit reportedly being heavily lopsided in favor of its founder, with Salim Ahmed Said being, by far, the first among equals. Author interview, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- am Majid al-Saadi has, for many years, been a notorious name within Iraq's oil sector, capable of monetizing his ability to block almost any appointee or project. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- an Multiple reporting networks stated that Abbas al-Sudani left the oil file in October 2024 after fleeing to Turkey for unspecified reasons. His stay in Istanbul was the subject of a mysterious unscheduled visit by PM Mohammed Shia al-Sudani on November 1-2, 2024. See "Erdoğan receives Iraqi Premier Al Sudani for talks in Istanbul," Daily Sabah, November 1, 2024.
- ao For instance, after suffering a life-threatening heart aneurysm in September 2024, Minister of Oil Hayan Abdal-Ghani wished to retire but was pressured by factions to remain in his role precisely to avoid infighting that might surround an effort to replace him. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees. See also "Iraqi oil minister stable after surgery in US, official says," Reuters, September 14, 2024.

"The cartel and its political-militia nexus now brings together impressive capabilities: an extraordinarily potent blend of oil sector, smuggling, and terrorist financing capabilities. Incorporating some of Iraq's most experienced oil technocrats—and combined with the CF's control of Prime Minister Mohammed Shia al-Sudani—today's cartel is the oilsmuggling equivalent of the royal flush in poker."

AAH has agreed to a level playing field with al-Maliki and Badr. Based on available evidence gathered by the author in an intensive multi-year research effort, AAH (typically fronted in oil disputes by strongman Laith al-Khazali and in ministry matters by Ali al-Maarij)^{66 ap} enjoys the most influence of any one faction.^{67 aq} In the author's assessment, what changed in mid-2023 is that non-AAH factions successfully vouchsafed their seats at the table, narrowly forestalling what might have become an exclusive AAH-Salim Ahmed Said monopoly-albeit with al-Maliki and Badr still present only as junior partners at this stage, and with the other oil smugglers falling in under Salim Ahmed Said.^{68 ar} In the author's view,⁶⁹ the cartel and its political-militia nexus now brings together impressive capabilities: an extraordinarily potent blend of oil sector, smuggling, and terrorist financing capabilities. Incorporating some of Iraq's most experienced oil technocrats-and combined with the CF's control of Prime Minister Mohammed Shia al-Sudani-today's cartel is the oil-smuggling equivalent of the royal flush in poker.

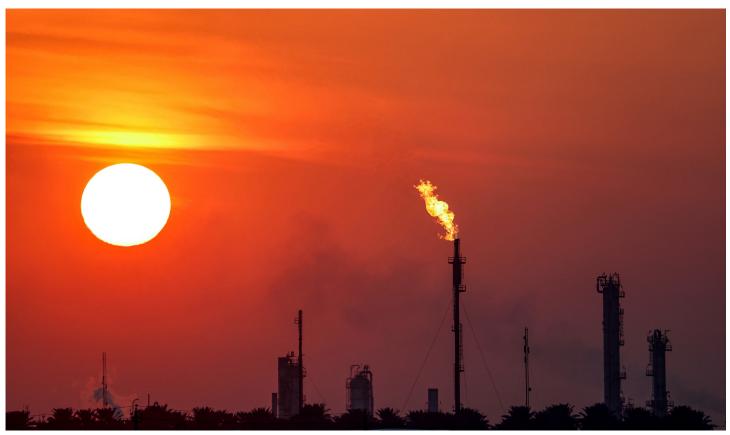
Part Three: How Terrorists Access Oil in al-Sudani's Iraq

It is easier to reuse and refine successful and proven models than to reinvent the wheel or fix things that are not broken; in the author's experience, this is how Iranian and Iraqi terrorist organizations approach the oil-smuggling business in Iraq.⁷⁰ Today's oil-

- aq This is a reasonable conclusion because no other Iraqi terrorist or militia faction—and no technocratic or political player—was mentioned as stronger than AAH in any of the numerous interviewees in a multi-year research effort from 2023-2025.
- ar This is a reasonable conclusion because Qais al-Khazali is (based on the author's numerous interviews with Iraqi politicians) the first-among-equals within the Coordination Framework, with more vigor than older figures like Hadi al-Ameri and Nouri al-Maliki. Laith al-Khazali is similarly described by most of the author's numerous interviewees as one of the most feared enforcers in the militia world. Salim Ahmed Said and Ali al-Maarij are similarly described as the most powerful forces within the Ministry of Oil since 2023.

ak Multiple independent interviewees describe an "oil council" or "a group" formed by Salim Ahmed Said to create greater cohesion among oil-smuggling operations. Multiple independent interviewees describe the council as including the famed oil-smuggling networks run by the Janabi and Kaissi families, mainly represented by Ahmad al-Janabi, plus other players such as the so-called Samarrai network and a long-term commercial partner to Salim Ahmed Said called Saad Faisal Ibrahim. Multiple, unconnected reporting networks describe these players as collectively being the key commercial network active in the obscuration, and trading of stolen Iraqi oil and sanctioned Iranian oil.

ap Laith al-Khazali is the brother of AAH leader Qais al-Khazali and the movement's main enforcer and business magnate. Laith is a U.S.-designated terrorist and serious human rights abuser. See "State Department Terrorist Designations of Asaib Ahl al-Haq and Its Leaders, Qays and Laith al-Khazali," U.S. Department of State, January 3, 2020.



The sun sets behind an oil refinery complex in Iraq on December 22, 2024. (Ahma Al-Rubaye/AFP via Getty Images)

smuggling and sanctions evasion activities in Iraq appear to be largely refinements to historic methods of stealing and comingling oil, particularly AISSOT's unprecedented efforts in 2017-2019 to get into the oil export business. These efforts are being carried out against the backdrop of a full-term al-Sudani government that is even more militia-dominated than the two-year premiership of Adel Abdul-Mahdi.⁷¹

At the most basic end of the spectrum, "hot tapping" of pipelines or robbery from open-air oil sumps and oil gathering stations inside oilfields does still occur in Iraq. This kind of theft requires the active support of officials from deputy ministers to field-level managers and security personnel, who collude to allow oil to be illegally removed from Iraqi state facilities.^{as} This sort of theft, the scale of which is unknown but is assessed by some industry journalists to already exceed 50,000 barrels per day (bpd),⁷² is valued at as much as \$100 million each month on global markets, with U.S.designated terrorist groups such as KH and AAH the primary beneficiaries.^{73at} According to multiple reporting networks, this kind of oilfield diversion by KH and AAH has been reported from well clusters and gathering stations at smaller oilfields such as East Baghdad, Qayyarah, Najma, Ajil, and Alas, which are run by partnerships of smaller foreign investors and Iraqi companies.^{au}

How Terrorists Monetize Oil Transportation inside Iraq

AAH and KH also control and tax the fuel oil distribution system at national and local levels.^{av} Multiple reporting networks agree that the allocation of fuel oil has been centralized under al-Sudani at the Prime Minister's National Operations Center (PM-NOC).⁷⁴

as Iraq's oilfields and storage depots—particularly the larger and longer-established ones—remain quite carefully regulated properties where observation posts and access permits make oil theft difficult without official collusion. This is the author's impression, based on all the available evidence and the author's analytic processes, including numerous visits within oilfields and interactions with oil protection forces in Irag.

at It is the author's impression, at the end of a long multi-year interview process, that KH remains quite focused on the lower-sophistication outright theft end of the scale, having invested less effort in monetizing the oil sector, while AAH has gravitated to the paperwork fraud end of the spectrum. This feels like it is slowly equalizing, with KH elbowing its way into a broader range of ventures, as will be discussed below. Author's assessment based on all the available evidence and the author's analytic processes.

au Many of these smaller fields in northern Iraq have been under KH control since they were "liberated" from the Islamic State in 2015-2017. Iraqi government control has never fully returned to these areas, which are within what the author termed "the colonization zone" occupied by Shi`a militias in his August 2017 CTC study. See Michael Knights, "Predicting the Shape of Iraq's Next Sunni Insurgencies," CTC Sentinel 10:7 (2017).

av Iraq has a well-organized system for moving fuel oil from a producing refinery directly to provincial-level OPDC fuel oil depots, and then onward to the "licensed agent" (approved recipient) such as an asphalt plant, power station, brick factory, or other user. Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

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In the author's assessment, this is an end-to-end oil logistics system that services the interests of U.S-designated terrorist movements, coordinated from the heart of the Prime Minister's Office.⁷⁵ Paperwork for "Fuel Movement Requests" are generated by the OPDC (which is run by an AAH-controlled DG Hussein Talib Abboud⁷⁶), specifying vehicle numbers, oil cargo volumes and specifications, and identifying information for each driver and vehicle.⁷⁷ The PM-NOC—and, according to two reporting networks, specifically the prime minister's brother Abbas al-Sudani⁷⁸—reviews requests, resulting in an approved Fuel Movement Request and a memo to allow the Oil Police to let individual vehicles through checkpoints at either end of the journey.⁷⁹ This kind of paperwork is needed to allow fuel oil to be loaded, transported, and unloaded at any government facility.⁸⁰

In addition to holding beneficial ownership stakes in the plants receiving (and then smuggling) fuel oil, both AAH and KH also operate "security companies" that tax the movement of the trucking contractors that carry fuel oil on behalf of OPDC.^{aw} In at least one case, KH and AAH may have worked with Salim Ahmed Said to successfully lobby the oil ministry to boost production at a northern Iraq oilfield, Qayyarah, for which Salim Ahmed Said is then alleged to have received the sole-source trucking contract to bring Qayyarah oil to his VS Oil Terminal in Basra.^{ax} A portion of the \$80 per metric ton trucking fee is reported to be kicked back to KH.^{ay} Such arrangements also give terrorist groups the ability to make oil disappear or change in volume and specification at the numerous points within its journey from initial loading point (at a refinery or oilfield) to its official unloading destination.^{az}

Fraudulent Fuel Oil Allocation to Terrorist Organizations

In the author's view, the apogee of legitimate-seeming transfer of oil to Iran-backed terrorists and militias is the allocation of fuel oil to Iraqi industries, whereupon the fuel oil is not used for its intended purpose but is instead illegally exported as a source of terrorist and militia fundraising.⁸¹ Iraq's cabinet, upon request from the Ministry of Oil, Ministry of Industry and Minerals, and Ministry of

- aw Multiple reporting networks suggest the trucking firms must pay U.S.-designated terrorist organizations such as KH and AAH a fee to facilitate the transport, with militias ensuring protection and also smooth passage through checkpoints and traffic lines. Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- ax Multiple reporting networks suggest that Salim Ahmed Said was the only company to receive an offer for the trucking contract, fitting with his prior AISSOT-era experience of securing no-bid contracts. No other company was named during the course of a multi-year research effort as having been allowed to bid for the contract. Author interviews, multiple Iraqi contacts, 2024-2025; exact dates, names, and places withheld at request of the interviewees.
- ay If one were to suppose this facilitation fee were 10% of the \$80 per metric ton transit fee for heavy oil coming from northern Iraq, this would be \$8 per ton or about \$190 per truck. When it comes to servicing Qayyarah, with a flow of 30,0000 barrels per day (150 truckloads), the notional security fee would generate \$28,500 per day or \$10.4 million per year.
- az One well-informed reporting network noted: "Inside Iraq, it is now virtually impossible to verify that oil has arrived in the same quality and quantity as when it began its truck journey. The seals are always broken by the time they reach Basra." Oil may be transshipped and split up between companies. This facilitates a lot of theft and swapping out of liquid types, while keeping their original paperwork unchanged. The origin and specifications of oil being transported in this way cannot be tracked. Author interview, Iraqi oil trading contact, 2024; exact date, name, and place withheld at request of the interviewee.

Transport, approves the allocation of government-subsidized fuel oil to asphalt plants, brick factories, marine fuel bunkering, and power stations. As noted, distribution of the fuel oil is managed by the PM-NOC, and the OPDC and the Oil Pipelines Company. As the industrial ventures use only a small fraction (or none) of the subsidized feedstock,^{ba} the remainder disappears from the Iraqi inventory and is available as a form of threat financing. Investigative journalism undertaken by a number of Western news agencies between July and December 2024 has cast a detailed spotlight on the phenomenon.⁸² In particular, these investigations showed that the al-Sudani administration had reversed the aforementioned efforts undertaken by the al-Kadhimi government to reduce fuel oil smuggling following the AISSOT scandal.^{bb}

First, the al-Sudani team increased subsidies for industry, recreating the large margins (between the government price and the export price) necessary to cover smuggling costs and provide a profit.⁸³ Thus, while al-Kadhimi raised the government fuel oil selling price to industry from \$70 per metric ton to \$220 per metric ton, al-Sudani lowered it again to \$100-150 per ton.⁸⁴ Second, the al-Sudani team loosened oversight on state-run and private industrial off-takers of government fuel oil, making far more fuel oil available for smuggling operations. The al-Kadhimi government had surveyed the real capacity of asphalt plants in 2021^{85 bc} and drastically reduced their fuel oil allocation^{86 bd} (often below 20 percent of the prior allocation) to match actual demand levels. Under al-Sudani, the reverse occurred: the allocation of fuel oil to factories increased well beyond their proven needs.^{be} Six completely non-

ba The author has reviewed Iraqi government audits of actual versus claimed capacity of asphalt plants. In most cases, the plants had an actual throughout of 0-40% of their stated capacity—including many that were simply non-operational and never had been built to the point of becoming operational.

- bb The period between May 2020 and the October 2021 elections was the fully empowered term of Prime Minister Mustafa al-Kadhimi. He remained acting prime minister (in a limited caretaker capacity) after the elections until the appointment of his successor, Mohammed Shia al-Sudani, in October 2022. For a clear description of this effort, see Michael Knights, "Extent of Terrorist and Militia Fuel Oil Diversion Exposed in Iraq," Militia Spotlight, Washington Institute for Near East Policy, August 7, 2024.
- bc On February 16, 2021, the Iraqi parliament's oil and gas committee held a session on the al-Kadhimi government's fact-finding investigation into the actual production levels (and thus fuel oil needs) of asphalt plants. The investigation found that MolM should halve the allocation of fuel oil due to the very low levels of actual operation at these plants, and the widespread practice of passing on more than half of the allocated fuel oil to so-called "aggregators," who are legally authorized to store the fuel oil and resell it to SOMO or to other domestic users. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- bd The allocation of fuel oil to SOMO exports was reduced from the al-Kadhimiera minimum of 10 million tons per year (183,560 barrels per day) to 7 million ton per year (128,500 barrels per day), an unexplained delta of more than 50,000 barrels per day. Fuel oil allocations to factories were restored, regardless of actual operating capacity, with plants receiving 70-100% of nameplate capacity, despite the government review that found plants operating at 0-40% of nameplate capacity in reality. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- be In July 2024, the oil ministry told the government that 26 of 55 privatesector asphalt factories had no legitimate claim to receive fuel oil allocations. Nevertheless, these plants were scheduled to receive 60% (down from 70%) of their claimed requirements for fuel oil. "Iraqi Fuel Oil Export Surge Raises Smuggling Concerns," MEES, November 1, 2024. See also Knights, "Extent of Terrorist and Militia Fuel Oil Diversion Exposed in Iraq."

operational plants run by U.S.-designated terrorist groups saw their allocations restored in 2023.^{bf} Al-Sudani's government also rapidly expanded the licensing of asphalt plants, including 37 new projects in 2023-2024 (versus one under the al-Kadhimi government in 2020-2022), a near-doubling of the industry.⁸⁷ The Middle East Economic Survey reported that only when confronted by the U.S. government with evidence of rampant abuse of allocations in the second half of 2024 did the al-Sudani administration pause and review the free flow of fuel oil to industry.^{bg}

The net result for most of 2024 was a surge of fuel oil exports from Iraqi waters that were not reflected in official Iraqi government export volumes. The respected industry journal Middle East Economic Survey (MEES) noted in a November 1, 2024, investigative piece that fuel oil exports recorded by the data intelligence firm Kpler and the Joint Organizations Data Initiative (JODI) showed a major disparity between legitimate fuel oil exports by SOMO and actual tracked fuel oil exports leaving Iraqi waters. According to the MEES investigation, the proportion of unofficial fuel oil exports in January 2024 was 200% higher than official,^{88 bh} rising to 315% higher in March 2024.^{89 bi} In March 2024, the delta between the two was calculated at 300,000 bpd (or approximately 45,000 metric tons per day), with a value of approximately \$14 million per day.^{bi} This suggests fuel oil smuggling valued at around \$440 million in March 2024 alone.^{bk}

Significant evidence suggests that much of this multi-billiondollar annual fuel oil smuggling trade is controlled by, or at least taxed by, U.S.-designated foreign terrorist organizations such as AAH and KH.^{bl} Asaib Ahl al-Haq has, since around 2014, had a powerful grip on the MoIM and its State Company for Mining

- bf Six plants assessed by the Iraqi government to be owned and operated by Asaib Ahl al-Haq, and assessed to be completely non-operational, lost their entire allocations of fuel oil under the al-Kadhimi-era review. A single reporting network claims that three were in Basra, one in Hillah, and two in other locations in northern Iraq. Allocations to these were all restored when al-Sudani took office. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- bg As MEES noted: "After receiving warnings from USG, MEES noted In what can be considered a tacit acknowledgment of the problem, the country's Ministerial Council For Economy later that month recommended a five-year halt in granting licenses to privately-owned facilities processing fuel oil, naphtha and kerosene, only permitting those involved in upgrading naphtha to gasoline." "Iraqi Fuel Oil Export Surge Raises Smuggling Concerns."
- bh The January 2024 volumes were 305,0000 bpd tracked exports versus 150,000 bpd of SOMO exports. "Iraqi Fuel Oil Export Surge Raises Smuggling Concerns."
- bi The March 2024 volumes were 440,000 bpd tracked exports versus 140,000 bpd of SOMO exports. "Iraqi Fuel Oil Export Surge Raises Smuggling Concerns."
- bj In 2024, S&P Global noted, Iraqi fuel oil sold for around \$320 per metric ton in international markets. The exactly equivalent of 300,000 bpd would be 44,776 metric tons, which multiplied by \$320 gives \$14,328,320 per day. Herman Wang with Staff Reports, "Smuggling weighs on prospects for oil industry in Iraq," S&P Global November 28, 2024.
- bk Calculated as follows: \$14,328,320 per day multiplied by 31 days is \$444,177,920.
- bl A Reuters investigative report citing five sources and two "Western intelligence reports" suggests over \$1 billion per year. Maha El Dahan and Yousef Saba, "Fuel Oil Smuggling Network Rakes in \$1 Billion for Iran and its Proxies," Reuters, December 3, 2024.

Industries (SCMI),^{bm} which are historically the main operators of government asphalt and flancote plants in Iraq and thus a major government off-taker of subsidized fuel oil allocations.⁹⁰ AAH also drove the expansion of the number of asphalt plants prior to the al-Kadhimi era and after,^{bn} emerging by 2024 as the terrorist group with the largest number of asphalt plants (18) receiving allocations of fuel oil.^{bo} One reporting network reported in 2024 that "Asaib gets you the oil from the ministry using paperwork, and they take a cut."⁹¹ Kataib Hezbollah meanwhile also operates a number of asphalt plants as a silent partner and may be a growing player in the industry after either being allowed into or muscling into AAH's relationships.^{bp}

For now, AAH seems to have pole position due to its longer investment in the oil industry. Multiple reporting networks also suggest that even aggregators not owned by AAH are forced to plug-in to AAH's overall oil-smuggling "system of systems."⁹² This is because AAH (advised by Salim Ahmed Said and ministry players like Deputy Minister of Oil Ali al-Maarij) has also cornered the market on downstream parts of the smuggling system. One aspect of this is storage and blending. Purloined fuel oil is often mixed together with crude oil and other petroleum liquids stolen from government sites, and AAH is the best equipped militia to undertake this blending.⁹³ AAH's blending capabilities are partly driven by its control of SCMI blending sites around Iraq.⁹⁴

Part Four: How FTOs Export Oil from Iraq

While stolen oil can be traded at fuel bourses inside Iraq, the heavily subsidized market inside the country means that profits from domestic sales are limited in comparison to the higher

- bm A single reporting network expanded on the importance of AAH control of the State Company for Mining Industries, relaying: "This company owns several heavy fuel oil blending facilities throughout Iraq—from the north to the south and is authorized to transport fuel oil in between those facilities, which effectively means the whole of the country. It is also authorized to export its final product in the form of bulk flancoat through the ports of southern Iraq. The [joint venture] is tightly controlled by the AAH and its associates. It serves as the main cover for the official export of large volumes of fuel oil sourced directly from the MoO refineries." Author interviews, Iraqi contact, 2024; exact date, name, and place withheld at request of the interviewee.
- bn A single reporting network claims that the seeds for AAH's expansion within the asphalt industry were laid in 2019, when Saif al-Din Ali Ahmed al-Azzawi, the MoIM's director general for the Investment Department, issued a written recommendation to the Economic Affairs Committee of Adel Abdal-Mahdi's cabinet to approve the accelerated licensing of new asphalt plants, and (in the meantime) to grant 25-year joint venture concessions and operational management contracts on existing MOIM State Company for Mining Industries plants to businesses under the control of Asaib Ahl al-Haq. Author interviews, Iraqi contact, 2024; exact date, name, and place withheld at request of the interviewee.
- bo One reporting network reported in 2024 that the number of asphalt plants for which AAH is the beneficial owner has tripled since the new government formed in October 2022, from six to 18. AAH has focused its expansion in Basra, particularly in the area around Khor Al-Zubayr. Author interviews, Iraqi contact, 2024; exact date, name, and place withheld at request of the interviewee.
- bp A minority of reporting networks have tended to describe many Basra asphalt sites as controlled by KH, while significantly more evidence links these sites to AAH networks. This perhaps reflects some sharing, which may have increased in scale in 2024. The only two sites consistently linked the author's multiple reporting networks to KH are the AI-Narjis and AI-Kawthar complexes in Basra. Author interviews, Iraqi contacts, 2024-2025; exact dates, names, and places withheld at request of the interviewees.

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fuel oil sales prices that can be found abroad.^{bq} Thus, one of the most profitable stages of the smuggling value chain is exports to international markets. Unsurprisingly, U.S.-designated foreign terrorist organizations are no longer content to steal oil, only to have smuggling businessmen realize most of the profits.^{br} Instead, terrorist organizations have muscled into this value-addition segment of the oil market in recent years, with AAH and KH leading the pack.^{95 bs}

Traditional land trucking is undoubtedly still used for oilsmuggling. Major oil aggregating and trading bourses are run in the Kurdistan Region of Iraq, mainly on the Patriotic Union of Kurdistan side of the region in militia-saturated areas such as Kalar, Kifri, and Tuz Khurmatu.^{bt} These trading hubs send visible queues of tanker trucks^{bu} into Iran and Turkey on a daily basis, and smaller and less obvious equivalents exist on the Iraqi borders with Syria and Jordan.⁹⁶ Some of the crude oil reaching these hubs comes from theft operations by AAH in Basra and by KH in northern oilfields, with the Basra oil being sent all the way up Iraq's eastern highways into the Kurdistan Region.97 Though some oil enters Iran directly via Shalamcheh (in Basra) or across Basra's smuggling trails,98 or via Diyala province,99 a near-consensus among oil industry insiders is that most of it seems to go to bourses in Kurdistan and then pass over into either Iran or Turkey-a long route but one that is trusted and customary. Oil then either passes to Turkey's Mediterranean ports or to Iran's Gulf export terminals such as Bandar Imam

bq For example, Iraq provides subsidized fuel oil to industry for anything from \$70 to \$220 per metric ton, while international sales prices are usually well above \$300 per metric ton. This underlines the importance of maintaining large subsidies in order to make smuggling profitable. Smuggling will thrive at the \$70 per metric ton price under Adel Abdal-Mahdi, struggle under the \$250 per metric ton price brought by al-Kadhimi, and recover at the \$100-150 per metric ton prices restored by al-Sudani.

- br In the 2000s, militias were tapping pipelines and stealing other small volumes and selling it to aggregators, who would blend and bundle it onward to smugglers, only the latter of which made decent margins. Author interviews, Iraqi contacts, 2023-2024; exact dates, names, and places withheld at request of the interviewees.
- bs No other *muqawama fasail* has ever been mentioned to the author as a powerful oil-smuggling militia or terrorist player in Iraq, though Badr may have a role.
- bt These are traditional oil-smuggling entry points to the Kurdistan Region, and are controlled on one side by Shi'a Turkmen PMF units with strong connection to KH, AAH, and IRGC, such as the PMF 16th and 52nd brigades. For an introduction to these units, see Michael Knights, Hamdi Malik, and Aymenn Jawad Al-Tamimi, "Honored, Not Contained: The Future of Iraq's Popular Mobilization Forces," Washington Institute for Near East Policy, March 23, 2020.
- bu This traditional trade is quite well understood and seemingly tolerated—judging by the fact that decades of visible trucking queues have never excited any U.S. reaction. This may be due to the involvement of U.S.-supported Kurdish political factions in the trade, combined with the limited volumes that can be carried by tanker trucks. This is the author's assessment but is a mainstream interpretation of the events.

"Unsurprisingly, U.S.-designated foreign terrorist organizations are no longer content to steal oil, only to have smuggling businessmen realize most of the profits. Instead, terrorist organizations have muscled into this value-addition segment of the oil market in recent years, with AAH and KH leading the pack."

Khomeini.^{bv}

One reason that this route may have become customary—despite its apparent unwieldiness—is that it had been difficult to ship crude oil or fuel oil out of Basra's ports in the past due to Iraqi government vigilance in protecting the reputation of the country's State Oil Marketing Organization and the broader ministry—which provides the vast majority of Iraq's national income. Today, this is arguably changing, with Iran-backed terrorist groups and militias seeking to wring the maximum value out of state institutions, even at the risk of attracting U.S. sanctions onto Iraq's singular, indispensable national source of income.

Misuse of Legitimate Marine Export Channels

After the collapse of the AISSOT fuel oil marketing scheme in 2019, SOMO regained its monopoly as the only entity allowed to legally export crude or fuel oil from Iraq,^{bw} almost all of which moves by sea. The main mechanism for fuel oil smuggling outside of SOMO

- by During this multi-year research project, the author was struck by the strange phenomenon of Iraqi oil being trucked all the way north from Basra to Kurdistan, and then trucked all the way down Iran's western provinces to Iranian ports in areas on Iran's Gulf coast, guite close to Basra. Why is this done and how can it be profitable? First, some of this may be crude oil, a more valuable commodity that can better withstand as much as an \$80 per metric ton fee going north in Iraq and then a \$60 per metric ton fee going south in Iran. Second, Iran is (interestingly) a more secure and professional trucking route along which adulteration of oil is rare, so quality control can be superior. Third, some oil is not moving that whole distance. Fourth, the Kurdish oil bourses are where one smuggler turns in his oil and makes his profit, while another buyer (possibly from Iran) may take over and be able to eke out a margin. Fifth, there is perhaps additional incentive to put money in the hands of the IRGC-dominated oil tucking networks in Iran. Amazingly, some volumes of oil from southern Irag may well then be shipped (mixed with Iranian oil) back into Iraqi waters for a brief reuniting with their native land, before being smuggled out of Iraq after being mislabeled ... as Iraqi oil! Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- bw There are a limited number of mechanisms by which oil can currently be legally exported from Iraq by sea. The State Oil Marketing Organization still jealously guards its monopoly status as the only approved marketer and exporter of Iraqi crude oil and fuel oil. The oil ministry's Iraqi Oil Tanker Company and the transport ministry's State Company for Marine Transport bicker over which of them should be allowed to sell small volumes of marine fuel oil to visiting ships, with the latter (whose minister is from the Badr Organization) currently winning that argument. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees. The author has also seen Ministry of Oil documentation dated during 2025 in which the two companies undertake said "bickering."

is the mislabeling of fuel oil as lower-value petroleum products that can be legally exported by government-registered private sector aggregators,^{bx} when licensed by the Ministry of Trade. These petroleum products include liquids such as vacuum residue (VR)^{by} naptha,^{bz} motor gas oil,^{ca} and vacuum gas oil.^{cb} The solid or semisolid hydrocarbons such as bitumen^{cc} and the sheet construction material flancote^{cd} (both heavy oil products) are also legally allowed to be sold overseas by licensed aggregators; in the case of flancote, by MoIM's State Company for Mining Industries or their joint venture partners.

In the author's view, what Iran-backed terrorists and militias have done, with the expert assistance of oil-smuggling businessmen and under-control oil industry insiders, is to perfect flaws in the authorization and inspection of all of the above legal export routes in order to facilitate the international smuggling of Iraqi oil products. Once a terrorist or militia-controlled company has access to the paperwork authorizing even small quantities of legitimate exports, that sample paperwork, knowledge of procedure, and access to *some* oil can be leveraged to produce duplicated or doctored paperwork at scale, and to hide larger volumes of illegal cargos within authorized tanker and ship movements.¹⁰⁰

The Role of Aggregators in the Illegal Export Mechanism

Aggregators are licensed by Iraq's government to gather fuel oil into larger batches for resale. They are vitally important for

- bx Iraq has long allowed aggregator companies to buy "excess" fuel oil from asphalt and brick factories, to consolidate small volumes of oil until they are of sufficient size to be useful as either packages of feedstock to resell to industry on terms competitive with government-provided fuel oil. This mechanism has historically been abused to allow stolen crude oil and petroleum products of all kinds to be mixed in to bulk out aggregated fuel oil, which is poorly monitored and metered. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- by VR is the bottom product from the vacuum distillation unit. SOMO is authorized to export it and has, in the past, gained permission from the Iraqi Ministry of Trade for private sector players to export it. Author interviews, multiple Iraqi and Western contacts, 2024-2025; exact dates, names, and places withheld at request of the interviewees.
- bz Naptha is a fraction of crude oil that is used to reduce the viscosity and thus enable transportation of heavy oils. SOMO is authorized to export naptha and has, in the past, gained permission for private sector players to export it. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- ca Motor gas oil is a refined product used for lubricating engines. SOMO is authorized to export it and has, in the past, gained permission for private sector players to export it. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- cb Vacuum gas oil is a refined product used as a feedstock by refiners in fluid catalytic crackers to produce transportation fuels like gasoline and diesel. SOMO is authorized to export it and has, in the past, gained permission for private sector players to export it. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- cc Bitumen is the residue of heavy crude oil in the refinery distillation tower. Private sector exporters can be licensed to export bitumen in barrels. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- cd Flancote—also known as prime coat—is a waterproofing material that can be provided in liquid (paint, delivered in pots) or solid (sheeting, delivered in pallets). Private sector exporters can be licensed to export flancote. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

intelligence analysts to focus on because they partner with terrorist organizations and militias to store stolen oil at fuel storage tanks and truck parking yards. One of the most visible and vulnerable elements of the smuggling trade is the physical facilities that are needed to store stolen oil, particularly those clustered close to Basra ports such as Khor al-Zubayr (KAZ).^{ce} As real estate close to the Basra ports is expensive, it is also a competitive advantage to have preferential access to defunct or failing state-owned enterprises: factories that usually have functioning oil storage tanks and sufficient space for open-air oil sumps known as "oil lakes," which are clearly visible on satellite imagery.

AAH appears to have developed significant first-mover advantages over its rivals in all these areas. Asaib has tripled its operation of asphalt plants^{ef} and added at least one berth operatorship^{cg} and aggregators^{ch} since 2021. One source told the author in 2024: "Qais [al-Khazali, head of AAH] controls most of the aggregating companies in Basra and the main fuel oil export berth at KAZ. It is almost impossible to set up a new oil aggregating company, or build storage tanks outside of his system with Salim Ahmad Said."101 A separate source added that AAH developed a "security division" (to fend off competition) and a "technical division" (to oversee paperwork fraud, transportation, and blending of oil)^{ci} that are anecdotally more sophisticated than the smuggling arms of other terrorist groups and militias.^{cj} A jewel in AAH's crown appears to be the aforementioned State Company for Mining Industries' Al-Thager Asphalt Industries Factory, 15 kilometers north of KAZ. This site is used by AAH as a fuel oil aggregating and

- ce These have sprung up in abundance around the Khor al-Zubayr (KAZ) port in Basra since 2018, probably related to the surge in fuel oil smuggling. An hour or two spent looking at commercial satellite imagery will allow around two dozen sites with storage tanks and oil lakes created since 2017 to be identified. Of possible interest, many of these are not only clustered near to KAZ but are also often straddling local pipelines between Basra's refinery and the port.
- cf Multiple reporting networks claim that since 2021, Asaib has increased the number of asphalt plants in controls from six to 18. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- cg Multiple reporting networks claim that Berth 9 is secured and controlled by AAH fighters. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- ch Multiple reporting networks claim that there are at least four known private aggregators with their own storage facilities who work directly with the AAH-Salim Ahmad Said network. These are identified as Anwar Baghdad and Kenos al-Rumailah Company (both fuel oil aggregators) and Rauaa Neft Company for Petroleum Services and Hyatt al-Janub (both naptha aggregators). Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewes.
- ci AAH is described by a single reporting network as being the only Iraqi group to have an in-house chief chemist able to use chemical additives to more effectively disguise the provenance of Iranian oil being blended with Iraqi output. Author interview, Iraqi contact, 2024; exact date, name, and place withheld at request of the interviewee.
- cj A separate single reporting network identified the key Asaib Ahl al-Haq personalities involved in administering the aggregation processes. Reporting directly to Qais al-Khazali and Laith al-Khazali is Sheikh Baqr al-Saeedi, the head of special operations in AAH and the day-to-day manager of AAH criminal operations. Under Sheikh Baqr is Abu Ameer al-Musawi (real name: Haider Kadhim), who has direct responsibility for all oil smuggling activities and who is a cousin of Qais and Laith al-Khazali. In charge of AAH's smuggling operations for AAH in Basra is Wissam Abdal-Amir al-Bazouni, the head of special operations for AAH in Basra and a direct report to Sheikh Baqr. Author interview, Iraqi contact, 2024; exact date, name, and place withheld at request of the interviewee.

bunkering site, where AAH technicians bunker and blend stolen or mischaracterized oil products before export.¹⁰²

How Ports and Shippers Mask Illegal Oil Exports

In addition to KAZ, there are three official marine export points for fuel oil in federal Iraq: Umm Qasr South (UQS), the newly operational VS Oil Terminal, and the fast-expanding Faw port. KAZ, UQS, and Faw are managed by the transport ministry's General Company for Ports of Iraq (GCPI), under its long-serving DG Farhan al-Fartousi.¹⁰³ GCPI has responsibility for "loading tankers, managing the port, and transporting [cargo] to the ship-to-ship transfer area."¹⁰⁴ Under licenses granted by the port authorities, berths are operated by private sector players, and these operators increasingly also operate new asphalt plants licensed in Basra, often adjacent to the port, which could be intended to economize the process of diverting fuel oil to export pathways.^{ck}

Port authorities, berth operators, and shipping companies are described by multiple reporting networks as facilitating oilsmuggling by Iran-backed terrorist and militia groups. Aggregators, GCPI, berth operators, and shippers knowingly load fuel oil cargos that are falsely labeled¹⁰⁵ as containing VR, naptha, bitumen, and flancote at Basra ports.cl In many cases, even rudimentary testing of viscosity (as is required before export) would demonstrate that fraud was underway. In many cases, the fraud is obvious: For instance, it is inconceivable for port authorities and berth operators to be unaware that cargos labeled as flancote^{106 cm} that are delivered in tanker trucks are not carrying flancote, because flancote is never delivered in tankers, not being a liquid but rather being a very viscous paint (delivered in pots) or a solid sheet form (transportable on pallets).¹⁰⁷ It is unusual that officials would skip such a step in the risk-averse, "cover your behind" world of Iraqi bureaucracy, which is telling (in the author's experience): it implies that the officials know they will only lose their jobs (or suffer worse consequences) if they actually do their jobs properly.¹⁰⁸ This is the key sign of a deeply embedded corruption system.109

The final stage in smuggling oil outside Iraq's territory via Basra is loading and carriage on small shallow-draught lightering

- ck Numerous other parties are beginning to crowd into the asphalt plant-owning space. One berth operator at KAZ—the Basra-registered Al-Duwaib for Marine Services and Contracting and General Trade and Oil Services and Transportation of Petroleum Products Ltd—has sought and secured a license to build an asphalt plant near KAZ (where they operate Berth 12). The Iraq-registered Ared Al Muheet Marine Import & Export Company & Customs & General Equipment LLC (Ocean Land), one of the operators of KAZ's Berth 11, is also building an asphalt plant near KAZ. Likewise, the Badr-controlled Ministry of Transport is seeking to build multiple large asphalt plants under its General Company for Transportation Projects. This list is based on a synthesized open-source intelligence searches of commercial data, checked against multiple reporting networks for accuracy.
- cl A single reporting network neatly summarized the system: "Outside the formal SOMO supply chain, private Iraqi companies also aggregate unused governmentsubsidized fuel oil from asphalt plants and cement factories. These private Iraqi companies transport fuel oil to KAZ by tanker truck. They mislabel fuel oil as vacuum residue and bitumen to bypass SOMO regulations and sell to the international market." Author interview, commercial investigator contact, 2023; exact date, name, and place withheld at request of the interviewee.
- cm The export of flancoat from Iraq is somewhat suspicious in the first place, as the demand for flancoat in Iraq is high and domestic production does not satisfy that demand.

vessels,^{en} chartered by the Iraqi government.^{eo} These services are meant only to bring fuel oil out to a ship-to-ship transfer area within Iraqi waters, but some feeder vessels also engage ships inside and outside of Iraqi waters in suspicious ship-to-ship transfers.^{cp} Other times, the feeders even deliver oil all the way to regional ports and oil storage sites in the Gulf.^{cq} The shipping companies that operate the lightering vessels are mainly owned by powerful Iragi oil-smuggling groups who themselves trade in fuel oil from their storage hubs in the UAE and Oman.^{110 cr} The monitoring responsibility of the SOMO Shipping Division and Products Division^{cs} may have been deliberately undermined in fuel oil exports by the complex layering of IOTC and SCMT in bunkering, plus its contracted shipping providers, which themselves lease the bunkering and lightering vessels.¹¹¹ In the original AISSOT scheme, as noted by The Wall Street Journal, the marketing of fuel oil was outsourced to Salim Ahmed Said;112 in the current era, SOMO still markets fuel oil but has too little control over vessel monitoring and loading to track whether the correct volumes-or too much-is being delivered.¹¹³

Part Five: The Sanctions Evasion Angle

Oil-smuggling by U.S.-designated terrorist organizations in Iraq

- cn Fuel oil is loaded at KAZ onto handysize class shuttle vessels with a shallow enough draught to travel up the Khor Al Abdullah waterway, which operates to a depth of 12 meters, enough to handle tankers of up to 50,000 deadweight tons (DWT). Author interview, Western due diligence and shipping contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- co IOTC and the Ministry of Transport's State Company for Marine Traffic (SCMT) are responsible for shuttling fuel oil from KAZ to the floating storage vessels. These state firms have overlapping responsibilities regarding shuttling, creating a complex dynamic offshore. They have also awarded contracts to private companies to support their shuttle operations. Author interview, Western due diligence and shipping contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- cp Commercially available shipping data shows that vessels managed by lightering companies not only discharge their cargo into the floating storage vessels after loading at Iraqi ports, but also engage in ship-to-ship transfers with each other and with unaffiliated oil product tankers bound for Gulf ports. Author interviews, Western due diligence and shipping contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees. These contacts have undertaken hundreds of hours of visual searches of marine traffic live-tracking and databases, as well as satellite imagery. The author has also viewed numerous (scores) of examples of AIS-tracking and satellite imagery showing suspicious ship-to-ship transfers.
- cq In some cases, feeders delivering (or purporting to deliver) oil products into Iraq may leave after being reloaded with smuggled liquids. A single reporting network claims that these small vessels are often chartered to pick up 10,000-20,000 metric tons of product, which appears to be the size of cargos gathered by aggregators in their new storage sites near KAZ. Author interview, Iraqi contact, 2023; exact date, name, and place withheld at request of the interviewee.
- cr These kinds of feeder shipping companies are being sanctioned by the United States with ever greater regularity. For instance, on April 10, 2025, the U.S. Treasury sanctioned one shipping company whose "vessels engage in high-risk ship-to-ship (STS) transfers of Iranian petroleum in waters off Iraq, Iran, the UAE, and the Gulf of Oman. These cargoes then reach other facilitators who blend the oil or fuel with products from other countries and falsify shipping documents to conceal links to Iran, allowing these cargoes to reach the international market." See "Treasury Targets Network Transporting Hundreds of Millions of Dollars' Worth of Iranian Petroleum," U.S. Department of the Treasury, April 10, 2025.
- cs Once a certain volume aboard a floating storage vessel is reached and the cargo is sold, SOMO's Shipping Department manages the cargo offtake scheduling from the storage vessel to each buyer's vessel. Author interviews, Iraqi oil industry and Western due diligence and shipping contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

is obviously concerning and demonstrably delivers hundreds of millions of dollars per year to them in threat financing. Yet, as the 2019 AISSOT scheme showed, the smuggling of Iraqi-origin oil may be just the tip of the iceberg in terms of value to the Iran threat network. Under the al-Sudani government, a Reuters investigative report noted in November 2024,¹¹⁴ that the Iraqi offshore has once again become a "laundromat," not only for smuggled Iraqi oil but also for sanctioned Iranian oil that gets laundered into—i.e., comingled with—Iraqi oil exports.

How Comingling Works in Practice

Comingling simply refers to Iraqi oil being intermixed at sea^{ct} with Iranian sanctioned oil, and then provided with fraudulent Iraqi government paperwork to show that the entire cargo is of Iraqi origin.¹¹⁵ Like the theft of fuel oil via paperwork fraud, the physical comingling of Iranian oil and Iraqi exports should be detectable and preventable by Iraq's government agencies that monitor movements and shipping data—i.e., SOMO, the Basra Oil Company, the Iraqi Oil Tanker Company, and the transport ministry's State Company for Marine Transport.

The whole point of comingling is for smuggled Iranian oil cargos to emerge "clean" as they leave Iraqi waters, able to show a certificate of origin that specifies the oil is Iraqi. Iraq's state marketer is critical to the arrangement because SOMO's Shipping Department runs the cargo offtake scheduling from the floating storage at Al-Muktaf.¹¹⁶ The product is then loaded onto buyer vessels by shipto-ship transfer, notionally inspected and certified by the SOMO Shipping Directorate officials,^{cu} and provided by SOMO with an emailed certificate of origin specifying the Iraqi origin, volume, and specifications of the oil.¹¹⁷

ct The consensus among industry experts consulted for this research across two years of interviews is that very little oil enters Iraq from Iran by tanker truck or via cross-border hoses, for export via Iraqi ports. This makes sense: It is more efficient to bring marine tankers of Iranian oil into Iraq's "laundromat," and large-scale trucking of oil would have been noticed long ago, as is the case on the Kurdistan-Iran border. According to the author's interviews, some small volumes do enter Iraq this way—by truck, by cross-border rubber pipelines, and by small vessels crossing over the narrow waterways separating Iran from Basra—but these are idiosyncratic arrangements that mainly get loaded onto feeder vessels on Iraq's Faw peninsula—either at the main Faw port or smuggler wharves like Abu Floos. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

cu Several reporting networks state that Iraqi officials in SOMO's Shipping Department misreport volumes discharged from IOTC-chartered storage vessels. Mohammed Saadoun, the head of the SOMO Shipping Department, was removed in 2020 after being suspected of covering up Iranian ship-toship transfer activities in the Iraqi offshore, associated with the comingling of sanctioned Iranian oil into AISSOT's exports of fuel oil. He thereafter went to work for a shipping network, Sea Crown, which makes up one part of Salim Ahmed Said's smuggler cartel. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees. Invoices from leaked documents^{ev} concerning Iranian government and sanctions evasion networks show that fake Iraqi documentation, including SOMO bills of lading, can be procured for around \$12,000 per cargo.^{ev} As Iraq's own oil minister admitted in late March 2025,¹¹⁸ fraudulent SOMO paperwork is used to portray Iranian oil as Iraqi. Such paperwork has even been utilized to portray entirely Iranian cargos as Iraqi, without them even passing through Iraq's territorial waters before such cargos headed to international markets.¹¹⁹ Such schemes are regularly supported by Automatic Identification System (AIS) spoofing that show the relevant tanker moving through Iraqi waters, not sailing out of an Iranian port.^{120 cx}

However, in many cases, Iranian oil appears to be physically "laundered" in Iraqi waters or in adjacent international waters in a manner that is intended to reinforce the apparent Iraqi origin of the oil if subjected to a basic AIS history check (i.e., did the delivering vessel transit Iraqi waters?).¹²¹ This behavior cannot be discounted as pure paperwork forgery and is detectable by Iraqi government agencies. Iraqi oil-smuggler networks,^{cy} working with the AAH-led "oil council," are careful to limit their direct interface with sanctioned or Iran-linked vessels, but vessel traffic analysis quickly yields detailed understanding of their techniques. Before entering Iraqi waters, Iranian oil is often transshipped from a high-risk ship^{cz} (that carried the oil from Iran) via an intermediary

- cv On February 4, 2024, PRANA Network (an online hacking group) claimed to have hacked the email servers of an Islamic Revolutionary Guard Corps (IRGC) front company called Sahara Thunder, which was later sanctioned by the U.S. Treasury on April 25, 2024. The Sahara Thunder leaks show that many smuggling vessels were ultimately owned by Iran's Ministry of Defence Armed Forces Logistics (MODAFL) and used to transport sanctioned Iranian oil products. For the PRANA claim, see Crescent_of_Anon, "The Prana Network breached email servers ...," X, February 5, 2024. To see one example, search for ship name "Chem (IMO: 9240914)" in "Unmasking Sahara Thunder: Meet the MODAFL Front Hiding Behind an Iranian Trading Company Identity," Wikilran, February 2024.
- cw A screenshot of a document includes a bill to Sahara Thunder to a fake bill of lading, the payoff being 4,282,991.60 AED, approximately \$1.2 million. Search for the ship named REMY at "Unmasking Sahara Thunder."
- cx One item worth watching is the delta between historic Iraqi current tracked volumes provided by data firms and adjusted datasets in which AIS spoofing has been sifted out. When this challenge is cracked, the delta may be a good pointer to the scale of spoofing activities in Iraq and elsewhere.
- cy These are typically Iraqi-owned, registered in the UAE, and include a shipping arm (which services IOTC and SCMT fuel oil lightering requirements) and a trading arm (which happens to blend and trade exactly the same types of products that IOTC and SCMT pay them to lighter). Another noticeable feature of these vessels is that they almost always describe themselves as 'partially laden,' even after berthing at Hamriyah Free Zone Port or other ports in the UAE. When they do offload their Iranian cargoes into onshore storage, it is mixed with Iraqi and Indian origin oil before being marketed as 'Middle East Blend.' Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- cz High-risk ships are vessels that regularly do not record all of their ship-to-ship transfers, and whose draught (i.e., cargo carried) changes regularly without explanation—sometimes 30-plus times before another transfer is recorded. This is the author's assessment based on all the available evidence and the author's analytic processes, including matching of AIS tracking and draft-change data with commercial satellite imagery showing ship-to-ship transfers.

vessel, then to the Iraqi oil-smugglers' owned or leased vessel.^{da} In some cases, less care is taken, with Iraqi oil-smugglers engaging directly with Iran-linked vessels.¹²² What matters most, however, is that Iraqi oil-smugglers' owned or leased vessels are *entering Iraqi waters partially loaded* after having engaged in suspicious ship-to-ship transfer activity, and that they are *leaving Iraqi waters with paperwork to show that their entire cargos are certified as Iraqi-origin oil*, which is hard to believe is an oversight by SOMO and Basra Oil Company.¹²³

The deliberate relaxation of inspections to check the national origin of Iraqi cargos appears to have been ordered by Minister of Oil Hayan Abdal-Ghani as early as April 2023,124 which coincides with AAH's and Salim Ahmed Said's zenith of unopposed influence within the oil ministry.¹²⁵ Nor does SOMO and Basra Oil Company ring the alarm bell when impossibly large flows of oil are regularly being loaded in the absence of legitimate oil supply. For instance, Salem Ahmed Said's VS Oil Terminal is permitted by SOMO to load around 30,000 bpd of Qavvarah heavy crude oil onto its floating storage vessel and then to market this to off-takers on SOMO's behalf, while far larger volumes (i.e., seven times this number) are usually being lifted from the same floating storage.^{db} Merely gaining the authority to load *some* oil on SOMO's behalf is alleged to have effectively granted a licensed exporter the ability to load any amount of oil without being queried, due to the overall weakness and corruption of monitoring systems.dc

The Value to Iran of Impersonating Iraqi Oil

The value of this sanctions evasion exercise is three-fold. First, it provides a major opportunity to get sanctioned Iranian oil volumes to market. The proportion of sanctioned Iranian crude to Iraqiorigin crude in such comingled shipments is described by multiple reporting networks as ranging from two-third Iranian to four-fifths Iranian.¹²⁶ The typical-sized tanker carrying comingled shipments carries about 47,000 metric tons or 398,000 barrels of fuel oil when full. If even one such ship were to enter the world market carrying two-thirds of one shipload (i.e., 31,000 metric tons) of smuggled Iranian fuel oil, the gain in value to Iran would be about \$3.29

da These "threesomes" can involve the intermediary vessel not actually receiving any oil, which is transferred by cargo hose straight from the high-risk carrier (that has been tracked in Iranian waters) to the Iraqi oil- smuggler's ship. At other times, the intermediary vessel takes on the Iraqi oil- smuggler's ship. Every so often, the intermediary ships are sanctioned by the United States and lose their value for this purpose. This is the author's assessment based on all the available evidence and the author's analytic processes, including matching of AIS tracking and draft-change data with commercial satellite imagery showing ship-to-ship transfers.

db Calculated as follows: VS Oil Terminal sent 35,000 bpd (2,000 metric tons) of authorized heavy oil per day to the offshore, yet the same floating storage loaded at least 263,000 bpd (four million metric tons) of liquids in nine months during 2024 (March through November, when Trump won re-election). The beginning of this scheme was uncovered in Lizzie Porter, Ben van Heuvelen, and Staff of Iraq Oil Report, "Iraq activates new deal to pay Iran for gas," Iraq Oil Report, March 22, 2024.

dc Multiple interviewees with who monitor Marine Traffic vessel tracking services report that once a company is licensed to export oil on behalf of Iraq's government, the exact amounts being exported are not closely monitored, nor is there a detailed reconciliation of authorities versus actual loadings, nor steps to prevent paperwork being duplicated and reused. This is the author's assessment based on all the available evidence and the author's analytic processes.

million.^{dd} Furthermore, comingled oil is also some of the highest value fuel oil that Iran sells, being that the cargo is brought to market as undiscounted Iraqi fuel oil, as opposed to sanctioned (and thus discounted) Iranian product.¹²⁷ The delta of gained value for Iran and any Iraqi partners (versus Iranian-labeled oil) would be about \$70 per metric ton.^{de} This also means that major traders—including U.S. traders—may unknowingly receive sanctioned Iranian crude and sometimes import it into the United States.¹²⁸

In a given month, vessel traffic analysis can typically identify at least half a dozen examples of sanctioned or otherwise Iran-linked vessels directly or indirectly interacting with Iraqi oil-smuggler fleets.¹²⁹ The overall value to Iran of this annual scale of Iranian oil being laundered in Iraq is thus at least a billion dollar industry.^{df} Greater scrutiny of the comingling dynamic would likely result in a higher figure being demonstrated.¹³⁰

This author's understanding of Iran's sanctions-busting networks also suggests that the oil smuggled via Iraq is being monetized by Iranian security agencies¹³¹—who are typically U.S.-designated terrorist groups involved in malign activities that U.S. sanctions are expressly designed to constrict.¹³² Investigative journalism undertaken by a range of newspapers and industry press¹³³ has recently described in detail how Iranian security agencies receive allocations of oil to smuggle—from which they can derive funding to support regional partners and to undertake foreign procurement. For instance, a son of the former head of Iran's Supreme National Security Council, Rear Admiral Ali Shamkhani,¹³⁴ now coordinates a large portion of sanctions-busting on behalf of Iran's Ministry of Defence Armed Forces Logistics (MODAFL).^{dg}

Investigative reporting has also shed light on the Iraqi government's intention of use fuel oil as a means by which to repay multi-billion-dollar debts to Tehran for electricity and gas, which may be sanctionable activity. In January 2025, respected industry journal Iraq Oil Report learned from oil ministry insiders that the al-Sudani government had, from March-November 2024, been transferring 600,000-900,000 metric tons (3.7-5.7 million barrels) per month of fuel oil to Iran.¹³⁵ According to a March 2024 Iraqi Oil Report story, the swap deal was initiated by al-Sudani's government as early as July 2023.¹³⁶ The mechanism described by Iraq Oil Report involved the Iranian embassy in Baghdad—which

- df Calculated as follows: 41,000 barrels per day multiplied by 365 days is 14,965,000 barrels per year. When multiplied by the international price of fuel oil \$460 per metric ton or \$68 per barrel (sample date, April 1, 2025), the result is \$1,017,620,000.
- dg Sahara Thunder leaks show that many smuggling vessels were ultimately owned by Iran's Ministry of Defence Armed Forces Logistics (MODAFL) and used to transport sanctioned Iranian oil products. To see one example, search for ship name "Chem (IMO: 9240914)" in "Unmasking Sahara Thunder."

dd Calculated as follows: 47,000 metric tons multiplied by the illicit gain of \$70 per metric ton.

de Calculated as follows: Iraqi fuel oil sells for around \$460 per metric tons (sample date, April 1, 2025). If one applies a 15% "political discount" to fuel oil known to have come from Iran (15% is often cited by industry experts as about the discount on Iranian-origin crude oil), then the probable maximum price for Iranian fuel oil sales is 85% of \$460, or \$391 per MT. The delta of gained value by disguising the oil's provenance is \$69 per MT (\$460 minus \$391).

"Iran-nominated traders anecdotally do not seem to return all of the earnings to Iran in hard currency (perhaps because sanctions have made this very difficult), but instead hold some of it offshore as a kind of operational 'slush fund' for Iran threat network costs worldwide."

is always led by an Islamic Revolutionary Guard Corps official^{dh} nominating off-taking companies for the fuel oil,^{di} which would then sell the oil, with the profit of the sales (i.e., minus the traders' fee and costs) being made available to Iran and deducted from Iraq's "debt pile."¹³⁷

In the author's experience, this kind of channel for repaying Iraqi debts to Iran (whether in the shape of AISSOT fuel oil marketing, or the 2024 swaps) is something that Iran's government has long sought to covertly insert into Iraq's oil export system.^{dj} Multiple reporting networks describe a "finder's fee" of 10% for Iraqi official or smugglers who can help Iran recover such debt, which has piled up to beyond \$11 billion under U.S. sanctions.¹³⁸ According to multiple reporting networks, this finder's fee was offered to Salim Ahmed Said, who tried to assist Iran once with AISSOT and now again, using his apparent kingpin position in Iraq's energy sector.¹³⁹ Out of his commission for recovering Iraqi debts to Iran, Salim Ahmed Said is alleged to have paid AAH and Iraqi officials their dues.^{dk} This system represents a multi-billion-dollar back door in

- dh All of Iran's four ambassadors in Iraq since the beginning of the Iran-Iraq war incumbent Mohammad-Kazem Al-e Sadegh, Iraj Masjedi, Hassan Danaeifar, and Hassan Kazemi Qomi—were IRGC appointees. See "Iran Appoints IRGC-Linked Official As Iraq Envoy," Iran International, April 11, 2022.
- di The emergence of the swap deal coincided with a loosening of SOMO's longstanding rules for registering off-takers for Iraqi oil, which appears to have facilitated the allocation of Iraqi oil to traders nominated by Iran (as opposed to the custom of SOMO selling only to refiners who could not further sell on the oil). This kind of monopoly-erosion has similarities to Salim Ahmed Said's AISSOT-era and recent efforts to break SOMO's monopoly on oil marketing. This is the author's assessment based on all the available evidence and the author's analytic processes.
- dj A recurring theme among reporting networks is lobbying undertaken by Iranian officials from their Baghdad embassy and Basra consulate to senior Iraqi politicians who may be in a position—or who can be maneuvered into such roles—to help Iran repatriate its gas and electricity earnings from Iraq. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- dk Multiple interviewees from within Iraq's oil ministry and broader oil aggregating trade describe Salim Ahmed Said as receiving some form of commission payment from Iran for enabling sanctions evasion. Multiple interviewees from within Iraq's oil ministry also describe lesser payments owed by Salim Ahmed Said to AAH in the course of arranging oil smuggling and sanctions evasion. (The payments received by Salim Ahmed Said for sanctions evasion are consistently reported as higher than the payments to AAH.) It is reasonable to conclude that Salim Ahmed Said may use AAH as a service provider and an operating cost in the sanctions evasion part of his business. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

U.S. sanctions on Iran.140

An intriguing aspect of this trade is that the Iran-nominated traders anecdotally do not seem to return all of the earnings to Iran in hard currency (perhaps because sanctions have made this very difficult),^{dl} but instead hold some of it offshore as a kind of operational "slush fund" for Iran threat network costs worldwide.¹⁴¹ Iran can pay out funds to various parties who are able to produce oil "coupons" or "vouchers" stamped by the Iranian embassy in Baghdad.^{142 dm} This system may be intended as a means for Iran to transfer funds to a wide range of international recipients, from partner forces (terrorist groups such as Lebanese Hezbollah and the Houthis) to arms vendors.¹⁴³ Baghdad may now be the heart of this system.¹⁴⁴ Interestingly, the Saddam-era smuggling of oil through the UN embargo also relied upon a system of oil coupons, each of which represented a quantity of oil that could be redeemed from traders storing the smuggled oil outside Iraq.^{dn}

Part Six: Key Issues for Government and Industry

U.S. Presidential National Security Memorandum 2 (NSPM-2), issued on February 4, 2025, directs "that the IRGC and its surrogates be disrupted, degraded, or denied access to the resources that sustain their destabilizing activities."145 It furthermore notes the Secretary of Treasury shall "immediately impose sanctions or appropriate enforcement remedies on all persons for which the Department has evidence of activity in violation of one or more Iran-related sanctions" and that the Secretary of State shall "take immediate steps, in coordination with the Secretary of the Treasury and other relevant agencies, to ensure that the Iraqi financial system is not utilized by Iran for sanctions evasion or circumvention, and that Gulf countries are not used as sanctions evasion transshipment points."146 As written, this memo requires the Treasury to "immediately impose sanctions or appropriate enforcement remedies on all persons for which the Department has evidence of activity in violation of one or more Iran-related sanctions."147 Working toward U.S. Treasury Secretary Scott Bessent's goal to "Make Iran Broke Again,"148 the articles of NSPM-2 collectively represent very strong demand signals for additional intelligence on the Iran threat network's use of the Iraqi energy sector.

The final section of this report looks at what intelligence agencies, regulators, and commercial entities need to watch out for within Iraq's energy sector. Until Iran-backed militias can be removed from government, if such an outcome is even possible, Iraq should be one of the most closely monitored and safeguarded hydrocarbons sectors in the world. Put simply: Federal Iraq's energy sector is already a minefield of foreign terrorist organization

dl A point of consensus among many accounts of Iranian oil smuggling via Iraq is that only part of the proceeds are returned to Iran, with a large share, perhaps a majority, retained outside the country for a variety of uses. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

dm Not all reporting networks use the same phrase (voucher, coupon, receipt) but they seem (to the author) to be describing the same system using different labels.

dn In Saddam's system, two types of oil coupons were issued: silver coupons that entitled holders to nine million barrels of oil and gold coupons worth an unspecified higher number. See Daveed Gartenstein-Ross and Eric Stakelbeck, "Uday's Oil-for-News program," Weekly Standard, May 17, 2005.

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interests in which Western companies must tread very carefully. No foreign counterparty can credibly claim to be surprised that this is occurring. A number of lawsuits have targeted financial services partners to Iraq in relation to militia abuse of the financial system; similar liability lawsuits may one day be targeted on energy sector players who facilitated terrorist financing due to weaknesses in know-your-customer and supply chain integrity.¹⁴⁹ Even U.S. government fuel contracting in Iraq has probably inadvertently enriched foreign terrorist organizations due to the dominance of these militias within the fuel market.^{do} The below section will look at ways in which the threat can evolve and intensify.

Diversification Potential

The AAH-Salim Ahmad-Said system's unique strength has been its effective control of the PM-NOC, MoIM, and Ministry of Oil at the same time—combined with a mutually beneficial relationship with Iran's government. It would be logical that other Iraqi terrorist organizations—notably Kataib Hezbollah—and non-Iraqi terrorist organizations (from Lebanese Hezbollah to the Houthis to IRGC and other Iraqi agencies) are maneuvering to own their own segments of the Iraqi oil sector. Badr Organization—currently not a terrorist organization but under close consideration for designation^{dp}—may seek to claim a larger share of the Iraqi hydrocarbons sector in the coming years.¹⁵⁰ Though exposure of fuel oil diversion resulted in a temporary freeze on asphalt plant licensing in 2024, it should be expected that any Iraqi government dominated by militias will slowly reverse this ruling due to the sizable excesses of fuel oil that Iraq will need to dispose of in the coming years.^{dq}

Expansion of terrorist threat financing via Iraq's oil sector could happen through a dizzying number of mechanisms, most of which are already being debuted. Other parts of the value-addition chain of Iraqi oil may be accessed by terrorist and militia groups, particularly refining, inside and outside Iraq.¹⁵¹ The loosening of SOMO's certification requirements for oil off-takers is something that needs to be closely monitored and perhaps deterred.¹⁵² The weakening of Iraqi oil inventory management makes increasing

- dp On December 3, 2020, U.S. Congressman Joe Wilson introduced a draft bill calling for Badr's designation. See Wilson Calls to Designate Iranian-Backed Militia as Terrorist Organization, U.S Congressman Joe Wilson website, December 3, 2020. Then, on April 2, 2025, Wilson introduced a draft bill calling for the designation as a terrorist of Badr's leader Hadi al-Ameri. See the Free Iraq From Iran Act, discussed at "Wilson Introduces the 'Maximum Support Act,'" website of U.S. Congressman Joe Wilson, April 3, 2025.
- dq There are strong indicators that fuel oil production in Iraq will continue to grow. Iraq has a professed ambition to raise its oil production capacity from the current 4.6 million barrels per day to 6-7 million bpd by 2027, and while the level of growth may be unlikely, there will be capacity increases beyond the current 4.6 million. With the development of more advanced refining units falling well behind schedule, Iraq's downstream sector will continue to yield about 60% fuel oil outputs (versus 40% other products such as gasoline or diesel, which newer units would create in greater proportions). Fuel oil production is likely to rise beyond the current 435,000 bpd on a sustained basis. Available fuel oil for industrial allocation or export is likely to also rise above the current range of around 140,000-235,000 bpd (21,000-35,000 metric tons per day). This is the author's assessment based on all the available evidence and the author's analytic processes.

volumes of oil available for terrorist-linked off-takers to lift¹⁵³ though as the below section notes, electronic monitoring systems should also be viewed with suspicion until they are proven not to be themselves run by corruption networks. Iraqi terrorist groups can now, through control of the oil ministry, monetize their ability to push contract awards toward favored vendors in the oil and gas industries—for upstream contracts, engineering projects, and transportation.^{dr}

A broadening number of ports and berths also need to be monitored, aside from the notorious KAZ and Salim Ahmed Said's VS Oil Terminal. Umm Qasr South's three oil berths (7, 8, 9) deserve close watching as feeder vessels begin to export not only fuel oil but potentially crude oil from these locations.¹⁵⁴ As the new mega port at al-Faw expands, this area may become more important. In the future, any vessel lifting oil liquids (or Liquefied Petroleum Gas) from Iraqi ports should be subject to additional scrutiny by U.S. agencies: for instance, Lloyd List stated that a stunning 61% of LPG cargos sold as Iraqi were found by Lloyds List to actually be Iranian.)¹⁵⁵ Overall, there may be rising demand for intelligence to support enforcement of the 2024 Stop Harboring Iranian Petroleum (SHIP) Act,^{ds} being that Iraq's entire port and offshore area is qualifying as a suspicious ship-to-ship transfer and sanctions evasion hotspot.¹⁵⁶ In this author's view, some of the focus being directed on Malavsia and Singapore's Eastern Outer Ports Limits (EOPL) area should be refocused on Iraqi loading facilities.157

Risks of Digitizing Oil Exports

The various Iran-backed militia and terrorist actors in Iraq are likely to become more ambitious and inventive if they can hold onto their control of the Prime Minister's Office, the Ministry of Oil, MoIM, and Ministry of Trade.¹⁵⁸ The Badr-dominated Ministry of Transport may play a bigger part in the oil smuggling and Iranian sanctions evasion portfolio in the future.159 Iraqi companies such as Al-Raiya are seeking to secure contracts to change the way that Iraq moves and accounts for crude oil and products. One initiative is the "Electronic Barrel System," dt which would replace many of the functions of the MoO Technical Directorate and Audit Directorate in terms of tracking oil movements and stocks throughout Iraq. Based on the proven risk of allowing other e-government systemssuch as government payroll services-to fall into the wrong hands, an Electronic Barrel System needs to be closely watched. Likewise, Al-Raiya wants to take over vessel management and tracking services from Iraq's government.¹⁶⁰ Iraq's chaotic inventory and offshore monitoring systems clearly do need modernization, but all such efforts need to be thoroughly scrutinized by sanctions and threat financing analysts. As with electronic payment systems, multiple factions are likely to fight for control of such powerful

- ds The Stop Harboring Iranian Petroleum Act or the SHIP Act (H.R.3774) was enacted into law on October 19, 2023.
- dt An Al-Raiya Group Instagram reel on the system notes: "Partnering with the Iraqi Ministry of Oil, Al-Raiya Group Company has launched a ground-breaking technological project that is set to revolutionize the oil industry in Iraq -the 'Electronic Barrel' project."

do The near-monopoly of AAH and KH in the fuel oil distribution industry means that the U.S. military and embassy in Iraq, both of which rely upon local fuel markets, may be drawn in as an unwitting user of the system. Author interviews, multiple Iraqi and Western contacts, 2024-2025; exact dates, names, and places withheld at request of the interviewees.

dr This is a very strong emerging theme in commercial investigations in Iraq. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.

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 $tools.^{du}$

Threat Posed by Chinese Oilfield Services

Direct theft of oil by terrorist organizations could rise as greater proportions of Iraqi oilfields are serviced by non-Western oil service providers, particularly Chinese firms,¹⁶¹ which have very minimal anti-corruption standards^{162 dv} and which are already partnered with militia organizations in some cases.¹⁶³ In the author's view, a strong emerging trend worthy of study is Chinese engineering procurement and construction (EPC) contractors partnering with a politically exposed Iraqi companies (i.e., linked to Iran-backed groups).¹⁶⁴

As such projects proliferate across a growing number of provinces, including far-flung areas of Anbar, Nineveh, and Diyala controlled by Iran-backed Popular Mobilization Force (PMF) militias,^{dw} the scale of diversion of crude oil could rise significantly. Refineries and OPDC storage depots in militia-controlled areas are particularly valuable because they are highly vulnerable to intimidation and are typically poorly regulated.^{dx}

Particular attention should be directed by threat financing intelligence analysts and regulators onto the Iraqi joint venture partners selected by Chinese companies. Key indicators for concern can include the lack of track record and financing for the Iraqi partner, non-bid contract awards via the non-public Supreme Committee for Reconstruction and Development, and connections to Iraqi militia-adjacent businessmen.

A special focus should be directed on Chinese partnerships with the Muhandis General Company for Construction, Engineering, and Mechanical, Agricultural, and Industrial Contracting" (or the Muhandis General Company, MGC, hereafter). Named after the late U.S.-designated terrorist Abu Mahdi al-Muhandis, MGC was formed in November 2022 as one of the first acts of the al-Sudani government and is an Iraqi version of IRGC's Khatam al-Anbiya conglomerate.^{dy} Owned by the terrorist-run Popular Mobilization

- du Iraq's government electronic payment system QiCard has been the subject of years of push-and-shove between Iran-backed militias and terrorist groups. Author interviews, multiple Iraqi and Western contacts, 2020-2025; exact dates, names, and places withheld at request of the interviewees.
- dv The report notes: "corruption discourages Western firms, it seems to be proving advantageous for Chinese investment. Chinese companies leverage this culture of nepotism to further their business interests at the expense of Western international oil companies." Yerevan Saeed and Sardar Aziz, "China's Rise in Iraq's Energy Sector: From Newcomer to Dominant Player," Arab Gulf States Institute in Washington (AGSIW), October 23, 2024.
- dw This is "the colonization zone" occupied by Shi`a militias noted in the author's August 2017 CTC study. See Knights, "Predicting the Shape of Iraq's Next Sunni Insurgencies."
- dx In one case, for instance, multiple reporting networks concur that Salim Ahmad Said, KH, and AAH colluded to seek raised production levels at exactly these kinds of northern fields in order to increase the output from which oil could be filched. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- dy This was the most successful state-owned company in Iran since 1990, receiving over \$50 billion worth of contracts for the Revolutionary Guard since its formation in 1991 and sanctioned by the United States, the United Nations, and the European Union as a commercial extension of the IRGC. Michael Knights, Hamdi Malik, and Crispin Smith, "The Muhandis Company: Iraq's Khatam al-Anbia," Militia Spotlight, Washington Institute for Near East Policy, March 21, 2023.

Forces, the MGC is being positioned to take government contracts in numerous segments of the Iraqi economy, including now oil.¹⁶⁵ Thus, MGC partnered with China Machinery Engineering Corporation in March 2024,¹⁶⁶ after which they jointly bid for a vital Iraqi export pipeline project in the \$1.5 billion range in October 2024.^{dz} MGC is now included in all major tenders issued by the Basra Oil Company, and multiple reporting networks suggest the MGC is given early warning of forthcoming tenders in order to preposition themselves with Chinese partners.

Analyst attention should also be focused on the possibility that such partnerships can include sanctioned Iranian engineering interests such as the Tadbir Energy Development Group,^{ea} which can be used as a means to illicitly procure oil industry technology for Iran or win contracts in Iraq. The U.S.-sanctioned National Iranian Oil Company—which could be struck by a "snapback" of U.N. sanctions later this year—has an office in the Iraqi Ministry of Oil that is specifically to facilitate this kind of business development in partnership with Iraqi officials.^{eb}

Onward Uses of Iranian Funds

As this analysis has shown, the Iraqi oil sector has a value to Iran and Iraqi terrorist organizations that can be characterized as reaching billions of dollars per year.¹⁶⁷ Some estimates already place the scale of this terrorist threat financing in the \$10-20 billion range annually,168 and illicit abuse of the energy industry could certainly expand to reach these numbers if it has not already. For counter-threat financing professionals, identifying the repatriation mechanism for illicit income-following the money-is perhaps the Holy Grail. Much more work needs to be done on tracing how Iranian and Iragi oil is converted into monetary value, and how that value is then utilized, partially outside of the formal, dollarbased global financial system.^{ec} The oil voucher model hinted at in this article should be investigated as it could offer operationally useful insights into the manner in which Iran recycles smuggled oil into threat finance for a range of overseas activities that the United States and other Western intelligence partners desire to put an end to.¹⁶⁹ CTC

- dz The author has reviewed one such Basra Oil Company document from October 27, 2024, that identifies MGC and CMEC as bidding for this project as a consortia.
- ea Tadbir Energy Development Group is part of the sanctioned Tadbir Economic Development Group, which are both owned by Execution of Imam Khomenei's Order (EIKO), a foundation reporting directly to Supreme Leader Ali Khamenei's office.
- eb During the premiership of Adel Abdal-Mahdi, the Iranian National Oil Company opened an office inside Iraq's oil ministry. Adnan Abu Zeed, "Iranian National Oil Company opens Office in Iraq," Al-Monitor, May 15, 2019. According to multiple reporting networks, this is an outstation used by the IRGC to win business, overtly or through front companies and silent partnerships, in Iraq. Deputy Minister of Oil Bassem Mohammed Khudair is Iran's key interlocutor according to multiple reporting networks. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- ec Cryptocurrency is a key concern here. The author wishes to thank his colleague Crispin Smith for this insight.

Citations

- Michael Knights, "Iran's Expanding Militia Army in Iraq: The New Special Groups," CTC Sentinel 12:7 (2019); Michael Knights, "Soleimani Is Dead: The Road Ahead for Iranian-Backed Militias in Iraq," CTC Sentinel 13:1 (2020); Michael Knights, "Back into the Shadows? The Future of Kata'ib Hezbollah and Iran's Other Proxies in Iraq," CTC Sentinel 13:10 (2020).
- 2 Michael Knights, Hamdi Malik, and Aymenn Jawad Al-Tamimi, "Honored, Not Contained: The Future of Iraq's Popular Mobilization Forces," Washington Institute for Near East Policy, March 23, 2020.
- 3 Michael Knights, Crispin Smith, and Hamdi Malik, "Discordance in the Iran Threat Network in Iraq: Militia Competition and Rivalry," *CTC Sentinel* 14:8 (2021).
- 4 Michael Knights, Hamdi Malik, and Crispin Smith, "Iraq's New Regime Change: How Tehran-Backed Terrorist Organizations and Militias Captured the Iraqi State," CTC Sentinel 16:11 (2023).
- 5 Unpacking this chronology in detail is the focus of Knights, Malik, and Smith, "Iraq's New Regime Change."
- 6 "What countries are the top producers and consumers of oil?" Energy Information Administration, September 22, 2023.
- 7 This effort leveraged the first three years of synthesized open-source and interview-led intelligence processes operated by the new Militia Spotlight team at the Washington Institute for Near East Policy. These very detailed analyses provided a complete chronology of the post-January 3, 2020, struggle by the IRGC-QF (Islamic Revolutionary Guard Corps-Quds Force) to restore intra-muqawama (pro-Iran, Shi`a militia group) cohesion and (when needed) to recentralize control of local anti-U.S. militant cells. Michael Knights, Hamdi Malik, and Crispin Smith, "Iraq's New Regime Change: How Tehran-Backed Terrorist Organizations and Militias Captured the Iraqi State," CTC Sentinel 16:11 (2023).
- 8 Knights, Malik, and Smith, "Iraq's New Regime Change."
- 9 Ian Talley, "U.S. Eyes Sanctions Against Global Network It Believes Is Shipping Iranian Oil," *Wall Street Journal*, July 31, 2022.
- 10 "Inside the secret oil trade that funds Iran's wars," *Economist*, October 17, 2024.
- 11 Ben Bartenstein, Jack Wittels, and Archie Hunter, "Iran Oil: Secretive Trader Called 'Hector' Seen as Global Kingpin," Bloomberg News, August 30, 2024; Ben Bartenstein, "Iran Oil Tycoon 'Hector' Plays Key Role in Arms Sales to Russia," Bloomberg News, December 24, 2024.
- 12 Maha El Dahan and Yousef Saba, "Fuel Oil Smuggling Network Rakes in \$1 Billion for Iran and its Proxies," Reuters, December 3, 2024.
- 13 Herman Wang and Lauren Holtmeier, "Trump May Target Iraq's Oil Sector with Sanctions to Counter Iranian Influence: Sources," S&P Global, November 27, 2024.
- 14 "Iraqi Fuel Oil Export Surge Raises Smuggling Concerns," MEES, November 1, 2024.
- 15 Lizzie Porter, Ben van Heuvelen, and Staff of Iraq Oil Report, "Iraq activates new deal to pay Iran for gas," Iraq Oil Report, March 22, 2024; Staff of Iraq Oil Report, "Iran-Iraq Fuel Oil Barter Deal Pays Down Debt Backlog," Iraq Oil Report, January 2, 2025.
- 16 See the findings and methodology described in "Unmasking Sahara Thunder: Meet the MODAFL Front Hiding Behind an Iranian Trading Company Identity," WikiIran, February 2024. See this Reuters piece to get an excellent visual walk-through the evidence using a case study: "How Iran moves sanctioned oil around the world," Reuters, January 7, 2025.
- 17 "National Security Presidential Memorandum-2/NSPM-2," The White House, February 4, 2025.
- 18 The Oil-for-Food program was discussed in depth in this 2004 retrospective: Joseph A. Christoff, "Testimony Before the Committee on Foreign Relations," U.S. Senate United States General Accounting Office, April 7, 2004.
- 19 A good recap of this history of the trucking trade—"the pipeline on wheels"—is given in Firat Bozcali, "The Illegal Oil Trade Along Turkey's Borders," *Middle East Research and Information Project* 261 (2011).
- 20 Ibid.
- 21 For a good sample of reporting on this, which was plentiful during the U.S.led occupation of Iraq in 2003-2011, see Ben Lando, "Analysis: Iraq's oil smuggling," UPI, December 15, 2006.
- 22 See a modern piece on the ongoing operations of such oil bourses in Timour Azhari, "Kurdish oil smuggling to Iran flourishes," Reuters, July 11, 2024.
- 23 Ibid.
- 24 Ibid.
- 25 Azhari.

- 26 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 27 For a blow-by-blow account, see Knights, Malik, and Smith, "Iraq's New Regime Change."
- 28 For Militia Spotlight's updated profile of KH, see Michael Knights, Crispin Smith, and Hamdi Malik, "Profile: Kataib Hezbollah," Militia Spotlight, Washington Institute for Near East Policy, April 1, 2021 (updated October 21, 2023).
- 29 For Militia Spotlight's updated profile of AAH, see Michael Knights, Crispin Smith, and Hamdi Malik, "Profile: Asaib Ahl al-Haq," Militia Spotlight, Washington Institute for Near East Policy, April 27, 2021 (updated October 21, 2023).
- 30 For a recent profile of AAH and its meteoric rise, see Michael Knights, "Embracing Asaib Ahl al-Haq: Pragmatism or Naiveté?" Hudson Institute, October 9, 2024.
- 31 Ibid.
- 32 This assessment is based on a synthesized intelligence process and is confirmed by multiple reporting networks canvassed by the author, to the point of this being common knowledge and widely accepted. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 33 This close relationship is explored in depth in Knights, Malik, and Smith, "Iraq's New Regime Change."
- 34 See the reporting by Iraq Oil Report in "Once fixable, Baiji refinery plundered beyond repair, Iraq Oil Report," Iraq Oil Report staff, January 28, 2016.
- 35 Talley.
- 36 Ibid.
- 37 Ibid.
- 38 Talley.
- 39 Multiple independent interviewees have used some formulation similar to "a cut"—i.e., "a percentage," "share," "commission"—to describe a remuneration scheme where smugglers are paid for sanction-busting on Iran's behalf. Author interviews, multiple Iraqi and Western contacts, 2024-2025; exact dates, names, and places withheld at request of the interviewees.
- 40 Talley.
- 41 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 42 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 43 Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 44 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 45 For a clear description of this effort, see Michael Knights, "Extent of Terrorist and Militia Fuel Oil Diversion Exposed in Iraq," Militia Spotlight, Washington Institute for Near East Policy, August 7, 2024.
- 46 Knights, Malik, and Smith, "Iraq's New Regime Change."
- 47 For Militia Spotlight's updated profile of the Badr Organization, see Michael Knights, Crispin Smith, and Hamdi Malik, "Profile: Badr Organization," Militia Spotlight, Washington Institute for Near East Policy, September 2, 2021.
- 48 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 49 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 50 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 51 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 52 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 53 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 54 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 55 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 56 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 57 This lopsided benefit to AAH and its efforts on the CF are described in the December 2023 CTC piece. See Knights, Malik, and Smith, "Iraq's New

Regime Change."

- 58 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 59 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 60 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 61 Author interviews, multiple Iraqi and Western contacts, 2022-2025; exact dates, names, and places withheld at request of the interviewees.
- 62 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 63 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 64 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 65 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 66 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 67 This is the author's strong assessment based on all the available evidence and the author's analytic processes.
- 68 Again, this is the author's assessment based on all the available evidence and the author's analytic processes.
- 69 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 70 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 71 For a good summation of this trend, see Michael Knights, "Iraq Is Quietly Falling Apart: Iran's Proxies Have Seized Power in Baghdad—and Are Gutting the State," *Foreign Policy*, June 5, 2023.
- 72 Herman Wang with Staff Reports, "Smuggling weighs on prospects for oil industry in Iraq," S&P Global, November 28, 2022.
- 73 Ibid.
- 74 El Dahan and Saba. This is also the author's assessment based on all the available evidence and the author's analytic processes.
- 75 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 76 Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 77 Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 78 Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 79 Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees. This squares with how the author remembers the system working when he worked extensively in Iraqi oilfields from 2006-2012 and built the analytic cell at the first publicprivate partnership between foreign oil and security companies and the Iraqi intelligence community.
- 80 Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 81 This is the author's strong assessment based on all the available evidence and the author's analytic processes.
- 82 Wang and Holtmeier; Wang with Staff Reports; El Dahan and Saba. Each of these efforts itself draws on multiple reports and interviews.
- 83 The author undertook a detailed set of interviews with an Iraqi fuel oil aggregator and Iraqi oil ministry officials in order to track the raising and lowering of the fuel oil subsidy from the Adel Abdal-Mahdi, al-Kadhimi and al-Sudani premierships. This informed the analysis in Michael Knights, "Extent of Terrorist and Militia Fuel Oil Diversion Exposed in Iraq," Militia Spotlight, Washington Institute for Near East Policy, August 7, 2024. Author interviews, multiple Iraqi contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 84 Ibid. The author has reviewed documents from both the al-Kadhimi and al-Sudani reviews of the industry.
- 85 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 86 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- Knights, "Extent of Terrorist and Militia Fuel Oil Diversion Exposed in Iraq."
 Ibid.
- 89 Ibid.
- 90 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact

dates, names, and places withheld at request of the interviewees.

- 91 Author interviews, Iraqi contact, 2024; exact date, name, and place withheld at request of the interviewee.
- 92 Author interviews, Iraqi contacts, 2025; exact dates, names, and places withheld at request of the interviewees.
- 93 Author interviews, Iraqi contacts, 2025; exact dates, names, and places withheld at request of the interviewees.
- 94 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 95 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 96 Wang with Staff Reports.
- 97 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 98 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 99 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 100 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 101 Author interview, Iraqi contact, 2024; exact date, name, and place withheld at request of the interviewee.
- 102 This is the author's assessment based on all the available evidence and the author's analytic processes. The author has also seen an image of a senior member of one U.S.-designated terrorist movement visiting Al-Thager in April 2022: Kataib Sayyed al-Shuhada (KSS) senior member and MP Falih al-Khazali was photographed publicly meeting the Al-Thager site manager Maytham Abdal-Hussein.
- 103 Ali al-Aqily, "Q&A: Jassim Kamel Marzouq, director of the Khor al-Zubair Port," Iraq Oil Report, November 12, 2024.
- 104 According to Jassim Kamel Marzoq, the director of KAZ port. See Ibid.
- 105 This is a point of strong consensus among reporting networks. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 106 Multiple reporting networks confirm this independently.
- 107 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 108 This is the author's assessment and is a mainstream interpretation of the events.
- 109 This is the author's assessment based on all the available evidence and the author's analytic processes, including long periods spent working within Iraqi institutions.
- 110 This is a point of strong consensus among reporting networks. Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 111 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 112 Talley.
- 113 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 114 El Dahan and Saba. This Reuters investigative report cites five sources and two "Western intelligence reports."
- 115 This is the author's assessment but is a mainstream interpretation of the events.
- 116 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 117 This is the author's assessment based on all the available evidence and the author's analytic processes. A visual example of a certificate of origin used to misrepresent Iranian oil as Iraqi can be viewed at "How Iran moves sanctioned oil around the world," Reuters, January 7, 2025.
- 118 "Flash Brief: 'These Tankers Were Iranian': Baghdad Accuses Tehran of Forging Iraqi Documents to Evade Oil Sanctions," Foundational for the Defense of Democracies, March 24, 2025.
- 119 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 120 Author interviews, multiple oil industry and commercial investigator contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 121 This is the author's assessment based on all the available evidence and the author's analytic processes, including matching of AIS tracking and draftchange data with commercial satellite imagery showing ship-to-ship transfers.
- 122 This is the author's assessment based on all the available evidence and the author's analytic processes, including matching of AIS tracking and draft-

- 123 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 124 Author interviews, multiple Iraqi and Western contacts, 2025; exact dates, names, and places withheld at request of the interviewees.
- 125 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 126 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 127 This is the author's assessment but is a mainstream interpretation of the events.
- 128 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 129 This is the author's assessment based on all the available evidence and the author's analytic processes, including matching of AIS tracking and draftchange data with commercial satellite imagery showing ship-to-ship transfers. Proving comingling is an imprecise, time-consuming, and strangely addictive pastime.
- 130 This is the author's assessment, a rather obvious finding.
- 131 This is the author's assessment based on all the available evidence and the author's analytic processes. See also "Inside the secret oil trade that funds Iran's wars."
- 132 The Economist detailed this allocation of oil to Iraq's security agencies as an alternative form of liquidity. See "Inside the secret oil trade that funds Iran's wars." See also Jonathan Saul and Parisa Hafezi, "Iran's Revolutionary Guards extend control over Tehran's oil exports, sources say," Reuters, December 18, 2024. See also "A Report on the Billion-Dollar Corruption of Shamkhani's Sons: Another Page of Corruption Within Khamenei's Inner Circle," Iran International, April 10, 2023.
- 133 Bartenstein, Wittels, and Hunter. See also "Inside the secret oil trade that funds Iran's wars" and Bartenstein.
- 134 Bartenstein, Wittels, and Hunter. See also "Inside the secret oil trade that funds Iran's wars" and Bartenstein.
- 135 Staff of Iraq Oil Report, "Iran-Iraq Fuel Oil Barter Deal Pays Down Debt Backlog," Iraq Oil Report, January 2, 2025.
- 136 Porter, van Heuvelen, and Staff of Iraq Oil Report.
- 137 Porter, van Heuvelen, and Staff of Iraq Oil Report.
- 138 "Flash Brief: Iraq to Pay Iran with Oil for Billions of Dollars in Debt," Foundation for the Defense of Democracies, July 14, 2023.
- 139 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 140 This is the author's assessment and is a mainstream interpretation of the events.
- 141 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 142 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 143 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 144 This is the author's assessment but is a mainstream interpretation of the events.

- 145 "National Security Presidential Memorandum-2/NSPM-2," The White House, February 4, 2025.
- 146 Ibid.
- 147 Ibid.
- 148 "US Treasury secretary Bessent vows to 'make Iran broke again,'" Iran International, March 6, 2025.
- 149 This is the author's assessment.
- 150 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 151 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 152 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 153 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 154 Author interviews, multiple Iraqi and Western contacts, 2023-2025; exact dates, names, and places withheld at request of the interviewees.
- 155 See Tomer Raanan, "Over half of LPG cargoes claiming Iraqi origin may actually be Iranian," Lloyds List, March 13, 2025.
- 156 For instance, KAZ is listed as a top high-risk area in Dimitris Ampatzidis and Kevin Kinnee, "High-risk ship-to-ship transfers and emerging hotspots," Kpler, October 2024.
- 157 Ibid.
- 158 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 159 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 160 A similar presentation on Al-Raiya's planned Vessel Traffic Management System (VTMS) for Iraq was taken offline.
- 161 Yerevan Saeed and Sardar Aziz, "China's Rise in Iraq's Energy Sector: From Newcomer to Dominant Player," Arab Gulf States Institute in Washington (AGSIW), October 23, 2024.
- 162 Ibid., pp. 7-8.
- 163 "Iraq's PMF-linked Muhandis signs MOU with China's CMEC," Reuters, March 8, 2024.
- 164 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 165 See the Militia Spotlight profile of MGC at Michael Knights, Crispin Smith, and Hamdi Malik, "Profile: The Muhandis General Company," Militia Spotlight, Washington Institute for Near East Policy, May 17, 2023, updated November 5, 2024.
- 166 "Iraq's PMF-linked Muhandis signs MOU with China's CMEC."
- 167 This is the author's assessment based on all the available evidence and the author's analytic processes.
- 168 This is the author's range based on a running straw poll among industry contracts with a close focus on the issue.
- 169 This is the author's assessment based on all the available evidence and the author's analytic processes.