ASSESSMENT OF THE RESPONSE TO

ILLICIT WEAPONS

TRAFFICKING

In the Gulf of Aden and the Red Sea

Global Maritime
Crime Programme
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Coordination and content overview

Michael Osman
Monika Roszkowska

Research, analysis and drafting

Wolf-Christian Paes

Mapping

Riccardo Pravettoni
Murat Yildiz

Graphic design and layout

Federica Martinelli

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Assessment of the response to illicit weapons trafficking in the Gulf of Aden and the Red Sea
The Republic of Yemen has been embroiled in a violent conflict since September 2014 when Houthi forces took military control of the capital city Sana’a and displaced the government of interim President Abdrabuh Mansour Hadi. According to the United Nations Development Programme (UNDP), Yemen’s protracted conflict has claimed at least 377,000 lives,¹ most of them civilians, and plunged Yemen, already the poorest country of the Arabian Peninsula, into a complex humanitarian catastrophe.

The Houthis, who call themselves Ansar Allah (Partisans of God), originally were a revivalist Zaidi Shia religious movement formed in the Sa’dah governorate in the 1990s under the leadership of prominent cleric Hussein al-Houthi. Critical of Yemen’s long-term President Ali Abdullah Saleh (in office from 1990 to 2012), an order for the arrest of their leader led to a low-level insurgency resulting in the killing of Hussein al-Houthi by government forces in September 2004. Following his death, the political leadership of the movement passed on to his brother Abdul-Malik al-Houthi. The Houthis reportedly formed close political and military ties with the Islamic Republic of Iran and the Lebanese movement Hezbollah and continued to challenge Saleh, exploiting the frustration of large parts of the Yemeni population with his government. They succeeded in capturing parts of the mountainous north of the country before a popular uprising linked to the Arab Spring swept the old regime from power in February 2011.² In the wake of this regime change, which brought Hadi to power, the Houthis increased their presence in Sana’a and formed alliances with other groups, while simultaneously clashing with tribesmen loyal to other political movements, in particular those of the Sunni Islamist Al-Islah party (“The Yemeni Congregation of Reform Party”), a Yemeni affiliate of the Muslim brotherhood.

Following the ouster of President Hadi and his subsequent flight to Aden, the Houthis consolidated their dominance over large parts of northern Yemen and significantly strengthened their military power through absorbing parts of the country’s armed forces. In March 2015, fearing a further deterioration of the security situation, a group of nine Arab countries led by the Kingdom of Saudi Arabia deployed military forces as part of Operation “Decisive Storm” with the aim to restore the authority of Yemen’s internationally recognized government.³ Meanwhile in the coastal province of Hadramawt, militants of Al-Qaeda in the Arabian Peninsula (AQAP) exploited the political vacuum and seized control of the local capital of Mukalla in April 2015, which they held for more than one year before being forced out by military forces backed by the United Arab Emirates.⁴ While the Coalition reversed some of the Houthi advances, the Houthis managed to consolidate their positions in the mountainous north of the country.

The period from 2016/2017 onwards, saw a significant increase in the military capabilities of the Houthis, which included the launch of ballistic missiles and uncrewed aerial vehicles (UAVs)⁵ against targets in Saudi Arabia, as well as the deployment of anti-ship missiles and water-borne improvised explosive devices (WBIED)⁶ against ships flying the flag of Coalition states in the Red Sea. While these attacks have done relatively little material damage, they allowed the Houthis to some extent to counterbalance the superiority of the Coalition forces and to project power beyond the immediate battlefield.⁷

In December 2018, fearing a further deterioration of the humanitarian situation in light of Coalition advances towards the important harbour city of Hodeida, which accounts for approximately 70 percent of Yemen’s imports (including humanitarian aid), the international community urged the conflict parties to agree the UN-mediated “Stockholm Agreement”. The agreement led to a local ceasefire and the establishment by the Security Council of a small UN mission to monitor party compliance (UNMHA – the United Nations Mission to support the Hudaydah Agreement). However, since the agree-

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⁴ Houthi WBIEDs are small boats converted to operate autonomously, typically using pre-set GPS coordinates. They are designed as ‘suicide weapons’, i.e., they explode on impact or in the air above the target. See: Conflict Armament Research (2020) Evolution of UAVs Employed by the Houthi Forces in Yemen. London.
⁵ The Houthi UA V s are typically small, artisinally produced aircraft, which are capable of transporting explosives autonomously over a range of up to 1,500 kilometres using pre-set GPS coordinates. They are designed as ‘suicide weapons’, i.e., they explode on impact or in the air above the target. See: Conflict Armament Research (2017) Anatomy of a ‘Drone Boat’ A water-borne improvised explosive device (WBIED) constructed in Yemen. London.
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by the United States of America and allied Member States to deploy a naval mission in the Red Sea to protect international shipping ended the period of relative calm and brought the conflict in Yemen back into the international spotlight. The subsequent launch of strikes onto targets inside Houthi-controlled areas in Yemen by the United States and United Kingdom as part of a campaign to counter the attacks on civilian shipping has added further complexity to the situation.

Meanwhile a truce was agreed between the Houthis and the internationally-recognized government in April 2022 and while it formally lapsed after eight months, the Houthis have largely refrained from cross border attacks and the Coalition has not resumed its aerial attacks in Yemen, while humanitarian concessions made by the government side, such as the operation of limited commercial flights from Sana’a and the improved access for commercial ships to Houthi-controlled ports have remained in place. Negotiations to advance the peaceful settlement of the wider conflict have demonstrated limited progress to date. The Houthis appear to have used the lull in the fighting to increase their military arsenals, displaying large numbers of sophisticated weapon systems in a series of military parades in Sana’a and Hodeida on the anniversaries of their “revolution” and amongst other holidays in September 2022 and 2023. Following the outbreak of the Gaza conflict in October 2023, these weapons were used to launch attacks on Israeli territory and on commercial ships, posing a threat to the vital shipping lines between Suez and the Bab al-Mandab. The continued threats and targeting of civilian vessels in the Red Sea and Gulf of Aden and the subsequent decision by the United States of America and allied Member States to deploy a naval mission in the Red Sea to protect international shipping ended the period of relative calm and brought the conflict in Yemen back into the international spotlight. The subsequent launch of strikes onto targets inside Houthi-controlled areas in Yemen by the United States and United Kingdom as part of a campaign to counter the attacks on civilian shipping has added further complexity to the situation.

8 https://www.mei.edu/publications/yemens-peace-process-hodeida-agreement-never-was
9 Middle East Institute, 2019, Yemen’s peace process: The Hodeida Agreement that never was? https://www.reuters.com/article/idUSKBN1X923J/
13 Memri TV, 2023, Houthis Showcase Large Arsenal Of Missiles, Drones At Sana’a Military Parade. https://www.memri.org/tv/houthis-showcase-large-arsenal-missiles-drones-military-parade
14 Interviews with representatives of the United States and the United Kingdom in October and November 2023.
Following the Houthi takeover of Sana’a in September 2014, their forces merged with parts of the Yemeni Armed Forces, significantly increasing their capabilities as well as their access to more sophisticated equipment, including helicopters and aircraft. However, aerial attacks by the Coalition destroyed many of their larger weapon systems and the Houthis adapted by engaging their enemies in guerrilla warfare using their knowledge of Yemen’s rugged terrain. Over time, the pre-war stocks of arms and ammunition were depleted, and the Houthis started to manufacture their own weapons, often showing great ingenuity. This “cottage industry” churning out increasingly sophisticated Unmanned Aerial Vehicle (UAV), WBIED and missile systems, is complemented by transfers from abroad, which range from small arms and lights weapons to ballistic and cruise missiles with the latter being smuggled in components and re-assembled in Yemen. In addition, the Houthis rely on the import of components for their indigenous weapon systems, in particular engines, servo actuators and electronics, as well as on chemicals smuggled from abroad to manufacture explosives and missile fuel.

In order to stop the flow of arms, the UN Security Council imposed a comprehensive arms embargo on the Houthis and their allies in April 2015, which remains in effect at the time of writing. Given that the airports in Houthi-controlled areas were closed for all but humanitarian flights between the start of Operation “Decisive

15 The first generation of Houthi WBIEs used a repurposed warhead from a P-15 Termit (Styx) anti-ship missile as the main explosive charge. Other examples include the development of several generations of improvised explosive devices (IED) by the Houthis to replenish the dwindling stocks of landmines inherited from the previous regime, see: Project Masam (2023) Houthi IED Update: Aden.

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Storm" in March 2015 and the truce in April 2022, and that Yemen's land borders are under the control of the internationally recognized government, attempts to enforce the sanctions focused on the maritime domain. The two major ports on the Red Sea under the control of the Houthis – Hodeida and Salif – were blocked by Coalition warships after the start of the intervention. The UN responded by creating the United Nations Verification and Inspection Mechanism for Yemen (UNVIM) at the request of the Government of Yemen to ensure compliance with Security Council Resolution 2216 (2015). The mechanism inspects commercial ships going to these ports in Djibouti, to ensure that sufficient foods and fuel reaches the population in the Houthi-controlled areas without weapons being smuggled.17 As a result, maritime smuggling operations shifted, at least until 2023, from large ships to smaller traditional vessels, so called dhows,18 which continue to operate in large numbers in the Red Sea and the Gulf of Aden.

Maritime trafficking in the Arabian Sea to Yemen

Given the presence of Coalition warships close to the Houthi shorelines in the Southern Red Sea, the main focus of maritime smuggling has been on the Arabian Sea. Between September 2015 and January 2023, a total of sixteen seagoing vessels carrying weapons, ammunition as well as components for sophisticated weapon system, such as cruise missiles and UAV were interdicted by warships from the United States, Saudi Arabia, France, and Australia.19 With one exception,20 the vessels were different types of dhows, in particular the large, seagoing Jelbut-type, and the smaller Shu’ai, which is mostly used for fishing and coastal trade. Most of the crew members on those vessels hailed from Yemen, in particular from the Red Sea coast, while two crews were predominantly Somali and in one case Iranian and Pakistani. Table 1 presents an overview of the quantities of arms and ammunition seized.

### TABLE 1

*Arms and ammunition seized in the Arabian Sea between 2015 and 2023*

<table>
<thead>
<tr>
<th>Year</th>
<th>SALW *</th>
<th>ATGMs **</th>
<th>Ammunition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0</td>
<td>75</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>5,927</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2018</td>
<td>2,522</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2019</td>
<td>0</td>
<td>171</td>
<td>476,000</td>
</tr>
<tr>
<td>2020</td>
<td>5,508</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>2021</td>
<td>8,625</td>
<td>50</td>
<td>220,000</td>
</tr>
<tr>
<td>2022</td>
<td>1,406</td>
<td>0</td>
<td>1,106,406</td>
</tr>
<tr>
<td>2023</td>
<td>5,265</td>
<td>30</td>
<td>578,400</td>
</tr>
<tr>
<td>Total</td>
<td>29,253</td>
<td>365</td>
<td>2,380,806</td>
</tr>
</tbody>
</table>

*SALW: Small Arms and Light Weapons **ATGMs: Anti-Tank Guided Missiles

17 United Nations Verification & Inspection Mechanism for Yemen website, https://www.vimye.org/
18 The term dhow refers to traditional sailing boats made out of wood, which have dominated the trade between the Gulf, the Indian Subcontinent, and the Horn of Africa for centuries. Today they are usually powered by diesel engines and range in size from five to 35 metres. While rare in the larger ports, they continue to be used for fishing and for transporting cargoes to smaller ports with limited infrastructure. The most common types used for arms smuggling are the large Jelbut-types commonly seen in Iranian waters and the smaller Shu’ai dhows which are often used in Yemen.
19 Calculations based on the analysis of the reports of the Panels of Experts on Yemen and Somalia. This number does not include the three, much smaller, speedboats interdicted by the United Kingdom in the Northern Gulf of Oman (see section section on trafficking across the land border with Oman).
20 The exception was the seizure of the fishing trawler Mawzan-1, which was seized by the US Navy in December 2022 with a cargo of 6,690 M122-k proximity fuses, 870 boxes of PG-7 strip propellant, as well as 25,000 rounds of 12.7x99mm calibre and 1,080,000 rounds of 7.62x54mm ammunition.
Within the Arabian Sea, the Panel of Experts identified two main trafficking routes, both of which involve transshipment from larger Jelbut dhows to the smaller Shu’ai. These transfers either take place off the coast of Somalia, or, at least in two cases in 2019 and 2020, in the vicinity of the Sawdah Islands in the Gulf of Oman. Following the transfer, the illicit cargo is then moved to secluded beaches on the Southern coast of Yemen, in earlier years primarily to the governorates of Shabwah and Hadramawt, and more recently to Mahra, where they are then smuggled across the desert to Houthi-controlled areas of the country.

The Panel of Experts has also indicated that the smuggling is facilitated by a network of individuals affiliated with the Houthis, which is responsible for recruiting crew members and for overland transport across the territory controlled by the internationally recognized government of Yemen, as well as for the provision of passports and financial resources.

Maritime trafficking in the Red Sea to Yemen

While the ports of Hodeidah and Salef have remained under the control of the Houthi forces since 2015, the Coalition naval presence in the Red Sea combined with the UNVIM inspection regime has historically been an effective deterrence for larger-scale smuggling of weapons into Yemen through the Red Sea.

However, while there is little evidence that weapons were smuggled through the Red Sea to the Houthis between 2015 and 2022, one commodity which was frequently seized in large quantities were chemicals, most often in bags labelled “urea fertilizer”. Urea is a fertilizer with a high nitrogen content, whose comparatively low price makes it a popular choice in agriculture in developing countries. Urea can also be used to manufacture urea nitrate, a high explosive which has been used in improvised explosive devices, however so far, there has been no evidence that urea nitrate has been used by the Houthis to manufacture IEDs and as a result, in practice, the ban has not been strongly enforced.

In 2022, following an investigation by the Panel of Experts on Yemen, new evidence came to light indicating that the same network of Houthi operatives which has coordinated the maritime smuggling of arms and ammunition was also responsible for the smuggling of the “urea fertilizer”. In January and November 2022, the US Navy seized two Jelbut dhows carrying chemicals and while the cargo was disposed without further analysis in the first case, the second cargo was more thoroughly investigated, showing that about one third of the bags did not contain urea, but rather ammonium perchlorate, a chemical used as an oxidizer in the manufacturing of solid missile fuels. According to the testimony of the crew members, the urea was destined for the port of Oboch, where it was transhipped to smaller dhows destined for the Houthi-controlled ports on the Red Sea.

Since October 2023 there have been reports in the Yemeni media suggesting that ships carrying weapons, as well as parts for missiles and UAVs were discharged at the ports of Hodeidah and Salef. Citing anonymous sources in the ports, the reports claimed that the vessels in question were “big ships” rather than the dhows,


22 Interviews by the Panel of Experts with Yemeni security officials, as well as members of the detained dhow crews, in Aden, Hadramawt and Mahra between 2020 and 2023.


24 Interviews with international subject matter experts between October and December 2023.

25 Interviews with representatives of the Yemen Coast Guard in Aden in October 2023.

26 Interviews with IED experts in Aden in October 2023.

27 Interviews with subject matter experts in October and November 2023.


Assessment of the response to illicit weapons trafficking in the Gulf of Aden and the Red Sea

Assessment of the response to illicit weapons trafficking in the Gulf of Aden and the Red Sea from Yemen. It is also likely that the cargo of three speedboats seized by the UK Navy in the Gulf of Oman in January and February 2022, as well as in February 2023, which included various components for cruise and ballistic missiles, as well as anti-tank guided missiles, were also destined for overland smuggling across the Shahn border crossing.

In other cases, dual-use items, i.e., parts, which have both civilian and military applications, have been smuggled across this border as well. They include engines, servo motors and electronics, which are used by the Houthis to manufacture UAVs and other weapons. In this case, the components are imported legally by businesses based in Oman and then transferred to Yemen using commercial trucking services. Reports of dual use items being sourced via this route date back to as early as January 2019, when Coalition forces seized a truck from Yemen. It is also likely that the cargo of three speedboats seized by the UK Navy in the Gulf of Oman in January and February 2022, as well as in February 2023, which included various components for cruise and ballistic missiles, as well as anti-tank guided missiles, were also destined for overland smuggling across the Shahn border crossing.

Traffic across the land border with Oman

Since the beginning of the war in Yemen, the focus of anti-proliferation efforts has been on the maritime domain. Given that the airports in Houthi-held areas had been closed for all but limited humanitarian flights until May 2022 and that the land border between Yemen and Saudi Arabia is heavily militarized, the only border which is open for the travel of ordinary Yemeni citizens is the one with Oman. Along that border, only two crossing points exist (of which only one, the Shahn land port, is open to commercial trucks) and to reach them from Houthi-held territory, one needs to travel for hundreds of kilometres along roads controlled by security forces of the internationally recognized government. However, several seizures in 2022 and in 2023 show that weapons and other related items are smuggled across the border to the Houthi forces.

The most significant seizure occurred in March 2022 when Yemeni customs officers inspected a truck coming from Oman. Concealed inside of four large fake electric generators, which were purpose-built for smuggling, were 52 sophisticated anti-tank guided missiles of a type commonly seized from dhows in the Arabian Sea. The missiles were detected when the truck was x-rayed at the Shahn border crossing. Subsequent investigations showed that the driver was working for a shipping and warehousing company in Sana’a and that he had picked up the “generators” as well as 4,000 crates of milk from the warehouse at the Mazyunah Free Zone, which is located directly across the border crossing from Yemen. It is also likely that the cargo of three speedboats seized by the UK Navy in the Gulf of Oman in January and February 2022, as well as in February 2023, which included various components for cruise and ballistic missiles, as well as anti-tank guided missiles, were also destined for overland smuggling across the Shahn border crossing.

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30 Interviews with different subject matter experts between October and December 2023.
31 Interviews with UN sources in October and November 2023 noted that the Security Council mandate for the Mission operating in Yemen does not include the monitoring of the arms embargo. The Mission conducts scheduled, weekly visits to the port areas, when approved, accompanied by Houthi personnel.
32 Commercial flights between Sana’a and Amman in Jordan resumed in 2022 and have since served as a vital lifeline for Yemenis living in Houthi-controlled areas. So far, there has been no indication that those flights have been used to smuggle components for the Houthi weapons program.

Smuggling of weapons from Yemen to other countries

While the smuggling of weapons to Yemen and in particular to the Houthis has been at the centre of attention since 2015, the fact that arms are also smuggled out of the country in significant quantities is sometimes neglected. This is surprising given that Yemen has traditionally played an important role as hub for illicit weapons smuggling, in particular for the Horn of Africa and has an active domestic and largely unregulated market for small arms and light weapons, which includes both brick-and-mortar shops in most major towns, as well as sales by private arms dealers on social media platforms such as Facebook and Telegram. Traditionally, this market has supplied weapons to private individuals rather than to organized groups. Gun ownership in Yemen has traditionally been very high, with some estimates claiming that the country ranks second only to the United States of America in terms of the number of firearms per resident. This strong domestic demand, which predates the current conflict, is driven by a complex set of factors, which includes societal norms (gun ownership is associated with prestige) as well as the more practical need to defend one's community in the absence of strong state institutions. Given the thriving domestic market, some of the weapons have also been supplied to other countries in the sub-region.

The smuggling of dual-use items presents a number of specific challenges for anti-proliferation efforts – one aspect is related to capacity-building; whereas customs officers and members of the security forces, for example at roadblocks, are usually able to identify weapons quite easily, this is not the case for dual-use items, whose identification often requires significant training. Another aspect is regulatory – items such as engines or electronic components for Houthi weapon systems are not considered restricted under the legislation of most countries, i.e., they can be freely imported. This makes it easy for business entities to import them and then to arrange their onwards transfer to Yemen and it is not in all cases clear whether they are aware that the parts will be used for the manufacturing of weapons, or that they are destined for the Houthis.

Given the close trading relationship between communities on the Southern coast of Yemen and the Northern coast of Somalia, the Gulf of Aden remains one of the key transit corridors for weapons. Arms are shipped in both directions – large quantities of mostly new weapons, are transferred from large vessels off the Somali coast to smaller boats going towards Hadramawt and Mahra, ultimately reaching the Houthis after being smuggled across the desert by criminal networks. Simultaneously, smaller, and more mixed cargoes of mostly used weapons are being smuggled from Yemeni ports such as Mukalla and Al-Shihr on small dhows towards Somalia, often to Berbera port in Bossaso, as well as to beaches in Galmudug, and more rarely, to


38 Interviews with subject matter experts between October and December 2023.

39 According to the Small Arms Survey, in 2018 there were 52.8 firearms per 100 residents in Yemen, which would have been second only to the United States of America, which was estimated to have 120.5 firearms per 100 residents. This would equate 14.9 million firearms in private possession in Yemen. See: https://www.smallarmssurvey.org/sites/default/files/resources/SAS-Infographics-global-firearms-holdings.pdf.


41 Interviews with subject matter experts between October and December 2023.

locations further South. Unlike in the case of weapons for the Houthis, those exports appear to be purely commercial in nature, even though at least some of the weapons ultimately end up with armed groups such as Al-Shabab and the Islamic State. Independent researchers have established that the arms dealers in Yemen and Somalia often communicate via mobile phone and commonly use the hawala remittances to make and receive international payments. Given that individuals and dhows based in the same ports have also featured in the better documented cases of transshipment of arms to Yemen, it is highly likely that at least some of them are involved in both proliferation patterns.

In addition to the ongoing smuggling of weapons across the Gulf of Aden, in recent years also the trafficking in the Red Sea appears to have increased. While the Yemeni Coast Guard operating from Mocha had previously seized small fishing boats carrying cargoes of a few pistols or a few hundred rounds of ammunition, it seems that increasingly larger cargoes of weapons are shipped from Houthi-controlled areas of the West Coast towards Sudan. In September 2022, the Sudanese government announced that the country’s navy had seized a dhow coming from Yemen with a cargo of 90 assault rifles, several hundred boxes of SALW ammunition, as well as detonating cords and fuses. A second seizure of arms destined for Sudan occurred in December 2023 when the Yemeni Coast Guard intercepted two skiffs carrying weapons and ammunition. Given the situation in Sudan since April 2023, it seems likely that the smuggling of arms from Yemen to Sudan may continue in the near future.

44 Interviews with subject matter experts between October and December 2023.
46 Ibid.
The Houthis have been subject to a comprehensive arms embargo imposed by the Security Council since April 2015, which covers all manner of weapons and components, as well as the provision of military training. All Member States of the United Nations have the obligation to enforce this sanctions regime and the Council has also called on different occasions on donors to support the measures increasing regional cooperation as well as capacity-building efforts in the area of anti-trafficking measures. However, despite this strong legal basis, a number of practical obstacles contribute to the challenges of enforcing the embargo. This section will provide a detailed overview over those issues, wherever possible, differentiating between the international, regional, and national level.

### Coordination challenges

Most attempts at smuggling are detected by international maritime forces outside of the territorial waters of Member States, while some shipments were also seized by Yemeni security forces, in particular by the Yemen Coast Guard, as well as by the customs service at the border with Oman. On the international side, the actors include various international maritime forces, including the US Navy and the UK Royal Navy, as well as two international naval forces, the European Union Naval Force - Operation ATALANTA (EUNAVFOR ATALANTA) and the Combined Maritime Forces (CMF), all of which have their own command structures and mandates, which differ significantly when it comes to the suppression of smuggling efforts. While most of the forces are also members of CMF, which would make their headquarters in Bahrain an obvious choice for coordinating efforts, CMF representatives have stated repeatedly that the CMF nations which have seized weapons in recent years (USA, UK, and France) have done so in their national capacity, while other nations focus on anti-piracy operations. The same is true for EUNAVFOR ATALANTA, whose area of operation was extended to include the Red Sea in late 2022. National restrictions do not allow most EUNAVFOR warships to seize weapons, so their role is limited to the collection of information. Another existing mechanism for information sharing consists of an informal, monthly online call bringing together EUNAVFOR ATALANTA, CMF, UNODC and the two Panels of Experts on Yemen and Somalia. While this is a useful forum, its nature does not allow the sharing of classified information.

Within the region, the crucial actors include the Yemeni security forces, especially the Yemeni Coast Guard, as well as the security forces of immediate neighbors, in particular Saudi Arabia, Oman, Somalia and Djibouti. All of these nations have an important role to play as they are either, in the case of Saudi Arabia, an important player supporting the anti-Houthi forces in Yemen, or because, weapons and related items are smuggled across their territory to the Houthis (see trafficking patterns for arms, ammunition, and related items above). However, effective coordination between the partners requires strengthening for a number of reasons: (a) there is no institutionalized cooperation mechanism between the countries of the region, requests for information usually have to be sent through diplomatic channels and are, more often than not, unsuccessful; (b) the stark differences in economic development may make cooperation on eye level (rather than patron-client relationships) difficult; and (c) different interpretation of the scope of sanctions regimes, for example, whether dual-use items or chemicals fall under it, have led to different levels of enforcement between partners. Currently, the only institutionalized mechanism for cross-border law enforcement cooperation is INTERPOL of which all states of the region are members, but according to interviews conducted for this report, there have been few, if any, successes in using this channel to arrest smugglers or share information through these channels. In addition, it seems that in some cases, for example in Yemen, the INTERPOL National Central Bureau, intended to be the liaison between the organization and the member state's law enforcement authorities, may have limited contact to the security forces, which significantly limits its effectiveness.

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50 Interview with CMF representatives in November 2023.
51 Interview with EUNAVFOR representative in October 2023.
52 Interview with representatives of EUNAVFOR ATALANTA, CMF and Panel of Experts on Somalia in October and November 2023.
53 Interviews conducted with different representatives of security forces in Aden in October 2023.
54 Representatives of Yemeni security services have frequently expressed their frustration to author, that they are, at best, involved in auxiliary roles in anti-proliferation operations led by the Coalition or by the US Navy.
55 Interviews conducted with stakeholders in Riyadh in October 2022 and in Aden in October 2022.
56 Interviews conducted with stakeholders in Riyadh in October 2022.
57 Interviews conducted with stakeholders in Aden in October 2023 and in Addis Ababa in November 2023.
International Maritime Forces active in the Arabian Sea

The most active international maritime force in this area is the US Navy, which maintains a headquarter (U.S. Naval Forces Central Command, NAVCENT) in Bahrain, commanding a significant naval force, the US Fifth Fleet, which includes a number of warships, including aircraft carriers, as well as both crewed and uncrewed reconnaissance aircraft. The forces' area of responsibility includes the Persian Gulf, the Red Sea, the Arabian Sea, as well as parts of the Indian Ocean. However, while the US Navy was responsible for more seizures of weapons than all other actors combined, the Fifth Fleet has a large geographic area to cover, as well as multiple other roles, which means that the numbers of assets available for anti-trafficking efforts is limited. Following the start of Houthi attacks on Israel and later on civilian ships in the Red Sea, the number of US warships north of the Bab-al-Mandab increased, but their focus so far has been on kinetic action against Houthi missiles and UAVs, as well as on Houthi sites inside of Yemen, rather than on anti-smuggling efforts. The US Navy has been taking a robust approach to anti-smuggling operations, frequently sinking Yemeni smuggling dhows, and handing their crew members over to the Yemeni authorities. On the operational level, the US Navy, as well as the Yemeni Coast Guard, are part of the Combined Maritime Forces (CMF), a multinational coalition of naval forces, which maintain a headquarter in the same facility as NAVCENT in Bahrain, which allows for some degree of information sharing, but which is far away from an integrated command structure.

The second international maritime force with a track record of arms interdictions in the region is the UK Royal Navy, which on three occasions in 2022 and 2023 intercepted fast boats moving with weapons and related components from the Islamic Republic of Iran towards the coast of Oman (see trafficking across the land border with Oman). Dubbed “Operation Kipion”, the UK navy has a focus on maintaining the freedom of navigation in the Persian Gulf and usually consists of a Type 23 frigate, three minehunters and various support elements, including helicopters, with a headquarter in Bahrain. The Royal Navy cooperates closely with the US Navy in their anti-smuggling operations, indicating a high-level of intelligence sharing and operational coordination, while also being a member of CMF. Information sharing with other partners in the region may be more limited. Geographically, until October 2023, the UK's naval focus was on the Strait of Hormuz and the Northern Gulf of Oman, which is reflected also in the location of the interdicts. However, as a member of “Operation Prosperity Guardian”, the UK has committed to maintaining a naval presence also in the Red Sea and has been actively supporting aerial attacks on Houthi positions in Yemen, raising the possibility of a stronger role in anti-smuggling operations in those waters in the future.

The third significant naval actor in the area of anti-trafficking has been the Coalition, in particular the Royal Saudi Navy, which was responsible for two seizures of dhows in 2020 (see section on maritime Trafficking in the Arabian Sea to Yemen), including one close to the coast of Somalia, which indicates a relatively large area of responsibility, as well as a degree of information sharing with other international stakeholders. In addition, Saudi Arabia, as well as other Coalition countries such as Egypt, maintains warships in the Southern Red Sea, which traditionally focused on protecting vital Saudi shipping against Houthi

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1 U.S. Naval Forces Central Command website https://www.cusnc.navy.mil
2 Interview with subject matter experts in November 2023.
3 Interview with representatives of CMF in November 2023.
4 UK Royal Navy website https://www.royalnavy.mod.uk/news and latest activity/operations/red sea and gulf/operation kipio
5 Interview with subject matter experts in November 2023.
attacks and on controlling the approaches to the Houthi-controlled ports of Hodeidah and Salef. The Coalition’s naval presence combined with the UNVIM inspection regime, which covers all shipping with the exception of purely humanitarian cargoes and dhows under 100 tons, has historically been an effective deterrence for larger-scale smuggling of weapons in the Red Sea, forcing the smugglers to use the longer and more expensive overland route through the desert from the coast of Mahra and Hadramawt. It seems that following the ceasefire between the Coalition and the Houthis in April 2022, which also included an agreement to ease restrictions on shipping to Hodeidah and Salef, the Coalition has significantly reduced its naval presence in the waters around Yemen. While the requirement for ships to be inspected by UNVIM in Djibouti remains in place, there are unconfirmed indications that this requirement is ignored by some ships (see maritime Trafficking in the Red Sea to Yemen). At the time of writing, it is unclear whether some of the other international maritime forces active in the area are willing and capable of enforcing the inspection regime in the future, which would be of crucial importance for stopping the smuggling of weapons and related items directly to the Houthis.

In addition to the naval forces mentioned above, the European Union has maintained a naval force in the Northwestern Indian Ocean since 2008. Dubbed “Operation Atalanta”, the mission is mostly concerned with deterring piracy off the coast of Somalia, however in recent years, its area of responsibility was expanded to include the Red Sea. In addition to warships from France, Italy and Spain, the mission also has limited capabilities for aerial reconnaissance using military aircraft based in Djibouti. EUNAVFOR ATALANTA collects information on arms smuggling in the Arabian Sea, but national caveats imposed on their forces mean that most warships are not authorized to engage smuggling vessels, which limits its ability to deter the proliferation of arms and related items. Similar caveats are also in place for most of the Member States contributing warships to the CMF in Bahrain. Bringing together 41 countries, the main focus of CMF has been the suppression of piracy, as well as the fight against the smuggling of narcotics. While CMF nations, such as France and Australia, have also interdicted dhows carrying arms and ammunition, they have done so in their national capacity, rather than under the CMF “flag”.

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6 Interviews with different subject matter experts in October and November 2023.
7 EU Naval Force Operation ATALANTA website, https://eunavfor.eu
8 Interview with subject matter expert in October 2023.
9 Combined Maritime Forces website https://combinedmaritimeforces.com
10 Interview with subject matter experts in November 2023.
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Another, more recent initiative aims to establish a regional maritime domain awareness center, which would bring together Yemen, Somalia, Djibouti and Ethiopia, and which potentially could also coordinate anti-proliferation efforts. The initiative, which is supported by UNODC, held a first high-level meeting in Addis Ababa in November 2023, but is still in its infancy.

On the national level, within Yemen, coordination challenges remain between the different agencies involved in anti-proliferation efforts, including the Yemeni Coast Guard, Customs, National Security, the Police, and the Yemen Armed Forces. While there have been successful cases of inter-agency cooperation in this area, for example during the investigation of the smuggling of the anti-tank guided missiles at Shahn in March 2022 (see section on trafficking across the land border with Oman), those were conducted in the form of ad hoc committees reporting to the Ministry of the Interior and the local governor. Interviews conducted for the report with representatives of different security services have shown that information sharing and coordination between the different stakeholders, as well as the overall coordination on an inter-ministerial level requires strengthening. While these challenges are by no means unique to Yemen, the issue is further complicated by the political fragmentation. Following the successful Houthi takeover of political power at the central level in 2014/2015 and the subsequent defection of large parts of the armed forces to their side, the Coalition attempted to re-build security institutions in areas outside of Houthi control through the formation of alliances with local leaders. Weapons, training and in particular financial support by Saudi Arabia and the UAE in their respective zones of influence, significantly contributed to the successes of the fledgling militias on the battlefield between 2015 and 2018. However, it also left a legacy of weak central control. Even though the creation of the Presidential Leadership Council in April 2022 brought most of the anti-Houthi factions together, weaknesses related to effective internal coordination and cooperation between different stakeholders remain.

58 Interview with senior UNODC staff in Addis Ababa in November 2023.
59 Interviews with stakeholders in Aden in October 2023.
60 Interviews with representatives of the security services in Mahra governorate in March 2022. Following his visit, the author was repeatedly contacted by members of the local security forces with information about suspected smuggling activities, asking him to pass them on to international maritime forces, illustrating the need for the establishment of more formal communication channels.
61 Interviews with various international experts on Yemen between 2018 and 2023.
Technical challenges for Yemeni security actors

In addition to the lack of coordination and information-sharing, both horizontally, for example between different agencies, and vertically, for example between headquarters and units positioned further away from the temporary capital Aden, a key challenge for the effective enforcement of arms related sanctions is the lack of suitable equipment. This is partially the result of the eight years of civil war, which has led to the loss of critical infrastructure and assets, and partially the result of the lack of investment by the cash-strapped internationally recognized government. The Yemen Coast Guard is tasked with patrolling more than 2,000 kilometres of coastline, and prior to 2015, the force had 75 patrol boats, many of them donated by the United States of America, operating from 13 operational bases in the Red Sea and the Gulf of Aden. While most of those boats were only able to operate in coastal waters, two larger vessels, the Sana’a and the Aden, were able to deploy on the high seas, significantly expanding the range of operation. The YCG also had access to coastal radar systems and communication equipment, allowing them to perform their role effectively. The war had a devastating effect on the force, fighting in Aden, YCG’s headquarter, destroyed many facilities, including the radar and communication infrastructure, severely limiting marine domain awareness. The patrol boat Sana’a sank in March 2017 with the loss of two crew members after hitting a sea mine, while its sister ship Aden has been suffering from engine problems, likely as the result of poor maintenance, and has largely been port-bound. At the time of writing, at the end of 2023, YCG had seven main operational bases (four on the Red Sea, two in the Gulf of Aden district and only one in the Arabian Sea district) with a total of 56 operational short-range patrol boats. Most of the vessels (40 out of 56) are operating in the Red Sea, which might explain why Houthi smuggling efforts were mostly focused on the Arabian Sea.

This is also illustrative of the imbalanced nature of international support – material support provided by donors may not necessarily target the areas which are the focus of Houthi smuggling operations. Critical areas, such as Shabwa governorate and the island of Socotra, both of which are smuggling hotspots, are not currently covered by any operational YCG patrol boats due to a lack of available resources and international support. Beyond the support of the Coalition, which has largely come to an end with the withdrawal of most Coalition forces between 2019 and 2022, material support to YCG has only been provided by UNDP and UNODC, and has also mostly focused on the headquarter level, the Gulf of Aden district and to a more limited extent the Red Sea, reflecting the limitations of available funding, as well as the lack of a permanent UN footprint in Mahra governorate. However, the current efforts are not sufficient for YCG to return to pre-conflict levels of readiness.

The limited scope of this assessment did not allow for an in-depth analysis of the capabilities of the other security forces which have a role in anti-proliferation efforts, not least because in the absence of support from the UN or other international actors, access to key decision makers is more limited. For example, further field research would be required to assess the facilities at Aden port used to inspect incoming containers and the capabilities of the police forces. However, two positive examples of where technical capabilities are available at a higher-than-expected level, should also be mentioned. During a visit to the Shahn border crossing in March 2022, the author, during his tenure with the Panel of Experts, was able to observe the clearance procedure for trucks bringing commercial cargoes from Oman. Here, the customs services are using a vehicle x-ray system to scan incoming trucks and their cargo, which allowed them to detect the anti-tank guided missiles hidden inside of fake generators (see section on trafficking across the land border with Oman). This example shows that given the right kind of equipment and training, Yemeni security forces can play an important role in

62 Interview with representatives of different security services in Aden in October 2023.
63 Information received from YCG in September 2023.
64 Interviews with representatives of YCG and other stakeholders in Aden in October 2023.
foiling smuggling attempts. The other example is the establishment of a national forensic laboratory which is jointly operated by the Ministry of Justice, the Ministry of the Interior and the Office of the Prosecutor General. The laboratory was opened in July 2023 in Aden and has the necessary advanced equipment to test chemicals, match fingerprints and perform ballistic analysis.\(^65\) Between June and September 2023, it already received more than 300 requests for analysis, mostly for seized narcotics, but in principle, the staff would also be capable of testing explosives, for example, from improvised explosive devices used by the Houthis and other groups, a capability which previously had not existed in Yemen since the start of the conflict.\(^66\)

**Capacity-building challenges for Yemeni security actors**

As in the case of the material challenges described in the previous section, the conflict also has taken its toll on the human capacity of the Yemeni security forces to address the challenge of the smuggling of weapons.\(^67\) On the one hand, a significant number of senior members of the pre-2015 Yemeni security forces changed over to the side of the Houthis during the days of the “revolution”, while others have left the country, have retired,\(^68\) or even have lost their lives during the fighting. This has made the rebuilding of the Yemeni security forces an urgent need, but so far, this has not been a priority for international partners. It seems that, at least initially, the coordination between the Coalition and their Yemeni allies needed to be strengthened, even though the internationally recognized government itself is a member of the Coalition and maintains a presence at its headquarters in Riyadh.\(^69\)

There has been little emphasis on the transfer of specialized skills. To illustrate this point, while members of Yemeni security forces have no problem identifying arms and ammunition, this is not the case for the smuggling of dual use items, required for the construction of more sophisticated weapon systems (see section on trafficking across the land border with Oman). Consequently, these items have been smuggled for years concealed as commercial cargo overland through nominally government-controlled territory. Another example would be smuggling of chemicals disguised as urea fertilizer (see section on maritime trafficking in the Red Sea to Yemen), which often is also transferred across government territory. While the establishment of the forensic laboratory in Aden means that there are national capacities to conduct chemical analysis, it seems unlikely that most of frontline officers at a checkpoint or in a port would have the necessary skills to know what to look for, while their level of awareness and ability to coordinate with the laboratory is unknown.\(^70\) The most glaring, and in theory, easiest to address, capacity gap, is the awareness about Houthi smuggling patterns. Even though there is a wealth of information on this subject available in the public domain, interviews conducted for this study show that Yemeni investigators usually have only a limited awareness of the modus operandi of Houthi smuggling networks, knowledge that would be essential for their work.\(^71\)

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\(^{65}\) Interviews with employees of the laboratory as well as with representatives of the Ministry of Justice, the Ministry of Interior, and the Office of the Prosecutor General in Aden in October 2023.

\(^{66}\) Interviews with IED experts from different international organizations in Aden in October 2023.

\(^{67}\) Interviews with representatives of different Yemeni security services in Aden in October 2023.

\(^{68}\) The loss of expertise due to retirement is an ongoing concern in Yemen, for example, the newly established national forensic laboratory is staffed by specialists who were trained abroad during the time of the independent South Yemen and who are close to, or even beyond, retirement age. Training younger people to eventually replace them is a pressing concern.

\(^{69}\) Numerous interviews with members of the Yemeni security forces between 2018 and 2023.

\(^{70}\) Interviews with representatives of the security forces in Aden in October 2023.

\(^{71}\) Interviews with representatives of the security forces in Aden in October 2023.
to trainings held in third countries, which significantly increases the cost due to the logistical challenges. Others, such as the majority of the non-governmental organizations present in Yemen, avoid capacity building in the area of law enforcement altogether.

Legal obstacles for the prosecution of smugglers

Another issue which would need to be addressed in order to allow for more effective anti-proliferation efforts are legal obstacles for the prosecution of individuals suspected of having been involved in smuggling operations in Yemeni courts of law. This is of importance as international maritime forces have been concerned under which jurisdiction the crew of smuggling vessels should be tried. This is driven by the experience of attempting to bring Somali pirates caught by international warships in the 2000s in the Indian Ocean to justice. In that case, suspected pirates sometimes successfully applied for asylum after arriving on the territory of the prosecuting state, for example in the Netherlands in 2009, in Germany in 2012 and in Denmark in 2023, and remained there after serving their sentences. Combined with the difficulty of providing sufficient evidence of illegal acts on sea, most Western nations active in the Arabian Sea (for example, Australia, France and the United Kingdom) have therefore adopted a catch-and-release policy for cases of maritime smuggling, which in essence means the vessels and crews are released, and only the cargo is destroyed or detained. However, this “pragmatic approach” has considerable downsides, as there is little deterrence in those cases, and because information collection from the crew members is difficult on a warship. In addition, the cargo can be replaced without causing any significant disruption to the network. As mentioned before, the US Navy has adopted a more hardline course vis-à-vis Yemeni arms smugglers in recent years, handing over crew members to the Yemeni Coast Guard (see section on maritime trafficking in the Arabian Sea to Yemen). While there has been likely at least a short-term impact on the smuggling of arms to the Houthis, US officials have stated repeatedly that in order to continue this policy, the suspects need to be prosecuted by the Yemeni authorities in accordance with international legal norms. Successful prosecutions would also increase the probability that other nations might also adopt the approach of the US and hand over arrested smugglers to the Yemeni authorities.

This could be due to the fact that international actors don’t necessarily collaborate closely with Yemeni counterparts in their investigations, and that at least some of the publicly available information exists only in English or is hidden in lengthy official documents. This lack of capacity is one factor responsible for the difficulties in successfully prosecuting arms smugglers in Yemeni courts, as the specialized prosecutors do not have the expertise to try cases of this nature (see section on legal obstacles for the prosecution of smugglers).

Since 2020, the number of international partners involved in the provision of capacity-building in Yemen has increased, but still remains relatively small compared with the number of organizations engaged, for example, in humanitarian action. Efforts are led by the UN, and in the field of law enforcement by UNODC, which has a strong relationship with the Yemen Coast Guard in Aden, where it has been conducting trainings on different aspects of maritime law enforcement. More recently, the organization has also started working with customs and the Aden port authority. Other, more specialized organizations, such as Conflict Armament Research, have carried out training for example on the identification of IED components. Beyond the UN and some non-governmental organizations, the number of international partners willing and able to conduct training inside of Yemen remains relatively small. Some parties, such as the US Navy or EUNAVFOR ATALANTA, who have publicly expressed an interest in collaborating more closely with Yemeni forces, are constrained by the security situation, which does not allow for the deployment of their respective staff to Yemen. As a result, usually training activities are limited to inviting officers from Yemeni security forces.

72 Interview with a representative of Conflict Armament Research in October 2023.
73 Interview with representatives of the US State Department and from EUNAVFOR ATALANTA in October 2023.
Interviews conducted for this report with the Prosecutor General, as well as with the Ministry of Justice and the Ministry of Interior in Aden in October 2023 have shown that there are a number of legal and procedural obstacles for a prosecution in Yemen. One key aspect here appears to be access to evidence, in particular to the seized weapons, as well as to the electronic items, such as GPS receivers, mobile and satellite phones, which were recovered by US forces from the smuggling dhows. These items have not been handed over to the Yemeni authorities, and, at least at the time of writing, Yemeni officials have also not been able to inspect them in third countries. It is not entirely clear why the seized weapons are not handed over, initially this may have been due to concerns that the arms might end up in the wrong hands. Another aspect, which might be an issue for a successful prosecution is that the Yemeni authorities do not have access to the crews of the warships which conducted the seizures, nor do they have videocassettes or any other material evidence which puts the suspects on the same dhow as the weapons. According to interviews conducted with officials of the prosecution service, unless the suspects confess to participating in smuggling, on this basis it is almost impossible to prove beyond reasonable doubt that they are guilty.

Coordination issues between Yemen and external partners regarding these cases, as well as the lack of investigators with training on naval and arms-related crimes in Yemen, also add to the difficulty of this process. In addition, many of the detained crew members have been transferred to the Houthi side as part of periodic prisoners’ exchanges, effectively protecting them from prosecution.

Organizational challenges

One aspect, which is often overlooked in the analysis of why anti-proliferation efforts involving Yemeni security forces, are challenging, has to do with the incentive structure for government employees. As mentioned previously, the internationally recognized government has been cash-strapped ever since the start of the conflict, and periodically had to be propped-up by loans, in particular from Saudi Arabia, in order to avoid bankruptcy. Consequently, the payment of government salaries, already often not very high, has been highly irregular. This exposes government employees to a higher risk of corruption and impacts morale. For example, the monthly salary of an enlisted man in the Yemeni Coast Guard in 2023 ranged from 60,000 to 90,000 Yemeni Riyal (45 to 85 US$), while officers of the same forces ranged between 90,000 and 140,000 Yemeni Riyal (85 to 100 USD). The payment was usually between two and four months late, so that the government is constantly in arrears. While it was not possibly to analyze this in detail for this report, it is very likely that other security forces, for example the police or the customs service, have similar salaries.

In order to motivate their staff, YCG in addition sometimes pays additional cash incentives for their participation in “missions”, but those never exceed two US$ per day. Similar incentives have also been reported from other security forces, including those directly involved in battle with the Houthis, and at least in the past those were often paid by the Coalition, but it is not clear whether this is still the case in light of their withdrawal from Yemen. The source of the funds for the payment of the incentives in the case of the YCG is not clear, however, interviews conducted by the Panel of Experts with YCG representatives in Hadramawt in October 2020 revealed that they were paid from extrabudgetary sources, i.e., from fees and fines levied, for example from fishermen, in order to make up the funding shortfall.

The low salaries, as well as their irregular payment, and the reliance on other funding sources for the incentives, obviously has an impact on morale within the security forces. Senior officers and political leaders have stated that they are afraid that this might weaken their forces. When it comes to anti-proliferation efforts, however, there is also the very real challenge of corruption. Frontline officers, for example, in the customs services, or soldiers at one of the many checkpoints along the country’s roads, can be incentivized to look the other way when a shipment of arms or ammunition needs to be cleared. It is impossible to assess how prevalent corruption at this level is. In the context of the irregular payment of low salaries, the relatively low number of seizures on the land borders and along the main roads leading from Oman to Houthi-controlled areas could be linked to the risk of corruption. This might possibly explain why although there are indications of smuggling through the land border, at Shahn border crossing point, despite all commercial trucks undergoing both a vehicle x-ray scan and a manual inspection, comparatively few illicit cargoes are seized, illustrating limitations which cannot be fixed through training or improved equipment.

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78 In at least one recent case, a single assault rifle, which had been deactivated by the US forces, was handed over to the Yemeni authorities along with a dhow crew. However, according to interviews with the Office of the Prosecutor General in Aden in October 2023, this does not satisfy the Yemeni requirements.

79 Interview with the Office of the Prosecutor General in Aden in October 2023.

80 Interviews with the Office of the Prosecutor General in Aden in October 2023.

81 It seems that the information exchange has been exclusively on the working level, i.e., between the commander of the warship and the Yemeni Coast Guard, neither of which understand the evidentiary requirements of the Yemeni justice system.

82 Interviews with the Office of the Prosecutor General as representatives of the YCG in Aden in October 2023.

83 Interview with subject matter expert in Aden in October 2023.

84 Interview with subject matter expert in Aden in October 2023.

85 Interviews with subject matter experts between October and December 2023.

86 Interviews with security officials conducted in Aden in October 2023.
In terms of the obstacles to a more efficient Member State enforcement of the sanctions against the Houthis, the lack of coordination between the multitude of actors involved in patrolling the Arabian Sea, combined with the relative weakness of state structures in both Yemen and Somalia, are important factors. In addition, at the regional level the consistent and coordinated enforcement of the sanctions regime is required for effective cross-border investigations. The outlook for the smuggling of weapons appears to be extremely murky at the time of writing. When this report was commissioned in summer 2023, Yemen had enjoyed a period of relative calm which started with the truce a year earlier. There had been no new arms seizures and concerns were increasingly shifting from arms supplies to the Houthis towards the risk of proliferation from Yemen towards the volatile Horn of Africa region. However, as the research progressed, the situation changed drastically following the Houthis’ purported attacks on Israel and commercial and military vessels in the Red Sea, ultimately leading to the commencement of Operation Prosperity Guardian, the maritime operation led by the United States of America and United Kingdom providing protection for civilian commercial shipping transiting the Red Sea. In January 2024, the UN Security Council passed a resolution demanding an immediate cessation of Houthi attacks on merchant and commercial vessels. This was followed by the military response led by the United States of America under Operation Poseidon Archer against targets in Houthi-controlled areas of Yemen the same month. The EU also subsequently launched a naval defensive operation in February – the EU Naval Force Operation Aspides. As the Houthis have to some degree expended their arsenal of advanced missiles and UAVs in those attacks, this will also likely lead to an increase of smuggling in order to rebuild stocks of these weapons. It remains to be seen whether the increased focus on Yemen will lead to more seizures, and whether international forces involved in the interdiction of smuggling will once again take a more active role in the patrolling of the approaches to the Houthi-controlled ports in the Red Sea.
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Recommendations

The following section consists of recommendations on how to improve the effectiveness of anti-proliferation efforts in the Red Sea and in the Arabian Sea, as well as on the territory of Yemen.

**Consider increasing cooperation and information-sharing**

As previously discussed, the multitude of national and international actors involved in different capacities and with different mandates, presents challenges for cooperation and information-sharing. One way to overcome this would be to create a clearing house for sanctions-related information, which could independently track developments and maintain a database of suspicious vessels. Having a permanently staffed clearing house, would also allow to overcome some of the challenges emanating from the frequent changes in personnel at the headquarters of the various actors.

**Consider increasing the monitoring of Houthi-controlled ports**

The Red Sea ports of Hodeida and Salef remain the only direct access for the Houthis to the sea for the transhipment of major cargo or imported goods. As discussed above, there are some indications that, following the truce in 2022, the patrolling of the approaches to the ports by naval forces for the purposes of monitoring potential smuggling operations has decreased, allowing vessels to berth without first having been inspected by UNVIM in Djibouti. In order to maintain an effective deterrence for smugglers, naval forces need to maintain a presence in those waters and monitor traffic.

**Consider increasing support to the security forces in Yemen**

Security forces of the internationally recognized government, in particular the Yemen Coast Guard, but also the customs service, land border guards, the police and prosecutors’ office, play an important role in enforcing the sanctions regime against the Houthis. However, despite several resolutions of the Security Council asking Member States to support them, in practice only the United States of America and the European Union have provided a modest level of capacity-building and material support through UNODC and UNDP in the past. More support for this sector, for example through a dedicated multi-donor fund, could play an important role in strengthening the capacity of the security forces to address the challenge of arms smuggling, and also potentially increase the bargaining position of international partners with regard to encouraging the internationally recognized government to implement reforms, for example with regard to the payment of salaries (see recommendation below). In addition to training, there is also a need for coastal detection systems and for coastal patrol vessels with a range of more than 200 nautical miles.

**Consider taking measures to allow for the prosecution of smugglers**

The successful prosecution of smugglers caught by international naval forces remains one of the priorities of the international community. In order to allow for the Yemeni justice system to prosecute them in accordance with international law, international forces should take measures to facilitate this process. For example, the crew of the warship which intercepts a smuggling vessel should document the process, for instance on video, and share this with the Yemeni authorities when handing over the smugglers, in accordance with relevant human rights standards. Members of the crew of the warship, such as the captain or the head of the boarding party, should also be made available as witnesses, for example, by giving a video testimony. When the seized items cannot be handed over to the Yemeni authorities, representatives of the office of the prosecutor’s office could be allowed to inspect them in a third country and receive a briefing on the circumstances of the seizure. In addition, there is a clear need to provide specialized training to the staff of the prosecutor’s office to allow them to try cases of arms smuggling.

**Consider strengthening cooperation in the area of anti-proliferation**

Yemen’s neighbors, both on the Arabian Peninsula, and across the sea in the Horn of Africa, play an important role in anti-proliferation efforts. However, as shown in previous sections of this report, in practical terms cooperation and information sharing is extremely limited. This could be addressed through the creation of a regional mechanism, for example, in the context of the envisioned regional maritime domain awareness center, which would have direct links to the relevant agencies of the participating states. Another aspect, which could help with forming a cohesive approach would be to conduct joint capacity-building activities involving actors from different regional states, for example under the umbrella of UNODC. However, in order to be successful, such an approach would also require a shared understanding of what constitutes arms smuggling, for example, when it comes to whether dual use items such as engines and electronics are included, as well as the necessary political will and resources to take effective measures to combat smuggling.

87 The most recent example is resolution 2722 (2024) adopted by the Security Council on 10 January 2024.
Consider creating a national focal point to coordinate measures

Coordination and information-sharing is not only a challenge among states and international organizations, but also among agencies of the internationally recognized government of Yemen. One step to address this would be for the government to establish a coordination mechanism for the activities of the different agencies and for coordination with international partners. It should be noted that, given the financial situation of the government, international partners would likely have to assist its creation materially, i.e., through the provision of equipment, as well as with capacity building. This could be done through UN agencies, which are already active in this sector in Yemen.

Consider taking steps towards Security Sector Reform

The reform of the security services in Yemen, including the regular payment of salaries, would be an important step in addressing challenges related to morale and corruption. A thorough analysis of this issue is beyond the scope of this report and for the government, the reform of the security forces in the middle of an ongoing conflict is likely difficult to implement. It appears that, in addition to the general shortage of funds in the government coffers, the uncontrolled growth of the forces since the start of the conflict is also a factor. In some cases, it seems that the payroll deliberately inflated by the salaries of “ghost soldiers”. So, addressing the issue of payroll verification, for example through the introduction of electronic payment systems, could over time not only help in addressing corruption, but also allow the government to pay salaries more regularly. However, this process would also likely require international technical support. Such an effort could be lead for example by the countries of the Gulf Cooperation Council.
Theoretical Framework and Methodology

This report aims to identify the challenges hampering a more effective response to the trafficking of weapons, ammunition and related items in the Arabian Sea and in the Red Sea as well as to assess the needs of the different partners involved. The report first looks at the context, the networks affiliated with the Houthi forces, the smuggling across the land border with Oman, and the smuggling of weapons from Yemen to the countries of the Horn of Africa, and then analyses the national and regional capabilities and the different issues which should be addressed to enable a more effective response, including coordination between the various partners.

For this purpose, this study has analyzed the available data from numerous international organizations, in particular the Panels of Experts on Yemen and Somalia, as well as other open sources. A complete list of references can be found below.

The report was produced in the framework of the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, their Parts and Components and Ammunition (Firearms Protocol), which aims at promoting and strengthening international cooperation and developing cohesive mechanisms to prevent, combat and eradicate the illicit manufacturing of and trafficking in firearms, their parts and components and ammunition (firearms).

Given that criminal networks operating in the Arabian Sea and in the Red Sea engage in the trafficking of various weapons, including small arms and light weapons and anti-tank guided missiles, the scope of the report includes weapons not covered by the Firearms Protocol to provide a comprehensive analysis of the challenges faced by national authorities and international partners.

**Key informant interviews**

In addition to the literature review and the data analysis discussed in the previous section, the second key instrument to verify existing and collecting additional data is through a series of key informant interviews which were conducted either in person – primarily during the field research in Yemen – or remotely using tools such as Microsoft Teams or Zoom. The interviews took place in September – December 2023. The participants for the key informant interviews were selected because of their current or past institutional affiliation, or because they have published data regarding the trafficking of weapons. Table 2 provides an overview over the interview participants.

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**TABLE 2**

<table>
<thead>
<tr>
<th>Institution</th>
<th>In-person</th>
<th>Remote</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN sources</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>International Government and Military Experts, including EUNAVFOR, CMF and 5th U.S. Fleet</td>
<td>0</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>International Non-Governmental Experts, including Conflict Armament Research and Project Masam**</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Government of Yemen – Ministries of Foreign Affairs, Defence, Interior and Justice in Aden</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Prosecutor General and Forensic Department in Aden</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Yemen Coast Guard, Customs and Aden Port Authority</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>19</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based predominantly on the reporting of the Panels of Experts on Yemen and Somalia

**Project Masam** is the largest humanitarian demining organization in the Government-held areas of Yemen. They are also analyzing the flow of components for improvised explosive devices (IEDs) to Yemen which are included in the scope of this study.
It should be noted that in particular the in-person interviews with Yemeni government stakeholders in practice included additional participants but given the constraints of access to Yemeni institutions, it is very difficult to interview more junior Yemeni stakeholders independently from their superiors. In practice, the interviews with Yemeni institutions therefore often were “mini-group interviews”. Wherever possible, efforts were made to ensure that information is attributed to the correct person in the records. While the researcher made attempts to include a diverse set of stakeholders, given the focus on Yemeni security institutions, there were few female interview partners, as they are almost completely absent from leadership positions in Yemen. Another significant limitation for meetings with key stakeholders is that interviews with stakeholders based in Houthi-held territories – which include the capital of Sana’a and the important ports of Hodeidah and Salef – were not possible due to security and freedom of movement restrictions. The researcher however interviewed UN staff based in Houthi-held territories both in person in Aden and remotely.

**Primary data collection instrument (semi-structured interviews)**

Given the absence of other data sources, the research relies primarily on data collected through semi-structured interviews with key stakeholders both in Yemen and abroad. Guiding questions were developed in preparation for the field research phase and were adapted for the specific interviews, e.g., meetings with higher-level stakeholders (government minister) had a different set of questions compared with those with representatives from agencies etc. The interview partners were informed that their participation in the study and in the interview is voluntarily and that the information obtained will only be used anonymously. The researcher adheres strictly to the rules of confidentiality and anonymity. The data obtained from the interviews was summarized in writing after the end of the field research phase, given the sensitive nature of the research as well as the local conditions, it was not possible to audio/video record the interviews.

**Geographic focus of the field research**

The field research focused on the temporary capital of Aden which is where most Government of Yemen counterparts are located and also the location where a number of relevant UN agencies have based the “Southern” part of its operations. Remote interviews were also conducted with key informants based outside of Aden.

**Data analysis**

The semi-structured interviews were recorded in writing and the transcript were analyzed by the researcher in line with established academic best practices. The obtained data was then triangulated with data from other sources, e.g., from the literature review.
References


