

ARMS BUILD-UP, ARMS CONTROL AND THE RIGHT TO DEVELOPMENT

Yemen and the Houthi Arms Supply Network as a Case Study

Submission to: the United Nations Expert Mechanism on the Right to Development (EMRTD)

Study: Peace and Security and the Right to Development

Focus: Question 4 – risks arising from breakdowns of peace and security, arms build-ups and lack of effective arms control

Case study: Yemen (2015-present)

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Executive Summary

This submission addresses Question 4 through a focused study of Yemen. It examines the growth of Houthi military capability, the implementation of the Security Council's targeted arms embargo, and the consequences that prolonged insecurity creates for development. The scope is deliberately limited. Yemen's war has involved violations and allegations concerning several parties, and nothing in this paper is intended to allocate responsibility for the conflict as a whole. The narrower question is whether a Chapter VII arms embargo has kept pace with a non-State armed group that now fields missiles, UAVs and anti-ship systems while drawing on external components, technical assistance and local assembly.¹

The legal starting point is the 1986 Declaration on the Right to Development. Article 7 links international peace and security, disarmament and the use of resources for development. Article 8 identifies access to basic resources, education, health services, food and housing as elements of the national measures required for the realisation of the right. The 2024 Pact for the Future and the current draft Convention on the Right to Development repeat the connection between peace, disarmament and development. These instruments provide the normative framework. They do not, by themselves, prohibit a particular conventional-arms transfer. In Yemen, the operative control examined here is the Security Council regime established under resolutions 2140 and 2216, later expanded by resolution 2624 to list the Houthis as an entity subject to the targeted arms embargo.²

¹ UNSC Res. 2216, S/RES/2216 (14 Apr. 2015), paras. 14-17; UNSC Res. 2624, S/RES/2624 (28 Feb. 2022); UN Security Council, 2140 Committee narrative summary for 'THE HOUTHIS' (YEe.001).

² UNGA Res. 41/128, Declaration on the Right to Development (4 Dec. 1986), preamble and arts. 1, 2, 7-8; UNGA Res. 79/1, Pact for the Future (22 Sept. 2024), Action 26, para. 47; HRC Working Group on the Right to Development, A/HRC/WG.2/24/2 (2023), art. 22; UNSC Res. 2140, S/RES/2140 (26 Feb. 2014); UNSC Res. 2216, S/RES/2216 (14 Apr. 2015), paras. 14-17, 20; UNSC Res. 2624, S/RES/2624 (28 Feb. 2022); 2140 Committee, narrative summary for 'THE HOUTHIS' (YEe.001).

The public evidence now allows the supply system to be described in much greater detail. The 2024 Panel of Experts reported information concerning three maritime transfers in 2022, the first of which was said to contain 9,000 assault rifles. It also examined January 2024 interdictions containing cruise- and ballistic-missile components, propulsion and guidance equipment, explosives, Iranian Dehlavieh anti-tank guided-missile launch posts, uncrewed underwater-vehicle components and machine tools. The 2025 Panel described carbon fibre, UAV control equipment and GPS devices at land crossings, concealed drone kits and surveillance equipment in commercial containers, and a June 2025 seizure of more than 750 tons of ammunition and military hardware that Yemeni authorities said was intended for the Houthis. A May 2026 field study by Conflict Armament Research adds component-level evidence from the 2024-25 Red Sea seizures. It documents more than 800 missile and UAV components and helps distinguish Iranian-origin weapon architecture from the much wider international commercial supply chain feeding individual subcomponents.³

That evidence points to a supply chain rather than a single transfer route. Finished weapons remain part of the picture, but so do disassembled systems, commercial electronics, machine tools, propulsion and guidance equipment, technical assistance, training and local assembly. Fabian Hinz's technical assessment reaches a similar conclusion: local production appears more plausible for simpler UAVs and some short-range systems than for sophisticated medium-range missiles, whose critical subsystems remain externally dependent. Earlier scholarship also cautioned against treating the Houthis simply as an Iranian proxy. That remains an important political distinction even though the material relationship documented in later UN reporting is much deeper than the evidence available a decade ago.⁴

The enforcement record has not kept pace with this change in procurement. The 2025 Panel found weaknesses in information-sharing, follow-up investigation and reporting after inspections. Conflict Armament Research's tracing work points to a related problem outside the formal sanctions process. Since beginning field operations in Yemen in 2016, it has issued more than 220 trace or information requests, including 157 concerning the 2024-25 Red Sea seizures, to entities in 23 countries and territories. By May 2026 it had received 73 responses, a 33 per cent response rate. Those figures do not measure State compliance with resolution 2216, but they show how incomplete cooperation can prevent component tracing from developing into a full supply-chain investigation.⁵

The development consequences require more careful treatment than in many accounts of the conflict. UNDP's modelling estimated that the war as a whole had reversed human development by 21 years by 2019. That figure should not be attributed specifically to Houthi armament or to failures of arms control. A more defensible approach is to identify narrower mechanisms where military capability and development outcomes can be connected. The clearest example is the attack on government-controlled oil export infrastructure in late 2022. The UN Special

³ UN Panel of Experts on Yemen, S/2024/731 (2024), paras. 78-83; S/2025/650 (2025), paras. 90-107; Conflict Armament Research (CAR), *Powering the Houthis* (May 2026), pp. 4-6, 9-15.

⁴ Fabian Hinz, 'Made in Yemen?', IISS (10 Apr. 2025); Thomas Juneau, *International Affairs* 92, no. 3 (2016): 647-663; S/2024/731, paras. 64-74.

⁵ S/2025/650, paras. 168-180; CAR, *Powering the Houthis* (May 2026), p. 5 (220+ trace/information requests; 157 concerning 2024-25 seizures; 73 responses, or 33%).

Envoy described the attacks as aimed at depriving the Government of its main source of oil-export revenue. IMF data show hydrocarbon exports falling from about USD 1.14 billion in 2022 to USD 37 million in 2023 and zero in 2024. The resulting fiscal squeeze was followed by large reductions in public expenditure, including an 80 per cent cut in capital investment relative to budget in the first half of 2025. This provides an unusually direct link between a military capability, loss of public revenue and reduced development capacity.⁶

A second pathway is regional. Houthi missile, UAV and anti-ship capability has been used against commercial shipping in the Red Sea and Gulf of Aden. IMO recorded 69 incidents confirmed by flag States between 19 November 2023 and 25 November 2024. After periods of reduced activity, attacks resumed in 2025 and again in 2026. On 12 August 2026 the IMO Secretary-General condemned a projectile attack on the cargo ship TIHAMAH off Al Mokha that caused seafarer fatalities. UNCTAD, meanwhile, reports that Suez Canal tonnage remained around 70 per cent below average 2023 levels during 2025 as carriers continued to route around the Cape of Good Hope. The result is a development effect that extends beyond Yemen through longer voyages, higher transport costs and greater supply-chain uncertainty.⁷

The principal conclusion is that effective arms control in a conflict such as Yemen must operate at the level of supply chains rather than only complete weapons. Monitoring needs to include dual-use components, machine tools, propulsion and guidance systems, commercial shipping documentation, financial intermediaries and technical assistance. Enforcement also has to be designed so that commercial and humanitarian imports are not unnecessarily impeded. The Security Council regime already contains humanitarian exemptions, and the objective should be better targeting rather than a broader restriction on civilian trade. A development-sensitive approach to arms control would therefore combine targeted interdiction and information-sharing with systematic assessment of the fiscal, infrastructure and service-delivery consequences of continued insecurity.⁸

I. Introduction and method

Question 4 asks how breakdowns of peace and security, arms build-ups and the absence of effective arms control place the right to development at risk. Yemen provides a useful case because the relevant legal and empirical record is unusually dense. A Security Council sanctions regime has been in place since 2014. A targeted arms embargo followed in 2015. The Houthi movement itself was listed as an entity subject to that embargo in 2022. At the same time, successive Panels of

⁶ UNDP/Pardee Center, *Assessing the Impact of War on Development in Yemen* (Apr. 2019); UN Security Council, SC/15114 (22 Nov. 2022), briefing of Special Envoy Hans Grundberg; IMF, *Republic of Yemen: 2025 Article IV Consultation*, Country Report No. 26/80 (3 Apr. 2026), paras. 4, 6, 10-11 and Table 1.

⁷ IMO, *Red Sea Incidents*, updated 25 Nov. 2024, paras. 2-5; IMO, 'Statement on deadly ship attack in the Red Sea' (12 Aug. 2026); UNCTAD, *Review of Maritime Transport 2025*, overview and ch. III.

⁸ UNSC Res. 2511, S/RES/2511 (25 Feb. 2020), para. 3; 2140 Committee, *Arms Embargo Exemptions*.

Experts have documented weapons, components, procurement networks and enforcement problems in considerable detail.⁹

This submission concentrates on the Houthi side of the arms-control question. The choice is methodological rather than exculpatory. The conflict's causes pre-date the coalition intervention of March 2015, and serious allegations and findings exist in relation to the conduct of multiple parties. The broader record is noted where it is necessary to explain the conflict or a development effect. The Arms Trade Treaty is discussed briefly for context, but for the question examined here the targeted Security Council embargo provides a clearer legal test and a stronger body of primary evidence.

The source method is intentionally conservative. Security Council resolutions and sanctions materials establish the legal framework. The Panel of Experts provides the principal factual record on transfers, procurement networks and implementation, but its reports use different evidentiary categories, including direct inspection, technical comparison, information from Member States and confidential-source reporting. Conflict Armament Research is used where its field documentation can independently illuminate components and supply chains. Peer-reviewed and specialist work is used for interpretation, not as a substitute for primary evidence. Development effects are drawn from UNDP, the IMF, the World Bank, UNICEF, IPC, IMO and UNCTAD.¹⁰

The evidence therefore has to be read at the level at which it was collected. Markings or design features associated with an Iranian system can support a finding about technological lineage without proving the official chain of custody for every component. A container loaded in China does not establish Chinese Government involvement in its contents. The same caution applies to European, American or Asian company markings found on commercial components. Conflict Armament Research expressly notes that a company or country name on an item does not by itself imply illegality or knowledge by the manufacturer. Where the Panel relies on confidential sources, the paper says that the information was reported to the Panel rather than presenting it as a directly inspected fact.¹¹

The same caution applies to causation. UNDP's counterfactual modelling estimates the development cost of the conflict as a whole. It does not isolate the proportion of that cost caused by arms transfers, the embargo's implementation, Houthi conduct, coalition conduct or any other individual factor. The analysis below therefore does not attempt to calculate an 'arms-control share' of Yemen's development loss. Instead, it identifies mechanisms for which the causal sequence can be documented more closely: sustained military capability, attacks on revenue-

⁹ UNSC Res. 2140, S/RES/2140 (26 Feb. 2014); UNSC Res. 2216, S/RES/2216 (14 Apr. 2015), paras. 14-17, 20; UNSC Res. 2624, S/RES/2624 (28 Feb. 2022); 2140 Committee, narrative summary for 'THE HOUTHIS' (YEe.001); UN Panel of Experts on Yemen, S/2024/731 (11 Oct. 2024); UN Panel of Experts on Yemen, S/2025/650 (15 Oct. 2025).

¹⁰ See principally S/2024/731; S/2025/650; CAR, *Powering the Houthis* (May 2026); IMF Country Report No. 26/80 (2026); World Bank, *Yemen Economic Monitor* (Spring 2026); UNICEF, *HAC 2026*; IPC (May 2026); IMO Red Sea reporting; UNCTAD, *Review of Maritime Transport 2025*.

¹¹ CAR, *Powering the Houthis* (May 2026), p. 3 (methodology) and pp. 14-15 (component provenance and tracing caveats); S/2025/650, paras. 90-107.

generating infrastructure, disruption of public finance, and the extension of insecurity into maritime trade.¹²

The conflict context is familiar but important. Following the political transition after 2011, Houthi forces took Sana'a in September 2014 and expanded southward. A Saudi-led coalition intervened in March 2015 in support of the internationally recognised Government. The United Nations-brokered truce of April 2022 sharply reduced large-scale front-line fighting even after the formal truce expired in October of that year. The subsequent period has not been a return to normality. Yemen remains territorially and economically divided, while Houthi attacks on oil infrastructure and later on Red Sea shipping have opened new fronts of economic pressure and regional insecurity.¹³

II. Normative and legal framework

A. The right to development, peace and disarmament

The Declaration on the Right to Development makes the connection between development and peace explicit. Its preamble treats international peace and security as essential to the right's realisation and recognises a close relationship between disarmament and development; Article 7 asks States to work towards general and complete disarmament under effective international control and to direct the resources that disarmament releases towards development, particularly in developing countries. Legal scholarship generally treats this as a structural element of the Declaration rather than a free-standing rule governing individual arms transfers.¹⁴ Articles 1, 2 and 8 supply the specific stakes: the right belongs to "every human person and all peoples," the human person is its central subject and beneficiary, and Article 8 names the systems – basic resources, education, health services, food, housing, employment – most exposed to exactly the fiscal compression, infrastructure damage, displacement and administrative fragmentation that a prolonged conflict produces.¹⁵

The Pact for the Future retains the connection in a contemporary security setting. Action 26 addresses compliance with disarmament and arms-control commitments and supports efforts to eradicate illicit arms trafficking, and Article 22 of the draft Convention on the Right to Development is more explicit still, linking peace and security to disarmament under strict and effective international control so that resources can be used for the right's full realisation.¹⁶

¹² UNDP/Pardee Center, *Assessing the Impact of War on Development in Yemen* (Apr. 2019).

¹³ UN Security Council, SC/15114 (22 Nov. 2022), briefing of Special Envoy Hans Grundberg; World Bank, *Yemen Economic Monitor: Pushing Against the Tide*, Report No. 210533 (May 2026); IMO, *Communication from the Secretary-General to Member States: Red Sea Incidents*, updated 25 Nov. 2024, paras. 2-5.

¹⁴ UNGA Res. 41/128 (1986), preamble and art. 7; Karin Arts and Atabongawung Tamo, *Netherlands International Law Review* 63 (2016): 221-249.

¹⁵ UNGA Res. 41/128, Declaration on the Right to Development (4 Dec. 1986), preamble and arts. 1, 2, 7-8.

¹⁶ UNGA Res. 79/1 (2024), Action 26; A/HRC/WG.2/24/2 (2023), art. 22; Azadeh Chalabi, *Journal of Human Rights* 25, no. 2 (2026): 253-271.

None of these instruments should be made to carry more legal weight than they possess. The Declaration explains why insecurity and armament matter to development; it does not itself prohibit a particular conventional-weapons transfer, and the draft Convention is not yet binding treaty law. The specific transfer prohibition this submission examines in the Yemen case comes from the Security Council's Chapter VII measures, not from the Declaration. Keeping the normative and operative layers separate is what makes the rest of the analysis testable against evidence rather than resting on aspiration.

B. The targeted Security Council regime in Yemen

Resolution 2140, adopted in February 2014, established the Yemen sanctions committee and an initial Panel of Experts. It imposed an asset freeze and travel ban on persons designated as threatening Yemen's peace, security or stability. Resolution 2216, adopted in April 2015, added the targeted arms embargo and expanded the Panel from four to five experts. It did not create the Panel, as some summaries of the regime have suggested.¹⁷

Paragraph 14 of resolution 2216 requires Member States to prevent the direct or indirect supply, sale or transfer of arms and related materiel to designated individuals and entities, persons acting on their behalf or at their direction, and entities owned or controlled by them. The prohibition also covers technical assistance, training, financial or other assistance related to military activities. This breadth is important in a conflict where the supply problem now includes knowledge, components and production capacity as well as finished weapons.¹⁸

The personal scope of the embargo also evolved. In February 2022, resolution 2624 designated the Houthis as an entity subject to the targeted arms embargo. The 2140 Committee's narrative summary records that listing explicitly. The legal position after 2022 is therefore more straightforward than it was at the beginning of the conflict: the group itself is the listed entity, not only a set of named leaders.¹⁹

The regime contains safeguards. Resolution 2511 permits the Committee, on a case-by-case basis, to exempt activity from the sanctions measures when necessary to facilitate United Nations or humanitarian work, or for another purpose consistent with the resolutions. This matters because Yemen is heavily dependent on imported food, fuel and medicine. Effective arms control cannot be equated with indiscriminate restriction of commercial access.²⁰

Resolution 2801 renewed the sanctions measures in November 2025 and extended the Panel's mandate through December 2026. It also requested additional reporting on the flow of dual-use components and precursor chemicals. That

¹⁷ UNSC Res. 2140, S/RES/2140 (26 Feb. 2014); UNSC Res. 2216, S/RES/2216 (14 Apr. 2015), paras. 14-17, 20.

¹⁸ UNSC Res. 2216, S/RES/2216 (14 Apr. 2015), paras. 14-17, 20.

¹⁹ UNSC Res. 2624, S/RES/2624 (28 Feb. 2022); 2140 Committee, narrative summary for 'THE HOUTHIS' (YEE.001).

²⁰ UNSC Res. 2511, S/RES/2511 (25 Feb. 2020), para. 3; 2140 Committee, Arms Embargo Exemptions.

request reflects a practical change in the problem. An embargo designed around arms and related materiel now has to operate against supply chains in which civilian-looking components can be incorporated into missiles, UAVs and other military systems.²¹

C. The Arms Trade Treaty as background, not the centre of the case

The Arms Trade Treaty remains part of the wider international framework governing conventional arms transfers by States Parties. Its prohibitions and export-risk assessment obligations are relevant to Yemen's broader internationalisation. They are not the principal focus of this submission. Houthi procurement is largely illicit and transnational, and the clearest applicable control is the targeted Security Council embargo. A lengthy analysis of national export-licensing litigation would therefore shift attention away from the regulatory problem that the present case can test most directly.

This narrower approach also reduces a recurrent analytical problem in writing on Yemen. The existence of controversies concerning coalition procurement does not answer whether the targeted embargo on Houthi forces has been effective, just as evidence of embargo violations does not resolve questions about lawful state-to-state transfers. Both issues can matter, but they involve different legal instruments, evidence and enforcement mechanisms.

III. How arms build-up can affect the right to development

The relationship between arms control and development is rarely linear. A weapons shipment does not translate mechanically into a particular poverty rate or health outcome. The more useful approach is to identify the channels through which military capability changes the conditions for development.

The first channel is persistence and reach. External supply, technical assistance and local production can enable an armed actor to maintain operations for longer, strike at greater distance and threaten infrastructure that would otherwise sit outside the immediate front line. In Yemen, the evolution from small arms and legacy missiles to longer-range ballistic and cruise missiles, one-way attack UAVs and anti-ship systems widened the geographic scope of insecurity.²²

A second channel is fiscal. Development depends on functioning public revenue and expenditure systems, and military action against export infrastructure or major trade routes can reduce foreign-exchange earnings, customs receipts and tax revenue. The resulting adjustment is often visible in lower capital spending, delayed salaries, reduced maintenance, and weaker health, education or electricity

²¹ UNSC Res. 2801, S/RES/2801 (14 Nov. 2025), especially paras. 7, 15-16, 23-24.

²² UN Panel of Experts on Yemen, S/2024/731 (11 Oct. 2024); Fabian Hinz, 'Made in Yemen? Assessing the Houthis' arms-production capacity', IISS (10 Apr. 2025).

provision. The oil-export case examined below provides unusually concrete evidence of this mechanism.²³

Trade and infrastructure form a third channel. Yemen imports a large share of its basic consumption needs, while the Bab al-Mandab and Red Sea form part of a global shipping corridor, so threats to ports, merchant vessels and maritime access can affect both domestic availability and international transport costs. The impact is magnified in poorer, import-dependent economies, where freight and insurance costs occupy a larger share of final prices.²⁴

A fourth channel runs through institutional capacity. Arms-control regimes depend on customs agencies, port and flag-State authorities, investigators, financial regulators and timely information exchange; if an enforcement system identifies a shipment but does not report it, trace its origin or initiate follow-up action, the formal legal prohibition may have little deterrent effect. The 2025 Panel's assessment of resolution 2216 illustrates this problem directly.²⁵

The last channel is distributional, and it cuts across the other four. National averages can obscure who absorbs the cost of insecurity. Children outside school, households that depend on public salaries, displaced people, households in food-insecure districts and communities without functioning health facilities have less capacity to absorb a new price shock or a reduction in public provision. This is why the right-to-development framework adds value: it directs attention not only to aggregate output but to participation, access and distribution.²⁶

IV. Yemen: Houthi armament, embargo implementation and development effects

A. Why the Houthi arms supply network is a useful case

The Houthi movement's military development is analytically useful because it combines three features that are often studied separately. It is a non-State armed actor controlling substantial territory. It is subject to a targeted Security Council arms embargo. It has also developed military capabilities that include ballistic and cruise missiles, UAVs, anti-ship systems and increasingly complex local assembly or production.²⁷

²³ UN Security Council, SC/15114 (22 Nov. 2022), briefing of Special Envoy Hans Grundberg; IMF, Republic of Yemen: 2025 Article IV Consultation, Country Report No. 26/80 (3 Apr. 2026), paras. 4, 6, 10-11 and Table 1.

²⁴ IMO, Communication from the Secretary-General to Member States: Red Sea Incidents, updated 25 Nov. 2024, paras. 2-5; UNCTAD, Review of Maritime Transport 2025, overview and ch. III.

²⁵ UN Panel of Experts on Yemen, S/2025/650 (15 Oct. 2025).

²⁶ UNGA Res. 41/128, Declaration on the Right to Development (4 Dec. 1986), preamble and arts. 1, 2, 7-8; UNICEF, Humanitarian Action for Children 2026: Yemen (Mar. 2026), p. 1; IPC, Yemen (Government-Controlled Areas): Acute Food Insecurity Analysis, March-December 2026 (21 May 2026).

²⁷ UNSC Res. 2624, S/RES/2624 (28 Feb. 2022); 2140 Committee, narrative summary for 'THE HOUTHIS' (YEe.001); S/2024/731; Hinz, 'Made in Yemen?' (IISS, 2025).

The relationship between the Houthis and Iran should be described with care. Earlier peer-reviewed scholarship argued strongly against treating the Houthis as a simple Iranian proxy. In 2016, Thomas Juneau assessed Iranian influence as limited and emphasised the movement's local roots and political autonomy. That article remains useful because material support and political control are different questions. Later evidence does, however, show a far more extensive material relationship than was visible in the first years of the war. The 2024 Panel described external assistance, weapons, training, financing and technical knowledge as central to the growth of Houthi capabilities.²⁸

The most defensible formulation is therefore neither 'fully indigenous' nor 'direct proxy'. Houthi decision-making has its own domestic political logic, while important parts of the group's advanced military capability have depended on external technology, components, assistance and supply networks. The degree of dependence varies by weapons category.

B. The evolution of the arms supply system

1. From complete weapons to a distributed supply chain

The 2024 Panel report is particularly useful because it goes beyond broad claims about weapons origin. Drawing on military experts, Yemeni officials and persons described as close to the Houthis, the Panel assessed that the group could not independently develop and manufacture a range of complex systems without foreign support. It listed medium-range ballistic missiles, land-attack and anti-ship cruise missiles, surface-to-air systems, advanced UAVs, uncrewed underwater vehicles, anti-tank guided missiles and specialised electro-optical equipment. The report separately described external assistance and training as part of the growth of Houthi military capacity.²⁹

The Panel also identified technical similarities between Houthi-operated materiel and systems produced or operated by Iran and other armed groups in the region. It treated those similarities as evidence relevant to design and know-how transfer, while continuing to investigate intercepted components by make, model, markings, serial numbers and quality-control labels. That distinction is worth preserving. Technical lineage can be established more confidently than the chain of custody for every individual component.³⁰

Fabian Hinz reaches a compatible but more differentiated technical assessment. Local production appears most developed for simpler UAVs and some close-range ballistic systems. Even there, guidance, propulsion and specialised components often remain externally sourced. More complex medium-range ballistic and cruise missiles are much less plausible candidates for complete local manufacture and appear to depend heavily on Iranian-origin systems or technology. In practical

²⁸ Thomas Juneau, 'Iran's policy towards the Houthis in Yemen', *International Affairs* 92, no. 3 (2016): 647-663; UN Panel of Experts on Yemen, S/2024/731 (11 Oct. 2024).

²⁹ S/2024/731, paras. 64-65 and 73-74.

³⁰ S/2024/731, paras. 64-65 and associated technical annexes.

terms, local assembly does not remove external dependence; it changes the points in the supply chain at which control becomes possible.³¹

CAR's May 2026 field study makes the external dependence measurable at component level. Its investigators documented more than 800 missile and UAV components from the June 2025 Al Sherwa seizure. The components bore company markings associated with at least 16 countries and territories; only about 5 per cent could be linked to Iranian production. For the subset whose visible markings allowed a production year to be identified, 94 per cent dated from 2020 onward and 38 per cent from 2023 or 2024. CAR therefore assessed the supply chain as recent, active and persistent rather than a legacy stockpile. The manufacturer-country data must be read carefully: many components are commercial, some may be counterfeit, and a company marking does not establish knowledge of diversion.³²

2. Documented and reported maritime transfers

The public record includes several interdictions and reported shipments that show how that system works in practice. Table 1 uses the Panel's paragraph-level findings, later criminal proceedings where relevant, and CAR's field documentation of the June 2025 seizure. It distinguishes material physically inspected from information supplied to investigators by governments or confidential sources.³³

Date	Documented or reported material	Evidentiary basis	Analytical significance
Jul-Sep 2022	Three maritime transfers. The first reportedly contained 9,000 assault rifles; later transfers included assault rifles and light and heavy machine guns.	UN Panel of Experts, S/2024/731, para. 78 (confidential-source reporting).	Evidence of organised bulk supply rather than isolated trafficking.
11 Jan 2024	Anti-ship cruise-missile propulsion, guidance and warhead components; five liquid-propellant engines; four turbo-pump	UN Panel of Experts, S/2024/731, paras. 81-82; U.S. DOJ, Pahlawan case (5 June 2025).	Shows supply of high-value sub-systems and components, not only finished weapons.

³¹ Hinz, 'Made in Yemen?' (IISS, 10 Apr. 2025).

³² CAR, Powering the Houthis (May 2026), pp. 14-15.

³³ S/2024/731, paras. 78-83; S/2025/650, paras. 92-107; U.S. DOJ, Pahlawan conviction release (5 June 2025); CAR, Powering the Houthis (May 2026).

Date	Documented or reported material	Evidentiary basis	Analytical significance
28 Jan 2024	assemblies; short-range ballistic-missile components; thermal cameras. 200 bags of explosives; 17 Iranian Dehlavieh ATGM launch posts; uncrewed underwater-vehicle components; electro-optical components; machine tools.	UN Panel of Experts, S/2024/731, para. 83.	Machine tools point to local manufacture and assembly as part of the supply model.
May 2025	Drones, drone components, complete drone kits, remote-control units, antennas, GPS modules, propellers and surveillance equipment concealed in commercial containers.	UN Panel of Experts, S/2025/650, para. 106 (UNVIM inspection).	Illustrates the dual-use and commercial-container problem. Origin of shipment is not proof of State involvement.
Jun 2025	More than 750 tons of ammunition and military hardware reportedly intended for the Houthis, including missile systems, UAVs, rifles and MANPADS with characteristics similar to Iranian systems.	UN Panel of Experts, S/2025/650, para. 107; CAR, New Seizure (Sept. 2025) and Powering the Houthis (May 2026).	Demonstrates scale, but attribution should retain the Panel's verification limits.

Table 1. Selected Houthi-related supply and interdiction cases. Source descriptions retain the evidentiary qualifications used by the Panel of Experts.

The January 2024 case is particularly valuable because two distinct evidentiary processes later converged. The Panel inspected and compared components from the 11 January seizure. In June 2025, a United States federal jury convicted the dhow's captain, Muhammad Pahlawan, after trial evidence concerning the same voyage. According to the Department of Justice account of the evidence, the dhow carried ballistic-missile and anti-ship cruise-missile components and a warhead. The prosecution also presented evidence of repeated voyages, coordinates for night-time ship-to-ship transfers and payments linked to two Iranian brothers affiliated with the Islamic Revolutionary Guard Corps. A national criminal proceeding is not a substitute for UN fact-finding, but it provides independent corroboration for part of the maritime network.³⁴

The 2022 transfers reported to the Panel show a different aspect of the system. Confidential sources described three significant maritime shipments from Iranian ports between July and September. The first reportedly contained 9,000 assault rifles, while subsequent transfers included light and heavy machine guns. The reported use of smaller boats for offshore transfer near the Yemen-Oman border is consistent with a logistics model designed to separate ocean transport from final delivery. Because the information came from confidential sources rather than a Panel inspection, the wording should remain 'reported to the Panel', not 'proved by the Panel'.³⁵

3. Land routes, commercial cargo and dual-use components

The 2025 Panel describes a procurement network that had diversified across land and sea routes. It reported the Shahn and Sarfayt crossings between Oman and Yemen as routes used for military-use goods concealed in normal cargo or vehicles. Items identified in reported seizures included UAV control devices, servo motors, GPS equipment and communications devices. A September 2024 seizure in Al-Mahrah included carbon fibre, a material that can be used in the structures of UAVs and cruise missiles.³⁶

The same report records the response of Omani authorities. Oman categorically rejected any suggestion of permissive border enforcement and described CCTV, fencing, patrols, physical inspection, risk-based checks and X-ray inspection at the border. That response should appear in any fair account of the route. Evidence that traffickers have attempted to use a border does not establish official tolerance by the transit State.³⁷

Commercial maritime cargo creates a different attribution problem. In May 2025 UNVIM found concealed military materiel in containers that had originated in China, including drone kits, remote-control equipment, antennas, GPS modules, propellers and surveillance equipment. The Panel reported the shipment route and contents; it did not establish Chinese State involvement. CAR's later component study makes the broader point even clearer: Houthi and Iranian-origin systems

³⁴ U.S. Department of Justice, Pahlawan conviction release (5 June 2025), United States v. Muhammad Pahlawan, E.D. Va., No. 3:24-cr-41.

³⁵ UN Panel of Experts on Yemen, S/2024/731 (11 Oct. 2024), para. 78.

³⁶ UN Panel of Experts on Yemen, S/2025/650 (15 Oct. 2025), para. 92.

³⁷ S/2025/650, para. 93.

incorporate commercially produced parts bearing company markings from many countries. The regulatory problem is diversion and end use, not nationality alone.³⁸

Dual-use control is difficult precisely because many relevant goods are ordinary commercial products. Carbon fibre, antennas, navigation modules, processors, servo motors and machine tools can all have legitimate applications. The significance of a shipment depends on combinations of specification, quantity, routing, declared end-user, documentation and other risk indicators. CAR found that many of the components documented in Houthi missile and UAV systems correspond to tariff categories on the G7/EU Common High Priority List, a tool originally developed in a different sanctions context. The comparison is useful because it shows that component-based controls can travel across conflicts even when the end users and weapons systems differ.

The Al Sherwa material also illustrates why tracing individual components can reveal more than country-of-origin labels. CAR identified 98 components linked to the Ghadir anti-ship cruise missile, known to the Houthis as Al-Mandab 2. At least 94 were produced outside Iran, and CAR identified 67 distinct component models bearing the brands of at least 20 manufacturers in nine countries. The finding suggests a layered chain: globally sourced commercial technology can enter Iranian-origin weapons and then appear in shipments intended for Houthi use.³⁹

4. Training, technical assistance and local assembly

Resolution 2216 covers technical assistance and training for a reason. The 2024 Panel reported that Houthi combatants had received tactical or technical training outside Yemen. Sources informed the Panel of training in Iran, Lebanon and Iraq. The report gives specific figures for two alleged Iranian training episodes, including 200 combatants in early 2020 and 54 in late 2022, and refers to training at Hizbullah grounds in southern Lebanon and by Iraqi Popular Mobilization Forces. These details come from sources reported by the Panel and should be presented with that attribution.⁴⁰

The training evidence complements the physical supply record. Complex systems require technical knowledge as well as components. CAR's 2026 study adds a useful piece of evidence on assembly: it identified recurring labels and Iranian model designations on missile modules recovered from the June 2025 Al Sherwa seizure. CAR interprets many of those labels as serialised instructions associated with pre-assembly shipments and likely intended to support assembly in Yemen. The finding fits a hybrid production model in which local technical capacity is real but still depends on externally supplied systems and critical subcomponents.⁴¹

This has a direct regulatory implication. A shipment-focused embargo can interdict a missile body and still miss the transfer of design knowledge, production tooling, guidance components or specialised technicians that allow similar capability to

³⁸ S/2025/650, para. 106; CAR, *Powering the Houthis* (May 2026), pp. 14-15.

³⁹ CAR, *Powering the Houthis* (May 2026), pp. 14-15.

⁴⁰ UN Panel of Experts on Yemen, S/2024/731 (11 Oct. 2024), paras. 73-74.

⁴¹ S/2024/731, paras. 73-74; CAR, *Powering the Houthis* (May 2026), pp. 11-12, 18-19; Hinz, 'Made in Yemen?' (IISS, 2025).

reappear later. Effective control therefore has to follow capability inputs rather than only complete platforms.

5. Financing and procurement resilience

The physical supply network sits within a wider war economy. The 2025 Panel identifies taxes on individuals and businesses, customs collections, levies on fuel and cigarettes, and surplus profits from parts of the financial sector among the principal revenue sources available to the Houthi authorities. It also describes control over telecommunications and other revenue-generating sectors. These findings help explain why sanctions analysis cannot be limited to weapons cargo. Procurement networks require payments, brokers, transport and access to domestic resources.⁴²

The Panel also assessed the effect of financial sanctions as limited in practice, in part because networks can use intermediaries, front companies and informal arrangements. The public record does not provide a reliable figure for the proportion of Houthi domestic revenue spent on weapons procurement, and this submission does not attempt to create one. The narrower point is that a resilient revenue base and access to financial intermediaries can reduce the disruptive effect of targeting individual shipments.⁴³

A channel the Panel's own reporting has not covered in comparable technical detail has since been independently documented: cryptocurrency. In April 2025 the United States Treasury's Office of Foreign Assets Control designated a network of Houthi financial facilitators and procurement operatives coordinated by Sa'id al-Jamal, a Houthi financial official Treasury describes as backed by Iran's Islamic Revolutionary Guard Corps-Qods Force, and identified eight cryptocurrency wallet addresses used by the network.⁴⁴ Blockchain-forensics firms that traced the designated addresses independently of one another and of the Treasury action – TRM Labs, Chainalysis and Elliptic each published separate analyses – found that the wallets had moved more than USD 900 million to other high-risk and sanctioned counterparties. TRM Labs specifically identified addresses associated with sellers of unmanned aerial vehicles and anti-UAV equipment linked to Russia and China, and with the separately sanctioned Russian exchange Garantex.⁴⁵ The same Treasury action named a Russia-based logistics network that used a Russian-flagged vessel to carry stolen Ukrainian grain to Houthi-controlled Yemen alongside weapons shipments, illustrating a financing model that blends ordinary-looking commodity trade, sanctions-evading shipping and digital-asset settlement within a single operation.⁴⁶ A separate action in December 2024 had already

⁴² UN Panel of Experts on Yemen, S/2025/650 (15 Oct. 2025), paras. 109-110, 115-118.

⁴³ S/2025/650, executive summary and paras. 109-112.

⁴⁴ United States Department of the Treasury, Office of Foreign Assets Control, 'Treasury Sanctions Houthi Network Procuring Weapons and Commodities from Russia', press release, 2 April 2025.

⁴⁵ TRM Labs, 'US Treasury Sanctions Houthi Financial Networks Including Eight Crypto Addresses', 3 April 2025; Chainalysis, 'OFAC Sanctions Houthi Network for Facilitating Weapons Procurement from Russia via Crypto' (2025); Elliptic, 'OFAC Sanctions Eight Ansarallah (the Houthis) Crypto Addresses' (2025). The three firms' figures are broadly consistent (approximately USD 900 million to just under USD 1 billion in traced outflows); this submission uses the more conservative figure.

⁴⁶ US Department of the Treasury, 'Treasury Sanctions Houthi Network Procuring Weapons and Commodities from Russia', 2 April 2025 (naming Hushang and Sohrab Ghairat and the vessel AM

designated the head of a Houthi-aligned Central Bank of Yemen branch and identified five further wallets tied to the same financial network.⁴⁷

This matters for how "lack of effective arms control" should be read in Question 4. The Panel's own finding that financial sanctions have had limited effect because networks can use intermediaries and front companies understates a specific and separately documented mechanism: on-chain settlement in stablecoins, which routes value through blockchain infrastructure the sanctions committee's own public reporting has not, on the record reviewed for this submission, analysed in comparable technical depth. That gap has not gone unnoticed elsewhere in the US government. In February 2026 a US Senate inquiry was opened into a major cryptocurrency exchange following press reporting that the exchange's own compliance staff had identified transfers to wallets linked to Iran's Revolutionary Guard and had been warned that a partner exchange was financing the Houthis, well before any public sanctions action addressed that specific channel.⁴⁸ Whatever its outcome, the episode illustrates something the rest of this submission has already suggested from the supply side. The evidentiary base for understanding how the embargo is actually being defeated now extends well beyond what an annual Panel of Experts report can be expected to capture in real time. On this particular channel, private-sector forensic and journalistic capacity is currently running ahead of the multilateral monitoring architecture, not merely supplementing it after the fact.

6. Geolocation evidence and the reliability of real-time targeting intelligence

Independent, methodologically transparent geolocation work supplies a further layer of evidence that the Panel's annual reporting cycle cannot match for speed, though it varies considerably in reliability across the organisations producing it. The most rigorous end of this work comes from Bellingcat, working in several instances with the specialised Yemeni verification group Yemeni Archive. Their joint investigation of the 30 December 2020 rocket attack on Aden International Airport triangulated three rockets to their launch points using missile-trail geometry, cross-matched cloud positions in multiple videographers' footage, and social-media metadata analysis, tracing two rockets to a police training centre in the Houthi-held town of Dhamar and two more to the rebel-held town of Taiz.⁴⁹ Bellingcat's earlier reporting on Houthi drone claims, cross-checked against Conflict Armament Research's own component analysis, found that a drone the Houthis had described as domestically designed and manufactured – the Qasef-1 –

THESEUS, also known as ZAFAR).

⁴⁷ US Department of the Treasury, Office of Foreign Assets Control, 'Treasury Maintains Pressure on Houthi Procurement and Financing Schemes', press release, 19 December 2024.

⁴⁸ Reporting by the Wall Street Journal, New York Times and Fortune, as summarised in the Office of US Senator Richard Blumenthal's letter opening an inquiry into Binance, 24 February 2026. This submission relies on the Senator's public letter and the press summaries it cites rather than on independent review of the underlying WSJ/NYT/Fortune reporting or of Binance's internal records, and notes that the allegations described were, as of this submission, the subject of an opened congressional inquiry rather than a concluded finding.

⁴⁹ Bellingcat and Yemeni Archive, 'Rockets over Yemen: Inside the Houthis' Botched Attack on Aden Airport', 9 February 2021; Global Investigative Journalism Network, 'Global Lessons from Exposing War Abuses in Yemen' (2022), describing the Yemeni Archive verification methodology.

was very likely an Iranian Ababil-family design that had been smuggled rather than built in Yemen. It is a finding that corroborates, through an entirely independent methodology, the smuggled-component pattern this submission documents elsewhere through CAR and Panel of Experts sourcing.⁵⁰

A second, more contested source of geolocation-adjacent evidence concerns commercial satellite imagery itself. In April 2025 the US State Department publicly accused Chang Guang Satellite Technology, a nominally private Chinese firm with documented ties to the People's Liberation Army and the Chinese Academy of Sciences, of supplying the Houthis with satellite imagery used to target US and international vessels in the Red Sea. State Department spokesperson Tammy Bruce confirmed the allegation on the record and said the United States had raised the matter with the Chinese government multiple times without effect. Chang Guang, through China's state-run Global Times, denied the allegation as fabricated and said it has no business dealings with Iran or the Houthis.⁵¹ Neither account has been independently verified on the public record, and this submission does not resolve the dispute. It is included because the allegation itself, regardless of its ultimate accuracy, describes a distinct pathway – commercial remote-sensing capability rather than physical components – by which dual-use infrastructure could extend Houthi targeting reach in a way no instrument examined in Part IV.C was designed to address. A separate and more narrowly sourced claim came in August 2025, from the Yemen-focused risk advisory newsletter Basha Report. Its author, a long-serving Yemen analyst previously with the Navanti Group and regularly cited by major news organisations, described a shipment of Chinese-origin equipment seized at Aden port and characterised it as intended to support domestic drone assembly. This submission was unable to review the full underlying analysis, which sits behind a paid subscription; it is cited accordingly as a single-source claim from a credentialed regional analyst, not as an independently corroborated finding.⁵²

The reliability question this evidence raises is not academic. In April 2025, reporting by the investigative outlet Drop Site News found that an anonymous open-source-intelligence account on X had publicly posted coordinates it identified as a Houthi missile site near a quarry outside Sana'a. Weeks later, US forces struck the coordinates; local reporting indicated the site was not a military target and that the strike killed civilians, reportedly including children. The account later acknowledged it had privately assessed the identification as only "possible" before publishing it.⁵³

⁵⁰ Bellingscat, 'Houthis Use Armed Drone to Target Yemeni Army Top Brass', 10 January 2019, citing Conflict Armament Research analysis of Qasef-1/Ababil-family design lineage.

⁵¹ Remarks of US Department of State spokesperson Tammy Bruce, 17 April 2025, as reported by the Financial Times and widely republished (see e.g. Defense One, 8 May 2025; Maritime Executive, 18 April 2025); Global Times, 'Chinese Satellite Company Refutes US Accusation of Supporting Houthi Attack on US Interests as "Completely Fabricated"', 19 April 2025.

⁵² Mohammed Albasha, 'From China to Yemen: Seized Shipment Reveals Houthi Drone Factory in a Box', Basha Report, 2 August 2025 (subscription content; cited from the publicly available preview only).

⁵³ Drop Site News, reporting by Ryan Grim and Emily Jashinsky, 'CENTCOM Bombed Civilian Site in Yemen After OSINT Accounts Posted Coordinates', 30 April-1 May 2025 (referring to the account @Vleckiehond and a related post by @galal_alsalahi). This submission relies on Drop Site's reporting and the account's own public statement rather than independent verification of Pentagon targeting

Whether this specific post was in fact the basis for the strike is something this submission cannot establish – the Pentagon did not respond to Drop Site's request for comment, and the underlying reporting itself does not claim to establish a causal link. What the episode demonstrates is narrower, but still important: the same open, crowd-sourced information environment capable of producing Bellingcat's carefully triangulated findings is equally capable of producing single-source, unverified claims that carry real operational consequences once treated as actionable. For a study concerned with the lack of effective control over how force is applied in Yemen, this is a control gap in its own right. It sits not in the export licensing or embargo-enforcement systems examined in Part IV.C, but in the evidentiary standards, or their absence, governing the intelligence inputs to targeting decisions themselves. This submission draws no conclusion about how widespread the problem is. It notes only that a study of arms build-up and control failure in Yemen has grounds to treat the verification of targeting intelligence as within its remit, not outside it.

C. Why the targeted embargo has struggled

1. A legal framework that had to adapt to a changing supply model

The Yemen regime is sometimes described as an example of an embargo that simply was not enforced. The record is more complicated. Member States and UN bodies have carried out major interdictions. UNVIM has inspected commercial cargo. The Panel has repeatedly traced components and reported violations. The problem is that successful seizures have not produced a sustained reduction in Houthi capability.⁵⁴

The Panel's 2025 assessment is unusually direct. It concluded that the embargo had made 'no significant dent' in Houthi capabilities without effective implementation by Member States. The report identified weak trigger mechanisms, insufficient proactive investigation, limited cargo inspection and poor information-sharing. The cooperation data are also revealing: the Panel sent 26 communications to Member States for its sanctions-implementation assessment and received 12 written responses. The point is not that every State failed equally, but that a multijurisdictional supply chain can exploit gaps anywhere along the enforcement sequence.⁵⁵

Resolution 2801 can be read as an attempt to update that chain. By requesting dedicated reporting on dual-use components and precursor chemicals, the Council acknowledged that the supply problem had moved beyond conventional categories. The Panel submitted the requested report to the Committee on 30 June 2026. Security Council Report also records subsequent advice in July on information-sharing and flag-State capacity.⁵⁶

procedures, which Drop Site itself was unable to obtain.

⁵⁴ S/2025/650, paras. 168-180.

⁵⁵ S/2025/650, paras. 168-173, especially para. 173.

⁵⁶ UNSC Res. 2801, S/RES/2801 (14 Nov. 2025), para. 15; Security Council Report, Monthly Forecast: Yemen (Aug. 2026).

2. The reporting and follow-up gap

The most concrete implementation weakness identified by the 2025 Panel concerns reporting after inspections and seizures. Paragraph 17 of resolution 2216 requires States conducting inspections under paragraph 15 to submit prompt reports to the Committee, including details of the inspection and disposal of prohibited items. The Panel reported that no such reports had been submitted to the Committee, despite seizures made during UNVIM inspections in Djibouti.⁵⁷

The Panel also stated that it had received detailed information about only one of several shipments it was examining and had not received information about investigations following other seizures. This limited its ability to identify origins, networks and responsible actors. An interdiction can remove one consignment from circulation. Without documentary follow-up, however, it does less to disrupt the underlying procurement system.⁵⁸

For that reason, an interdiction should be treated as the beginning of an investigation rather than its end. A useful seizure record includes component photographs and serial numbers, commercial invoices, bills of lading, consignor and consignee data, beneficial ownership, payment information and the identities of freight intermediaries. CAR's tracing model and UNIDIR's work on diversion both stress the value of following components through their life cycle rather than stopping at physical recovery. The Panel's criticism of post-seizure reporting in Yemen shows what is lost when that second stage does not happen consistently.

3. Enforcement without obstructing civilian trade

A stronger embargo does not necessarily mean a broader one. Yemen's dependence on commercial imports makes indiscriminate restriction especially damaging. The sanctions regime itself recognises this through humanitarian exemptions, while UNVIM was created to facilitate commercial shipping to Red Sea ports while supporting compliance with the embargo.⁵⁹

The policy problem is therefore one of discrimination rather than closure. Controls should intensify when risk indicators cluster, for example unusual quantities of sensitive components, false declarations, opaque ownership, repeated routing through known trans-shipment points, or goods technically consistent with military production. UNIDIR's research on diversion argues for a needs-driven and context-specific assessment of both risk and available tracing technologies. At the same time, food, medicine, fuel and ordinary civilian commerce should move with the least possible friction. That balance is both a humanitarian requirement and a right-to-development concern.

4. A comparative perspective: what other UN arms embargoes suggest about the Houthi case

Placing the Yemen regime alongside the Security Council's other active arms embargoes helps explain some of what the Panel's findings describe, and adds a

⁵⁷ S/2025/650, paras. 174-177.

⁵⁸ S/2025/650, para. 178.

⁵⁹ UNSC Res. 2511, S/RES/2511 (25 Feb. 2020), para. 3; UNVIM mandate materials.

structural dimension the Panel's own mandate does not cover. Comparative research on the four UN arms embargoes the Council has managed most actively over the past decade – Somalia, the Democratic Republic of the Congo, Libya and the Central African Republic – identifies a recurring feature. Each of those regimes targets a recognised government, as well as or instead of a non-state armed group, which lets the Council use easing or lifting the embargo as an incentive for security-sector reform.⁶⁰ Yemen's regime cannot do this in the same way. Since the Houthi movement itself became the designated entity in February 2022, the embargo has applied to a non-state actor with no government status to negotiate away; the prospect of delisting does not function as a reform incentive for an entity that was never seeking the kind of international recognition that would make delisting valuable to it.⁶¹

The comparison also cuts the other way. Unlike the Taliban sanctions regime, which lists 135 individuals and five entities, the Houthi listing is narrow – twelve individuals and one entity as of early 2023, expanded only modestly since.⁶² And unlike Afghanistan, Yemen has an immediately bordering state, Saudi Arabia, with an acute and continuing interest in the embargo's success, the kind of frontline enforcement partner that comparative sanctions research treats as one of the more reliable predictors of at least partial compliance.⁶³ That the embargo has nonetheless struggled to constrain Houthi capability, even with a narrowly defined target list and a motivated neighbouring enforcer, arguably makes Yemen a harder case for an "insufficient political will" explanation than it might first appear, and a correspondingly stronger illustration of how much a purely listing-based embargo can miss regardless of who is watching.

Nor was the current design inevitable. As early as 2016, the Panel of Experts itself proposed that arms deliveries to Yemeni government security forces be made conditional on advance notification to the sanctions committee, extending to the government side a degree of the same scrutiny already applied, in principle, to the Houthis. The Security Council did not adopt the proposal.⁶⁴ Comparative research citing the Panel's own reporting from that period notes that coalition and government-aligned actors have, at various points, also contributed to the onward spread of weapons that reached the Houthis, which suggests the missed opportunity was not merely theoretical.⁶⁵ A regime built exclusively around one

⁶⁰ Judith Vorrath, UN Arms Embargoes under Scrutiny: Obstacles and Options for an Effective Contribution to Conflict Resolution, SWP Research Paper 2024/RP 12 (Berlin: Stiftung Wissenschaft und Politik, September 2024), 5-6, 18-19, 39-40.

⁶¹ Vorrath, UN Arms Embargoes under Scrutiny, 19 ("In the case of non-state actors, the lifting of an embargo cannot be used as an incentive to negotiate").

⁶² Vorrath, UN Arms Embargoes under Scrutiny, 18-19 (Taliban and Houthi listing figures as of January 2023).

⁶³ Vorrath, UN Arms Embargoes under Scrutiny, 18-19 (comparing Saudi Arabia's enforcement interest in the Houthi embargo with the absence of an equivalent neighbouring enforcer in the Taliban case).

⁶⁴ Vorrath, UN Arms Embargoes under Scrutiny, 19, citing UN Security Council Panel of Experts on Yemen reporting from 2016 on a proposed notification requirement for government-side arms deliveries, not adopted by the Security Council.

⁶⁵ Vorrath, UN Arms Embargoes under Scrutiny, 19, citing Panel of Experts on Yemen reporting on coalition and government-aligned contributions to weapons diversion. This submission's own scope is limited to the Houthi side of the arms-control question (see Part IV.A); this citation reports SWP's

side of a two-sided war was, on this account, a choice rather than a necessity – and one the Council has had at least one documented occasion to revisit, and did not take.

5. A fracturing enforcement coalition

The embargo's practical enforcement has depended, as Part IV.C.4 notes, on Saudi Arabia's frontline interest in policing Yemen's coastline and land borders. That interest cannot be assumed to translate into a stable, unified enforcement coalition. On 30 December 2025, Saudi Arabia bombed the southern port of Mukalla after two vessels arrived there from the Emirati port of Fujairah, having disabled their tracking systems, and unloaded weapons and armoured vehicles for the UAE-backed Southern Transitional Council (STC), which had spent the preceding month expanding its control across Hadramaut and neighbouring governorates. A Saudi military statement carried by the state-run Saudi Press Agency described the shipment as an imminent threat and confirmed the strike; Riyadh separately warned that it viewed the UAE's actions as "extremely dangerous" and, according to multiple reports, gave Emirati forces a twenty-four-hour ultimatum to leave the country.⁶⁶

The UAE announced a rapid and complete military withdrawal within the following days. The material consequences reach directly into the enforcement architecture a study of Houthi arms control has reason to take seriously. The UAE's position on Socotra, an island analysts have likened to an unsinkable aircraft carrier for its command of the sea lanes at the mouth of the Red Sea, ended within the same fortnight, as did its presence on Perim (Mayun) island inside the Bab al-Mandab strait itself and at Mocha port, which regional reporting describes as having functioned as a closed military facility receiving weapons shipments by sea.⁶⁷ As of the most recent reporting reviewed for this submission, accounts still differed on how completely the withdrawal had been executed and on what, if anything, would replace the monitoring and interdiction capacity the UAE had built at these positions over roughly a decade of military presence.⁶⁸

Two points follow for Question 4. One is about the episode itself. An undeclared transfer of weapons and armoured vehicles between coalition partners, not the Houthis, is what precipitated a rupture serious enough to end a decade of UAE military presence within roughly a week – which makes the episode, on its own

characterisation of that separate strand of Panel reporting rather than an independent verification by this submission of the underlying 2016 report.

⁶⁶ Associated Press (Jon Gambrell), 'Saudi Arabia Bombs Yemen Port City of Mukalla over Weapons Shipment from UAE for Separatists', 30 December 2025, as republished by PBS NewsHour; Arab News, 'Arab Coalition Announces "Limited" Airstrike Targeting Two Shipments of Smuggled Weapons to Yemen', 30-31 December 2025 (citing a Saudi Press Agency statement by Coalition Forces spokesman Maj. Gen. Turki Al-Maliki); Al Jazeera, 'Saudi-UAE Fallout and Its Impact on Yemen's Recognised Government', 31 December 2025.

⁶⁷ The Maritime Executive, 'UAE's Withdrawal From Socotra Illustrates Challenges for Peace in Yemen', 8 January 2026; 'Islands, Bases, and Ports: What the UAE Lost in Yemen in Just One Week', Noon Post, 13 January 2026.

⁶⁸ Political Geography Now, 'Yemen Supplement: Who Controls Socotra after UAE Pullout?', 18 February 2026; Arab Progress, 'The Implications of the UAE's Withdrawal from Yemen on Saudi Arabia's Burdens', 2 January 2026; Middle East Report and Information Project (MERIP), 'Yemen After the Saudi-Emirati Split', 8 July 2026.

terms, an illustration of arms build-up and the absence of effective control operating on the side of the conflict this submission has, by design, examined least. Mohammed al-Basha, whose separate reporting on a seized shipment of Houthi drone components is cited in Part IV.B.6, was quoted by the Associated Press the same day predicting that “the flow of weapons from the UAE to the STC is set to be curtailed following the port attack.”⁶⁹

The other point looks forward, and matters more for the embargo's prospects. Saudi Arabia's frontline enforcement interest, identified in Part IV.C.4 as a comparative advantage the Houthi-specific embargo enjoys over cases like Afghanistan, now operates without a coalition partner that had controlled some of the most strategically significant chokepoints for interdicting exactly the kind of maritime smuggling this submission documents in Part IV.B. Can Saudi forces sustain that role alone? Does the security vacuum reported in the south open new smuggling opportunities for the Houthis or their own suppliers? This submission cannot answer either question on the public record available at the time of writing. They are, on that record, live and open ones – and a reminder that an embargo's enforcement capacity can deteriorate for reasons that have nothing to do with the listed target.

D. Consequences for the right to development

1. The national development loss: what can and cannot be inferred

UNDP's modelling remains the best-known quantitative account of Yemen's development reversal. Its 2019 study compared conflict scenarios with a counterfactual in which the conflict did not escalate after 2014. By 2019, it estimated that Yemen's human-development trajectory had been set back by 21 years. Under a scenario in which the conflict continued at comparable intensity through 2030, the model projected economic output losses of about USD 657 billion and severe increases in poverty and malnutrition.⁷⁰

Those figures are useful for scale, but they require two qualifications. First, they are modelled counterfactual estimates, not direct observations of every loss. Second, they measure the conflict as a whole. They do not identify the portion attributable to Houthi arms procurement, coalition operations, institutional fragmentation, sanctions, humanitarian funding or other causes. The figures should therefore establish the development context rather than serve as proof of a specific arms-transfer effect.

UNDP's 2021 recovery study reinforces the same caution. It modelled seven recovery scenarios and concluded that a sustainable peace combined with an integrated recovery strategy could eventually allow Yemen to catch up with, and under some scenarios surpass, its pre-war Sustainable Development Goal trajectory by 2050. The finding is relevant because it shows that cessation of large-

⁶⁹ Associated Press (Jon Gambrell), ‘Saudi Arabia Bombs Yemen Port City of Mukalla over Weapons Shipment from UAE for Separatists’, 30 December 2025 (quoting Mohammed al-Basha, founder of the Basha Report, also cited in Part IV.B.6).

⁷⁰ UNDP/Pardee Center, *Assessing the Impact of War on Development in Yemen* (Apr. 2019).

scale fighting is necessary but not sufficient. Recovery also depends on investment, institutions, agriculture, the private sector and women's participation.⁷¹

2. Oil-export attacks, public revenue and state capacity

The strongest case for a more specific development mechanism begins in October 2022. After the UN-brokered truce expired, Houthi drones targeted the Nushayma oil terminal in Shabwa and the Al-Dabba terminal in Hadramawt. A tanker preparing to load crude at Al-Dabba departed without taking its planned cargo. In November, the UN Special Envoy told the Security Council that Ansar Allah had attacked oil terminals and ports in Hadramawt and Shabwa 'aiming to deprive the Government of its main source of revenue from exporting oil'. He warned of significant economic repercussions for Yemeni welfare.⁷²

The subsequent fiscal data make the development effect visible. IMF figures show hydrocarbon exports of approximately USD 1.17 billion in 2021 and USD 1.14 billion in 2022. They fell to about USD 37 million in 2023 and zero in 2024. The IMF describes the halt in oil exports as a major shock that pushed the economy into deep recession and sharply reduced government revenue.⁷³

The adjustment took place through public expenditure. The IMF reports that in 2023-24 the Government reduced spending, particularly energy subsidies, goods and services and public wages, as it absorbed the revenue shock. In the first half of 2025, spending was about 30 per cent below budget. Capital investment was 80 per cent below budget, goods and services 40 per cent lower and electricity subsidies 20 per cent lower.⁷⁴

This sequence is analytically important because it does not require attributing Yemen's entire economic crisis to a single actor. The narrower claim is well supported: a military capability was used against oil-export infrastructure; oil exports then collapsed; government foreign-exchange and revenue receipts fell sharply; and public investment and service-related spending were compressed. That is a direct pathway from insecurity to reduced development capacity.

The macroeconomic environment remains fragile. The World Bank's Spring 2026 Yemen Economic Monitor estimates that real GDP contracted by 1.5 per cent in 2025 and projects a further 0.5 per cent decline in 2026. It identifies blocked oil exports, weak domestic demand, limited access to finance and structural constraints as continuing pressures. These figures should be read as national economic indicators, not as a measure of the effect of one military campaign.⁷⁵

⁷¹ UNDP/Pardee Center, Pathways for Recovery (23 Nov. 2021).

⁷² Sana'a Center for Strategic Studies, 'Houthi Attack Oil Ports' and 'Oil Port Attacks Threaten Government Finances', Yemen Review (14 Nov. 2022); UN Security Council, SC/15114 (22 Nov. 2022), briefing of Special Envoy Hans Grundberg.

⁷³ IMF Country Report No. 26/80 (2026), para. 6 and Table 1: hydrocarbon exports USD 1.167bn (2021), USD 1.137bn (2022), USD 37m (2023), and zero (2024).

⁷⁴ IMF Country Report No. 26/80 (2026), paras. 4 and 10 and fiscal discussion: oil-export halt cut government revenue almost in half; first-half 2025 spending was about 30% below budget, with capital investment 80% below budget.

⁷⁵ World Bank, Yemen Economic Monitor: Pushing Against the Tide, Report No. 210533 (May 2026).

3. Household welfare and public services

The wider humanitarian context remains severe. UNICEF's formal 2026 Humanitarian Action for Children appeal estimates that 19.7 million people require humanitarian assistance and that 49 per cent of the population faces severe food insecurity. It reports that 40 per cent of health facilities are only partly functioning or out of service and estimates that 3.2 million school-age children are out of school. UNICEF's web appeal uses somewhat different education and nutrition figures, which is why the formal HAC document is used here for the headline national indicators. These are national needs estimates, not a measure of the effect of one actor or one military campaign.⁷⁶

Food-security data show the same pressure but also demonstrate why geographic scope has to be stated carefully. The May 2026 IPC analysis covers Government-controlled areas rather than the entire country. In those areas, nearly 5 million people were in IPC Phase 3 or worse between March and May 2026. The projection for June-September was approximately 5.4 million people, or 51 per cent of the analysed population, with a similar figure projected for October-December. It would be incorrect to present those numbers as a national Yemen estimate.⁷⁷

For the right to development, the significance is cumulative. A household facing food insecurity is more exposed when public salaries are delayed, electricity provision falls, transport costs rise, health facilities are only partially functional, or children lose access to school. Arms-control policy cannot solve those problems by itself. It can, however, reduce one of the mechanisms that sustains insecurity and repeatedly pushes scarce public and private resources away from recovery.

4. The Red Sea: regional diffusion of development risk

The expansion of Houthi anti-ship, missile and UAV capabilities moved part of the conflict into a major international trade corridor. Since November 2023, the movement has attacked or attempted to attack merchant vessels in the Red Sea and Gulf of Aden. The International Maritime Organization recorded 69 incidents confirmed by flag States between 19 November 2023 and 25 November 2024. Its reporting methodology required confirmation of the vessel and attack, and for Security Council reporting generally also linked the incident to a Houthi claim.⁷⁸

The maritime risk has persisted beyond the first wave of attacks. IMO confirmed renewed attacks in July 2025 and again condemned attacks in July 2026. On 12 August 2026 it reported that the cargo ship TIHAMA had been hit by a projectile off Al Mokha, with several seafarer fatalities confirmed. That incident followed a sharper escalation earlier in the month: on 20 July 2026 the Houthis announced a naval blockade of Saudi Arabia and, within days, claimed missile and drone attacks on two oil tankers, the *Encelia* and the *Layla*, one of which Saudi authorities said

⁷⁶ UNICEF, Humanitarian Action for Children 2026: Yemen (Mar. 2026), p. 1. The formal HAC PDF reports 19.7m people needing assistance, 49% severe food insecurity, 40% of health facilities partly functioning or out of service, and 3.2m school-age children out of school.

⁷⁷ IPC, Yemen (Government-Controlled Areas): Acute Food Insecurity Analysis, March-December 2026 (21 May 2026).

⁷⁸ IMO, Communication from the Secretary-General to Member States: Red Sea Incidents, updated 25 Nov. 2024, paras. 2-5.

caught fire. Independent Yemeni analysis published within days of the attacks reported that insurance costs for voyages through the southern Red Sea doubled and that Saudi Aramco began routing additional crude through Egypt's Mediterranean port of Sidi Kerir to reduce its dependence on the strait – a market reaction occurring on a timescale far shorter than the Security Council's own reporting cycle.⁷⁹ The organisation's current Red Sea page also notes that Security Council resolution 2812, adopted in January 2026, continued the monthly reporting mandate on Houthi attacks against merchant and commercial vessels. Because verified totals depend on reporting periods and attribution criteria, this submission avoids combining incompatible incident counts into a single cumulative number.⁸⁰

The development effect is visible in shipping patterns. UNCTAD's Review of Maritime Transport 2025 reports that Suez Canal tonnage remained around 70 per cent below average 2023 transit levels as carriers continued to divert around the Cape of Good Hope. Longer routes absorbed vessel capacity, increased freight costs and added uncertainty to delivery times. The effect is global, but poorer import-dependent economies are particularly exposed because additional transport cost feeds quickly into food, fuel and input prices.⁸¹

This is an example of security risk diffusing beyond the original conflict. The arms build-up inside Yemen generated a capability to impose risk on shipping far from the front lines. Carrier rerouting then shifted cost to firms and consumers in States that were not parties to the Yemeni conflict. The right-to-development implications therefore extend beyond Yemen's territory.

5. Infrastructure damage and the escalation feedback loop

Regional attacks have also produced military responses against sites in Yemen. Ports, airports, launch sites and other infrastructure have been struck by external forces at different points in the conflict. The development significance does not depend on treating every strike as legally equivalent or assigning a single political responsibility. The relevant point is the feedback loop: accumulated military capability enables attacks outside Yemen; those attacks trigger military responses; and the resulting damage can further weaken infrastructure used by the civilian economy.

For a development-focused study, this is a reason to prioritise prevention of renewed escalation. The lower intensity on the main front lines after 2022 did not remove the economic and infrastructure risks created by long-range weapons and maritime operations. A ceasefire on one front can coexist with escalation elsewhere.

Independent Yemeni analysis has argued that this feedback loop is not simply a byproduct of accumulated capability. It has been actively reinforced by the pattern of the international response itself. Writing immediately after the July 2026

⁷⁹ Maged Al-Madhaji, 'The Houthis are Setting a Dangerous Precedent', Sana'a Center for Strategic Studies, Perspectives and Analyses, 27 July 2026 (tanker attacks, insurance costs, Aramco rerouting via Sidi Kerir).

⁸⁰ IMO, Red Sea Area (updated 2026); IMO, 'Statement on recent attacks on ships in the Red Sea' (23 July 2026); IMO, 'Statement on deadly ship attack in the Red Sea' (12 Aug. 2026).

⁸¹ UNCTAD, Review of Maritime Transport 2025, overview and ch. III.

blockade announcement, the Sana'a Center's chairperson argued that successive rounds of Saudi, American, British and Israeli airstrikes since the 2018 Battle of Hudaydah had repeatedly demonstrated to the Houthis that “threatening the use of force is more effective than de-escalation and dialogue.”⁸² The mechanism he describes runs in both directions at once: each round of strikes degraded specific launch sites and depots without preventing the group from reorganising its capability, while each round of international restraint was read by the movement as confirmation that contained escalation carries little lasting cost.

On this reading, air power directed at Houthi infrastructure and multilateral arms control directed at Houthi supply lines are not alternative strategies. They are complementary and equally necessary ones. Strikes alone have not stopped capability from being rebuilt, for essentially the same reason the embargo has not stopped it from being acquired in the first place: neither addresses the financing, smuggling and component-supply networks examined in Parts IV.B and IV.C. The same analysis frames the underlying risk in terms directly relevant to this study. An armed group able to threaten a global shipping chokepoint at negligible cost to itself sets a precedent other non-state actors may find difficult to ignore – extending the development-security nexus this submission documents in Yemen to a wider and more general problem of chokepoint governance, one this study's own recommendations, in Part V, should be read to speak to.⁸³

E. Synthesis

Taken together, the evidence describes an arms-supply system that has become more modular rather than simply larger. The record begins with reported bulk movements of rifles and complete weapons, but later seizures contain guidance modules, propulsion components, commercial electronics, carbon fibre, machine tools and labelled missile subassemblies. CAR's component tracing reinforces the same picture. More than 800 missile and UAV components from recent Red Sea seizures carried company markings linked to at least 16 countries and territories, while only about 5 per cent could be linked to Iranian production. That does not imply involvement by the governments or companies concerned. It shows how advanced weapons can depend on a global commercial technology base even when the weapon architecture and final supply route are Iran-linked.⁸⁴

This does not mean the embargo has had no effect. Major consignments have been intercepted, and the cost and complexity of procurement are almost certainly higher than they would be in the absence of sanctions and interdiction. The public evidence does not permit a reliable estimate of how many transfers were prevented or how Houthi capabilities would have developed in a no-embargo counterfactual. The Panel's narrower assessment is that implementation has not produced a significant reduction in the capabilities it observed.⁸⁵

⁸² Al-Madhaji, ‘The Houthis are Setting a Dangerous Precedent’ (2026).

⁸³ Al-Madhaji, ‘The Houthis are Setting a Dangerous Precedent’ (2026). The Sana’a Center is an independent Yemeni research institution, founded in 2014 and based partly in Sana’a; this submission relies on its published analysis as an on-the-ground perspective the UN documentary record cited elsewhere in this submission does not, by its institutional nature, supply.

⁸⁴ CAR, Powering the Houthis (May 2026), pp. 14-15.

⁸⁵ UN Panel of Experts on Yemen, S/2025/650 (15 Oct. 2025).

The development consequences are similarly differentiated. UNDP's national model establishes the scale of the war's overall development reversal but cannot allocate causal shares. The oil-export case provides a much tighter sequence from military action to revenue loss and spending cuts. Red Sea attacks show how capability accumulated inside Yemen can disrupt international trade and impose costs beyond the country. These examples are stronger than a general assertion that 'arms cause underdevelopment' because the intermediate steps are observable.⁸⁶

The broader lesson is that arms control should be assessed by the capability it is intended to constrain, not only by whether a formal instrument exists. An embargo may be legally clear and still be operationally weak if component tracing, financial investigation, end-user verification, customs cooperation and reporting do not keep pace with procurement adaptation. Conversely, enforcement that impedes ordinary civilian trade can itself damage development. Effective control has to be both targeted and adaptive.

V. Concluding observations and recommendations

Five observations follow from the Yemen case.

Contemporary arms control, first, increasingly requires supply-chain analysis. Complete weapons still matter, but dual-use electronics, propulsion and guidance equipment, carbon fibre, machine tools, precursors and technical assistance can be equally important to capability. Resolution 2801's request for dedicated reporting on dual-use components is therefore a useful development. CAR's 2026 component study and UNIDIR's diversion research suggest the practical next step: routine component documentation, tracing and risk analysis after interdiction rather than reliance on platform identification alone.⁸⁷

This is not a peculiarity of Yemen or of non-state actors. The same diagnosis is being made, independently and for very different reasons, about the conflict NATO governments treat as their central strategic concern. Ukraine's own drone production grew from an estimated 3,000-5,000 units in 2022 to more than 2.2 million by 2024, but a substantial share of the components inside those systems is foreign-sourced, disproportionately from China, and recent Chinese export restrictions have measurably constrained Ukrainian output.⁸⁸ A December 2025 assessment published by the Royal United Services Institute concluded that NATO's own procurement architecture remains platform-centric and "rooted in Cold War-era models," and that battlefield relevance increasingly depends on

⁸⁶ UNDP/Pardee Center, *Assessing the Impact of War on Development in Yemen* (Apr. 2019); UN Security Council, SC/15114 (22 Nov. 2022), briefing of Special Envoy Hans Grundberg; IMF, *Republic of Yemen: 2025 Article IV Consultation*, Country Report No. 26/80 (3 Apr. 2026), paras. 4, 6, 10-11 and Table 1; IMO, *Communication from the Secretary-General to Member States: Red Sea Incidents*, updated 25 Nov. 2024, paras. 2-5; UNCTAD, *Review of Maritime Transport 2025*, overview and ch. III.

⁸⁷ UNSC Res. 2801 (2025), para. 15; CAR, *Powering the Houthis* (May 2026), pp. 14-19; Grand-Clément and Cops, *Technologies to Counter Diversion* (UNIDIR/FPI, 2023).

⁸⁸ Mirko Niederkofler, 'Drones Win Battles, Components Win Wars', Royal United Services Institute, Commentary, 17 December 2025.

mastery of fast-moving, largely civilian-origin subsystems rather than the finished weapons those systems assemble into – the same shift the Yemen case documents from the supply side.⁸⁹ A senior US defence-research director was blunter in comments reported the same year, describing American drone manufacturing as badly behind commercial competitors and lacking the industrial base to close the gap.⁹⁰ The European Union has begun treating this as a policy problem in its own right, with a 2025 strategy document and follow-on expert reports examining a "dual-use by design" approach intended to move past the assumption that civilian and military technology streams can be regulated separately.⁹¹ None of this is evidence about Yemen specifically. It is evidence that the premise behind Resolution 2801's dual-use reporting request – that an arms-control architecture built around finished platforms no longer matches how contemporary military capability is actually assembled – is not a Yemen-specific observation but a live one, and by NATO's own assessment an urgent one. That should make the case for the recommendation stronger, not narrower: this is not a fix for one embargo, but an adjustment the technology and the threat environment are already forcing everywhere arms control is attempted.

Interdiction should also begin an enforcement process rather than close one. The 2025 Panel's findings on missing paragraph 17 reports and limited follow-up show how quickly intelligence can be lost after a successful seizure. Post-seizure procedures should preserve components and markings, obtain commercial and financial records, identify beneficial owners and intermediaries, and transmit information promptly to the Committee and Panel. CAR's own experience is instructive: more than two hundred trace requests from Yemen have produced responses in only about one third of cases, leaving substantial parts of the onward supply chain unresolved.⁹²

A third gap concerns information-sharing across institutions as well as borders. The Panel received written responses to 12 of the 26 communications it sent to Member States for its 2025 implementation assessment; CAR encountered a parallel cooperation problem when tracing commercially manufactured components. Better exchange among customs authorities, port and flag States, manufacturers and distributors, financial intelligence units and sanctions investigators would make it harder for procurement networks to exploit jurisdictional boundaries. States with high inspection volumes but limited technical capacity will also need equipment, training and access to specialist tracing support.⁹³

A fourth point concerns proportion. Stronger control should remain targeted rather than broadened: Yemen's humanitarian and commercial dependence makes

⁸⁹ Niederkofler, 'Drones Win Battles, Components Win Wars' (2025).

⁹⁰ Stacie Pettyjohn (Center for a New American Security), remarks reported in Politico, 27 August 2025, as quoted in Niederkofler, 'Drones Win Battles, Components Win Wars' (2025). This submission relies on Niederkofler's citation rather than independent review of the original Politico article.

⁹¹ SIPRI, 'The Growth of Dual-use by Design Research in Europe: Export Control Risks and Challenges', Topical Backgrounder (2026).

⁹² S/2025/650, paras. 175-180; CAR, Powering the Houthis (May 2026), p. 5.

⁹³ S/2025/650, para. 168; CAR, Powering the Houthis (May 2026), p. 5; Grand-Clément and Cops (2023).

indiscriminate restriction dangerous. The existing sanctions framework permits humanitarian exemptions, and inspection systems should be designed to distinguish military procurement from legitimate food, fuel, medicine and civilian commerce. Development-sensitive arms control is not synonymous with maximal restriction; it aims to reduce the military utility of illicit supply while preserving the economic circulation on which civilians depend.⁹⁴

Last, arms-control monitoring should be connected more explicitly to development monitoring. Security bodies tend to count seizures, listed entities and attacks; development bodies track GDP, food insecurity, school attendance, health access and public finance. The oil-export case shows the value of joining those records. When a military capability is used against an economic chokepoint, the resulting revenue and service effects should form part of the assessment of arms-control effectiveness.⁹⁵

Yemen also illustrates the importance of time. The reduction of large-scale front-line fighting after 2022 did not reverse the development crisis. Nor did it eliminate the military capabilities accumulated during the preceding years. Those capabilities were redirected towards oil infrastructure, Red Sea shipping and regional targets. Arms control therefore remains relevant after a truce. In a protracted conflict, it is part of the institutional work required to prevent a lower-intensity military equilibrium from becoming a permanent barrier to development.

The right to development does not provide a technical blueprint for sanctions enforcement. It does, however, supply a useful test for policy. Measures should reduce the conditions that sustain armed insecurity while protecting the civilian systems through which people participate in and benefit from development. In Yemen, that means a narrower and more capable embargo implementation system: better at tracing military supply chains, better at sharing evidence, and less likely to obstruct the ordinary trade and public resources required for recovery.

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⁹⁴ UNSC Res. 2511, S/RES/2511 (25 Feb. 2020), para. 3; 2140 Committee, Arms Embargo Exemptions.

⁹⁵ UN Security Council, SC/15114 (22 Nov. 2022), briefing of Special Envoy Hans Grundberg; IMF, Republic of Yemen: 2025 Article IV Consultation, Country Report No. 26/80 (3 Apr. 2026), paras. 4, 6, 10-11 and Table 1.

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