



The Relevance of Dual-Use Export Controls for Gulf States

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From space technology to nuclear power and biotechnologies, dual-use technologies hold significant potential to enhance global security, trade, and development. However, alongside their civilian uses, these technologies can also have military applications, including for the development of nuclear, biological, and chemical weapons – collectively known as weapons of mass destruction (WMD). This dual potential has raised concerns regarding the proliferation of such technologies and prompted efforts to mitigate associated risks.

Export controls are among the key tools used by states to address these proliferation risks while allowing regulated trade in dual-use items. Dual-use export controls enable states to monitor and manage dual-use trade to and from their territories and to block undesirable transfers.

In the Gulf region, most Gulf Cooperation Council (GCC) states, with the exception of the UAE, still lack robust dual-use export control systems to date. While external incentives – such as international cooperation programs, outreach initiatives, and occasional diplomatic pressure from the United States and other powers – have led to some measures being adopted, negative perceptions of export controls persist in the region.

This piece argues that more attention should be paid to the range of internal incentives that GCC states have to adopt dual-use export control systems: such controls hold practical relevance for Gulf states as most of them are expanding their arms and dual-use trade and striving to bolster their regional and global status.¹

What are dual-use export controls and why do states adopt them?

Dual-use items are civilian goods and technologies that have potential applications in military or WMD programs. To regulate the transfer of these sensitive items, many states require companies trading in dual-use items to obtain authorizations, or licenses, before

¹ Marshall, S., 'The Role of the Gulf States in Expanded Weapons Production in the Global South', Published as part of debate #4 of the SALAM project, Fall 2024, PRISME, <https://prismeinitiative.org/blog/role-gulf-states-expanded-weapons-production-global-south-shana-marshall/>.

transferring them. This regulatory framework is commonly referred to as ‘dual-use export controls,’ even though these controls often also apply to imports, transit, and other related activities.

Dual-use export controls are most effective when adopted by a majority of states, rather than being implemented unilaterally. If only a handful of states apply these controls, especially while major technology suppliers continue unrestricted exports, their impact is significantly reduced. This realization has driven the creation of international instruments to establish common standards on dual-use export controls, primarily to address concerns regarding WMD and missile proliferation by both states and non-state actors.

Starting in the 1970s, groups of states established four key international export control regimes: the Nuclear Suppliers Group, the Australia Group, the Wassenaar Arrangement, and the Missile Technology Control Regime.² While these regimes include only a limited number of participating states, they play a critical role in providing and regularly updating comprehensive control lists of sensitive dual-use items, which are accessible to all states as a resource for implementing their own export controls.

Heightened concerns regarding WMD proliferation after the 11 September 2001 terrorist attacks, coupled with the revelations about the A.Q. Khan network’s role in facilitating access to WMD-related materials to Libya, Iran, and North Korea prompted the adoption of United Nations Security Council Resolution (UNSCR) 1540 in 2004, to combat WMD proliferation to non-state actors.³ This resolution marked a significant milestone by introducing a legal obligation for all states to implement controls on the movement of dual-use items from or through their territories if these items could be used in connection with WMD or their delivery systems.⁴

Today, at the national level export control systems translating these international standards and obligations typically encompass both dual-use items and conventional arms, forming what are known as systems of strategic trade controls. While the specific structure of these systems varies according to national contexts, they generally include at least three central elements. The first element is the establishment of a legal and regulatory framework, which includes a list of controlled items. The control lists maintained by the four multilateral export control regimes are widely recognized as global standards and are therefore often also adopted by states outside the regimes to regulate their dual-use trade. The second element involves setting up a licensing system to assess the risks associated with exporting dual-use items and to process license applications. This system enhances states’ oversight and awareness of flows of critical goods and technologies, even if no

2 Australia Group, <https://www.dfat.gov.au/publications/minisite/theaustraliagroupnet/site/en/index.html>; Missile Technology Control Regime, <https://mtrc.info>; Nuclear Suppliers Group, <https://www.nsg-online.org/en/>; Wassenaar Arrangement, <https://www.wassenaar.org>.

3 Laufer, M., ‘A. Q. Khan Nuclear Chronology’, Carnegie Endowment for International Peace, 7 Sep. 2005, <https://carnegieendowment.org/2005/09/07/a.-q.-khan-nuclear-chronology-pub-17420>.

4 United Nations Security Council (2004). Resolution 1540. S/RES/1540 (2004). 28 Apr. 2004, available at: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/No4/328/43/PDF/No432843.pdf?OpenElement>.



licenses are denied.⁵ It also helps states to map entities involved in dual-use trade and facilitates outreach efforts to raise awareness about potential risks. The third element is the development of procedures to enforce the controls. These measures enable national authorities to block unauthorized transfers and, when necessary, prosecute companies or individuals attempting to export without the required licenses.⁶

As a result, the transfer of many items with everyday civilian applications often require authorization due to their dual-use nature. For example, triethanolamine – a chemical widely used in soap and beauty products – is also a precursor for mustard gas and is therefore included in the Australia Group’s control list, which governs the trade of sensitive biological and chemical materials.⁷

Dual-use export controls in GCC states

Discussions on dual-use export controls in the GCC states have historically been driven by external pressure and incentives from the United States and other Western states. As critical transit hubs, Gulf states have, since at least the 1980s, been targeted by WMD proliferation networks seeking to divert and illicitly reroute shipments of sensitive dual-use items.⁸ In response, Western states sought to raise awareness about proliferation concerns, employing diplomatic pressure and, from the 1990s onward, establishing outreach and cooperation programmes aimed at strengthening dual-use export controls in the region.⁹ Alongside these efforts, multilateral bodies, such as the 1540 Committee, the World Customs Organization (WCO), and institutions tied to WMD non-proliferation and disarmament treaties also launched cooperation and outreach initiatives, with most GCC states gradually engaging in these activities.

Today, the only GCC state with a functional dual-use export control system is the UAE. Although diplomatic pressure from and cooperation with external partners played a role, a significant motivation for the UAE’s development of its strategic trade control system appears to have been its 2008 decision to pursue a nuclear energy programme, and the

5 Brockmann, Challenges to Multilateral Export Controls: The Case for Inter-regime Dialogue and Coordination (SIPRI: Stockholm, Dec. 2019), <https://www.sipri.org/publications/2019/policy-reports/challenges-multilateral-export-controls-case-inter-regime-dialogue-and-coordination>.

6 Bromley, M., ‘Export controls and cyber-surveillance tools: Five suggestions for the Summit for Democracy’, SIPRI Commentary, 8 Mar. 2024, <https://www.sipri.org/commentary/2024/export-controls-cyber-surveillance-summit-democracy>.

7 Vestergaard, C. and Marshall, W., ‘Triethanolamine – Fact Sheet’, Stimson Center, Mar. 2022, <https://www.stimson.org/2022/triethanolamine/>.

8 Dunne, A., Strategic Trade Controls in the United Arab Emirates: Key Considerations for the European Union, EU Non-Proliferation Paper, No. 12 (SIPRI: Stockholm, Mar. 2012), <https://www.sipri.org/publications/2012/eu-non-proliferation-and-disarmament-papers/strategic-trade-controls-united-arab-emirates-key-considerations-european-union>.

9 Chilcoat, A., ‘Overview of the Export Control and Related Border Security (EXBS) Program’, Presentation at the 22nd Asian Export Control Seminar, Tokyo, 17–19 Feb. 2015, https://supportoffice.jp/outreach/2014/asian_ec/pdf/day2/1000_Mr.AndrewChilcoat.pdf; EU P2P Export Control Programme, https://cbrn-risk-mitigation.network.europa.eu/eu-p2p-export-control-programme_en.



associated objective to facilitate technology-sharing in this field.¹⁰ Today, the UAE's system includes a federal (or national-level) licensing authority, the Executive Office for Control and Non-Proliferation (EOCN), alongside the Federal Authority for Nuclear Regulation (FANR), which oversees technology transfers and trade specifically in nuclear materials within the context of the UAE's civil nuclear energy programme.¹¹ The UAE has also set up outreach programmes to engage with and raise awareness about export controls among its national industry.

Progress in other GCC states has been more limited. Publicly available information indicates that some have adopted regulations governing the handling of and trade in chemical, nuclear, and, in some cases, biological materials.¹² However, these regulations are typically oriented toward public health and safety objectives rather than export controls. GCC states have also adopted a Common Customs Law since 2002, regulating regional trade through sea, air, and land routes.¹³ While these legislative measures provide some level of oversight and control over international trade in dual-use items, they lack essential elements of a full export control system, such as a list of controlled dual-use items and a licensing system.

Further progress on dual-use export controls in GCC states faces at least two key challenges. The first is navigating the delicate geopolitical landscape and the specific role export controls play within it. Indeed, dual-use export controls and trade sanctions have become central tools for Western states in responding to Russia's invasion of Ukraine. The Middle East, and particularly the UAE, has been identified as a hub where these restrictions are being circumvented.¹⁴ Reports indicate that the US and EU have been pressing the UAE to curb re-exports of sensitive goods to Russia.¹⁵ While the UAE has stated it has taken steps in this direction, the scope and implementation of these measures remain unclear.

The second challenge stems from lingering negative perceptions of dual-use export controls, both within the GCC and globally, as evidenced by recent Chinese-led initiatives

10 Dunne, A., Strategic Trade Controls in the United Arab Emirates: Key Considerations for the European Union, EU Non-Proliferation Paper, No. 12 (SIPRI: Stockholm, Mar. 2012), <https://www.sipri.org/publications/2012/eu-non-proliferation-and-disarmament-papers/strategic-trade-controls-united-arab-emirates-key-considerations-european-union>.

11 UAE Executive Office for Control and Non-proliferation (EOCN), <https://www.uaecic.gov.ae/en-us/>; Federal Authority for Nuclear Regulation (FANR), <https://www.fanr.gov.ae/en/>.

12 1540 Committee, 'Committee approved Matrices', consulted on 7 Sep. 2024, <https://www.un.org/en/sc/1540/national-implementation/1540-matrices/committee-approved-matrices.shtml>.

13 Gulf Cooperation Council (GCC), 'Common Customs Law of the GCC states: Rules of implementation and explanatory notes thereof', Jan. 2003, <https://www.gcc-sg.org/en-us/CognitiveSources/DigitalLibrary/Lists/DigitalLibrary/Customs/1274258180.pdf>

14 Smagin, N., 'Is the Blossoming Relationship Between Russia and the UAE Doomed?', Carnegie Politika Commentary, 13 Apr. 2023, <https://carnegieendowment.org/russia-eurasia/politika/2023/04/is-the-blossoming-relationship-between-russia-and-the-uae-doomed?lang=en>.

15 Cornwell, A., 'U.S., allies press UAE over Russia trade, sanctions', Reuters, 1 May 2024, <https://www.reuters.com/world/us-allies-press-uae-over-russia-trade-sanctions-2024-05-01/>.



at the UN General Assembly (UNGA).¹⁶ In 2021, 2022 and 2024, China secured the adoption of three UNGA resolutions on ‘Promoting international cooperation on peaceful uses in the context of international security’. The resolutions criticised the use of export controls to restrict technology transfers, with all GCC states voting in favour.¹⁷ Saudi Arabia, in particular, underscored concerns that restrictions on nuclear technology transfers were hindering the development of civilian nuclear programmes.¹⁸ This ongoing debate should offer an opportunity to unpack and, where relevant, address these concerns while highlighting the benefits that robust dual-use export controls can also entail.

Current prospects for strengthening dual-use export controls in GCC states

Despite ongoing challenges, there are encouraging signs that GCC states may be interested in further developing their dual-use export control systems. Since January 2022, all GCC states have joined the EU-led dual-use export control outreach initiative and have begun participating in regional activities.¹⁹ This initiative provides a platform to discuss the relevance of dual-use export controls and offers support to states seeking to adopt or strengthen such measures.

To advance this process, greater attention should be given to the internal motives that GCC states have for adopting dual-use export control systems. While Western concerns initially drove efforts to address the use of GCC states as proliferation hubs, these states themselves have clear incentives to act. Having joined key international non-proliferation treaties, GCC states have consistently reiterated their commitment to upholding and strengthening the non-proliferation norm.²⁰ Export controls also remain a critical tool to address

16 See UN General Assembly Resolution 76/234, ‘Promoting international cooperation on peaceful uses in the context of international security’, 21 Dec. 2021, <https://digitallibrary.un.org/record/3952874?ln=en&v=pdf>; UN General Assembly Resolution 77/96, ‘Promoting international cooperation on peaceful uses in the context of international security’, 7 Dec. 2022, <https://documents.un.org/doc/undoc/gen/n22/740/97/pdf/n2274097.pdf>, and Report of the First Committee, ‘Promoting international cooperation on peaceful uses in the context of international security’, 15 Nov. 2024, <https://docs.un.org/en/A/79/416>.

17 Brockmann, K., Bromley, M. and Maletta, G., ‘Implications of the UN resolutions on ‘international cooperation on peaceful uses’: Balancing non-proliferation and economic development’, SIPRI Commentary, 11 Dec. 2024, <https://www.sipri.org/commentary/topical-backgrounder/2024/implications-un-resolutions-international-cooperation-peaceful-uses-balancing-non-proliferation-and>.

18 Bromley, M., Mustafi□, S., Yuan, J., ‘China takes aim at the export control regimes: Targeted critique or misguided attack?’, WorldECR, Dec 2023 / Jan 2024, Issue #123, <https://www.worldecr.com/archive/china-takes-aim-at-the-export-control-regimes-targeted-critique-or-misguided-attack/>.

19 European Union, ‘Dual-use trade control - EU P2P Export Control Programme for Dual-Use Goods’, consulted on 7 Sep. 2024, https://cbrn-risk-mitigation.network.europa.eu/eu-p2p-export-control-programme/dual-use-trade-control_en.

20 See for example statements from GCC states during the United Nations General Assembly First Committee in 2021 and 2022, the same years as the adoption of the peaceful uses resolutions: <https://reachingcriticalwill.org/disarmament-fora/unga/2021/statements> and <https://reachingcriticalwill.org/disarmament-fora/unga/2022/statements>.



diversion risks. Over the past decade, both arms and dual-use items originating in or transiting through GCC states have found their way to militant groups in Libya and the Houthis in Yemen.²¹

Although adopting export control legislation cannot eliminate all illicit trade, it can equip states with the means to detect, investigate, and enforce actions against companies involved in diversion cases.²² Moreover, it enhances their capacity to manage transit and transshipment, particularly within the many free trade zones in the region.²³

Another key motive for the adoption of dual-use export controls is the current expansion of sectors across most GCC states that develop or utilize dual-use items. The NewSpace sector offers a notable example, with the UAE, Saudi Arabia, and Bahrain introducing new regulations, and setting up investment funds and other funding incentives.²⁴ According to their national space policies, these states aim to enhance local production capabilities and, potentially, begin exporting in the longer term. Many items and technologies developed in the space sector have dual-use applications, including for missile production, and therefore fall under dual-use export controls.²⁵ Similar developments are unfolding in other sectors where GCC states are emerging as leading exporters. For example, the UAE is among the top 10 exporters of triethanolamine, the dual-use chemical widely used in civilian industries but also a precursor for mustard gas, as mentioned earlier.²⁶ These expanding industries underscore the need for effective dual-use export controls to ensure responsible management of sensitive technologies.

In the current context, GCC states could also view the development of dual-use export controls as a means to enhance regional transparency and mutual confidence. By

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- 21 Slijper, F., 'Under the radar – The United Arab Emirates, arms transfers and regional conflict', PAX for peace, Sep. 2017, <https://paxforpeace.nl/what-we-do/publications/under-the-radar>; 'The IED Threat in Bahrain - A comparative analysis of components documented in the Gulf region', Conflict Armament Research (CAR), Dec. 2019, <https://www.conflictarm.com/reports/the-ied-threat-in-bahrain/>.
 - 22 Dunne, A., Strategic Trade Controls in the United Arab Emirates: Key Considerations for the European Union, EU Non-Proliferation Paper, No. 12 (SIPRI: Stockholm, Mar. 2012), <https://www.sipri.org/publications/2012/eu-non-proliferation-and-disarmament-papers/strategic-trade-controls-united-arab-emirates-key-considerations-european-union>.
 - 23 'United Arab Emirates Transshipment Chronology: 1971 – 2017', Wisconsin Project on Nuclear Arms Control, 1 Apr. 2017, <https://www.wisconsinproject.org/uae-transshipment-milestones-1971-2017/>; 'World's Major Container Ports, 2020', The Geography of Transport Systems, <https://transportgeography.org/contents/chapter6/port-terminals/world-major-container-ports/>.
 - 24 Kratos defense, 'Exploring the MENA Space Sector's Dynamic Investment Landscape', 7 Jan. 2024, <https://www.kratosdefense.com/constellations/articles/exploring-the-mena-space-sectors-dynamic-investment-landscape>; Kingdom of Bahrain, Space Policy, Apr. 2019, <<https://www.nssa.gov.bh/wp-content/uploads/2019/04/National-Space-Policy.pdf>>; UAE Government, Space Regulation, updated 7 Aug. 2024, <https://u.ae/en/about-the-uae/science-and-technology/key-sectors-in-science-and-technology/space-science-and-technology/space-regulation>.
 - 25 Brockmann, K. and Raju, N., Newspace and the Commercialization of the Space Industry: Challenges for the Missile Technology Control Regime (SIPRI: Stockholm, Oct. 2022), https://www.sipri.org/sites/default/files/2022-10/2210_newspace_and_the_commercialization_of_the_space_industry.pdf.
 - 26 Vestergaard, C. and Marshall, W., 'Triethanolamine – Fact Sheet', Stimson Center, March 2022, <https://www.stimson.org/2022/triethanolamine/>.



contributing to the responsible transfer of strategic items, dual-use export controls help mitigate risks of destabilising accumulations and reduce regional instability in the Middle East. This rationale is articulated in one of the four multilateral export control regimes, the Wassenaar Arrangement, which was established to ‘contribute to regional and international security and stability, by promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies, thus preventing destabilising accumulations’.²⁷

In practice, in other regions, regional cooperation on export controls has largely been driven by economic opportunities.²⁸ However, establishing a regional dialogue on export controls can also yield positive developments for regional security by fostering greater cooperation and information-sharing between states on their export control policies and implementation practices. Possible avenues to take this forward include the UAE, which, given its expertise in developing a national dual-use export control system, has already shared its experience with other states in the region and could expand this role further.²⁹ At a regional level, GCC states could increase exchanges of best practices and engage in a broader dialogue on export controls, which could be facilitated through the League of Arab States.

Regulated dual-use trade offers a tangible opportunity to balance security concerns with trade-driven development to deliver benefits to people across the region. Importantly, this is an area where authorities can and should ‘include civil society organizations, the private sector, and communities in policy development’, moving beyond a solely security-centric approach.³⁰ For dual-use export controls to be effective, it is indeed crucial to consult and involve a wide range of stakeholders, including national authorities, regional and international bodies, as well as the private sector and the research and academic community.

²⁷ Wassenaar Arrangement, <https://www.wassenaar.org/>.

²⁸ Lewis, J. and Brockmann, K., ‘Missile Proliferation and Control in the Asia-Pacific Region’, IISS Research paper, Apr. 2024, <https://www.iiss.org/research-paper/2024/04/missile-proliferation--and-control-in-the-asia-pacific-region/>.

²⁹ Press Release, “Regional Conference on Dual-Use Trade Control” discusses ways to achieve compliance in export controls and enhance cooperation in combating the proliferation of weapons of mass destruction’, UAE Executive Office for Control and Non-proliferation (EOCN), 17 Nov. 2022, <https://www.uaieic.gov.ae/en-us/news/regional-conference-on-dual-use-trade-control-discusses-ways-to-achieve-compliance-in-export-controls-and-enhance-cooperation-in-combating-the-proliferation-of-weapons-of-mass-destruction>.

³⁰ Soubrier, E., ‘The impacts of militarized foreign policy in the MENA region’, PRISME, Synthesis paper of debate #3 of the SALAM project, July 2024, <https://prismeinitiative.org/blog/impacts-militarized-foreign-policy-mena-region-emma-soubrier/>.



PRISME

Pathways to Renewed and Inclusive
Security in the Middle East



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PRISME

Pathways to Renewed and Inclusive
Security in the Middle East

PRISME Initiative

PRISME aims to redefine the conception of “security” in the Middle East and North Africa, as the starting point for strategic relations between MENA countries and their European and North American partners. It does so in pursuit of effective, collaborative approaches to ensuring a more peaceful and stable future. To this end, PRISME sponsors dialogue and debate between foreign policy professionals across diverse backgrounds and perspectives. These include individuals in governments, thinktanks and academic institutions located in the MENA region, Europe and North America, with a specific focus on engaging young and emerging thinkers and practitioners. Its goal is to re-define security in the Middle East, broadening the definitions of what it looks like, for whom, how it can be achieved, and how outside actors can contribute to it.

SALAM Project

SALAM (Sustaining Alternative Links beyond Arms and the Military) proposes to rethink the centrality of the arms trade in international relations with and among Middle East & North Africa (MENA) countries.

It fosters and amplifies ideas from a network of scholars and practitioners working in and with the Middle East. Issues they will address include the arms trade’s advertised role in cementing bilateral and multilateral ties between North America, Europe and the MENA region; the opportunity costs of over- or sole reliance on weaponry as security; and alternative modes of engagement that might redefine a shared strategic agenda.