

NEW CHALLENGES TO

THE 1540

NON-PROLIFERATION REGIME



Transshipment and export controls are vital for the full implementation of UNSCR 1540; Credit: Venti Views

ABSTRACT

At the dawn of the new millennium, the Security Council adopted United Nations Security Council resolution 1540 (2004) (UNSCR 1540), thus launching a long-term global effort in the fight against weapon of mass destruction (WMD) proliferation by non-State actors. After twenty years, the effort to achieve the 1540 non-proliferation regime is presented with new challenges, including a shift in the balance of power triggering competition and confrontation, emerging non-State actors gaining access to critical technology and a world economy with new opportunities for proliferators.

The upcoming years will see the implementation of countermeasures following the directives decided by the Security Council in successor resolution UNSCR 2663 (2022). Although the resolution failed to adequately empower the Group of Experts of the 1540 Committee to enable them to steer this process, there are the margins, with the support of the Committee, to promote an effective and harmonized implementation at national level.



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As the global arms control regime weakens under the blows of a changing balance of power and tensions,¹ the international community finds in United Nations Security Council resolution 1540 (2004) (UNSCR 1540) a resilient instrument in the fight against the proliferation of weapons of mass destruction (WMDs) and their means of delivery. On 30

November 2022, the Security Council unanimously passed UNSCR 2663 (2022), which renewed the 1540 Committee and Group of Experts' mandate until 30 November 2032. Even when rifts within the UN body are jeopardizing the ability to take decisions on other critical WMD proliferation issues,² resolution 1540 gathers, albeit not without controversies, the

unanimous approval of the Security Council members.

However, since its adoption, the international system has evolved and so has the risk of WMD proliferation. Although not comprehensively, the risk perspective presented aims to raise awareness of some key developments related to current threats and vulnera-

¹ Arms control treaties falling victim to international tensions in the last five years include the Intermediate-Range Nuclear Forces (INF) in 2019, the Open Skies Treaty in 2020, the Comprehensive Test Ban Treaty (CTBT) in 2023, the New Strategic Arms Reduction Treaty (New START) in 2023, the Conventional Arms Forces Control in Europe (CFE) in 2023.

² For example, on 26 May 2022, at the 9048th meeting, the Security Council failed to adopt a resolution tightening the sanctions regime on the Democratic People's Republic of Korea (SC/14911) and, on 28 March 2024, the extension of the mandate for the expert panel assisting the sanctions committee on the DPRK was vetoed (SC/15648).

bilities affecting the non-proliferation regime established by UNSCR 1540. Both today's threat of non-State actors, coupled with the ease of access to strategic items, and the opportunities created by the developments in global trade and in financial technology aggravate the WMD proliferation risk. Therefore, adaptive measures are required to strengthen the UNSCR 1540 non-proliferation regime and an internationally coordinated effort supported by subject matter experts is necessary to guarantee its effectiveness.

THE THREAT FROM NON-STATE ACTORS³

Twenty years later, the *raison d'être* of UNSCR 1540 persists. Violent non-State actors, generically identified with terrorist individuals and entities, continue to threaten international

security and stability,⁴ while non-violent non-State actors, such as private businesses and smugglers, continue to develop sophisticated tactics to traffic strategic goods,⁵ which include items involved in the development, production, or use of WMDs and their delivery systems.

Counter-terrorism efforts in the wake of the 9/11 attacks were one of the main drivers⁶ for the adoption of UNSCR 1540. The use of the threat to use nuclear, biological or chemical weapons could have very well served terrorists' ambitions. Therefore, the resolution shifted the attention from States to non-State actors.

Today's growing political, economic or military weight on the international stage of, for instance, politically, ethnically or religiously motivated extremists,

paramilitary groups or transnational criminal syndicates threatens the WMD non-proliferation regime more than ever. Far from a negligible risk, there have been several cases where non-State actors either demonstrated interest in, acquired or contributed to the acquisition or development of WMDs and their means of delivery. The Organisation for the Prohibition of Chemical Weapons (OPCW)-UN Joint Investigative Mechanism's reports on the use of chlorine and sulphur mustard gas by the Islamic State of Iraq and the Levant (ISIL, also known as Da'esh)⁷ proved the capacity of the terrorist group to produce and employ chemical weapons combined with projectile delivery systems. Similarly, certain transnational criminal organizations have contributed to advance North Korea's WMDs and means of delivery programmes by

3 UNSCR 1540 (2004) provides an ad hoc definition of non-State actor: "individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution."

4 See, for example, the conflicts tracked by the CrisisWatch, <https://www.crisisgroup.org/crisiswatch>.

5 See, for example, the press releases of the U.S. Department of Commerce, Bureau of Industry and Security <https://www.bis.doc.gov/index.php/about-bis/newsroom/press-releases>.

6 The other main driver was the uncovering of the Pakistani scientist Abdul Qadeer Khan's network engaging in the smuggling of nuclear weapons related materials.

7 For the 21 August 2015 attack in Marea, Syria, see Third report of the Organization for the Prohibition of Chemical Weapons-United Nations Joint Investigative Mechanism (S/2016/738/Rev.1). For the 15 and 16 September 2016 attack in Umm Hawsh, Syria, see Seventh report of the Organisation for the Prohibition of Chemical Weapons-United Nations Joint Investigative Mechanism (S/2017/904).

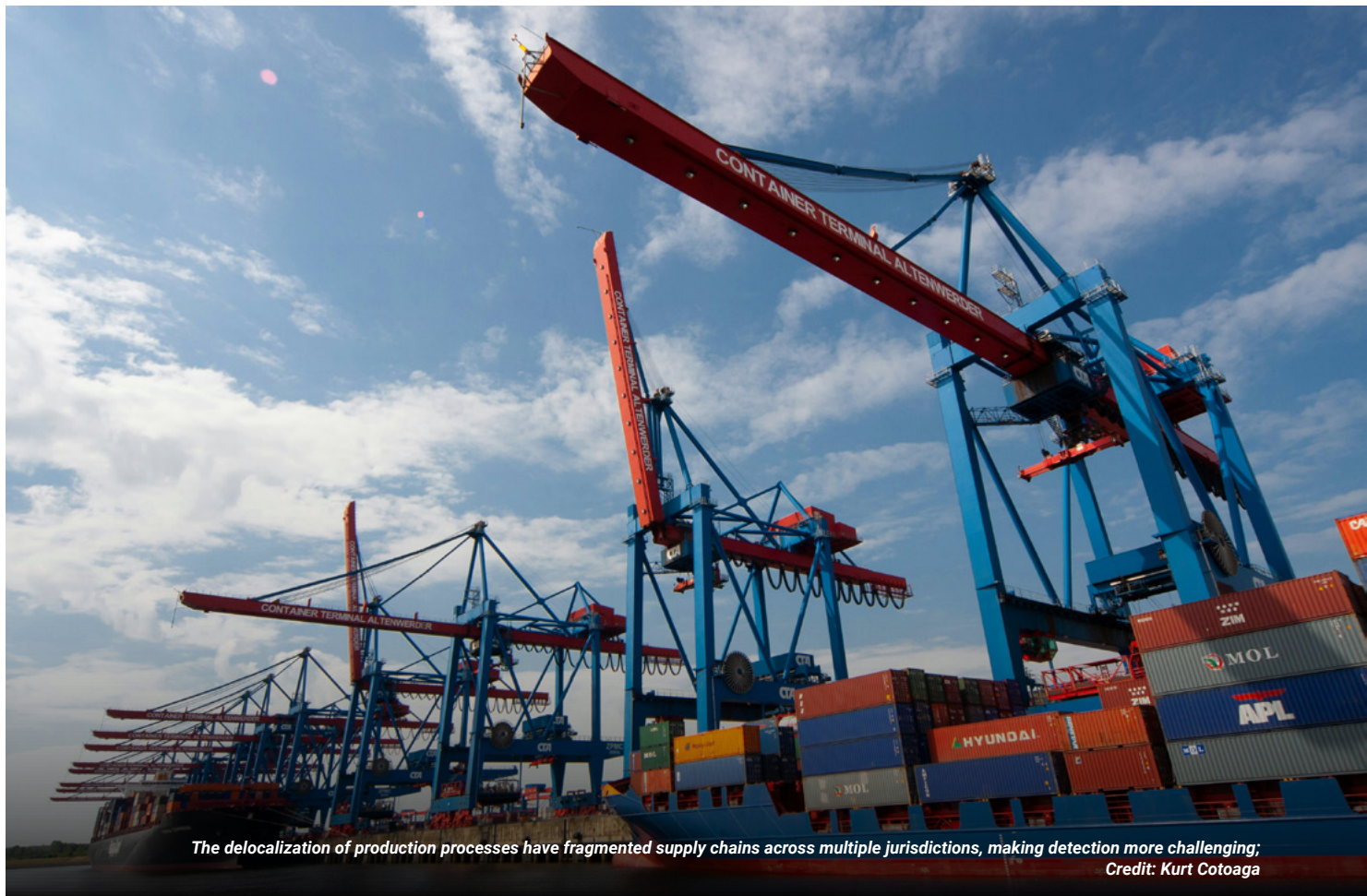
generating revenues, evading sanctions and providing financial services through offshore networks.⁸

ACCESS TO WEAPONS OF MASS DESTRUCTION

Even more concerning is the increasing risk of misuse of rapid scientific advancements for proliferation purposes.

Access to dual-use technology that could be used for the design, development, or manufacture of WMDs or their means of delivery adds to the risk of their use. The information revolution and low costs allow, for instance, the assembly of lethal devices, such as smart drones, simply by using a 3D printer and a mobile phone equipped with a camera and a GPS.⁹

Moreover, the risk of strategic technology transfer to non-State actors has become more serious. The shift in the geopolitical landscape has featured the emergence of global and regional tensions, in some cases turning into conflicts where non-State belligerents are sponsored by other States.¹⁰ While the levels of support to non-State actors may vary from political



The delocalization of production processes have fragmented supply chains across multiple jurisdictions, making detection more challenging; Credit: Kurt Cotoaga

8 See, for example, Christian Davies, Primrose Riorden and Chan Ho-Min, "Inside North Korea's oil smuggling: triads, ghost ships and underground banks", *Financial Times*, 29 March 2023.

9 Andrea Beccaro, "Non-State actors and modern technology" in *Small Wars & Insurgencies*, 34:4, 791 (August 2022).

10 See, for example, Hafsa Halawa, "Nonstate Actors, Geopolitics, and Conflict in the Middle East", *Carnegie Europe*, 30 November 2022.

to financial or material, resolution 1540 draws a clear line, in so far as its operative paragraph 1 prohibits all Member States from providing any form of support to those attempting to engage in the proliferation of WMDs or their means of delivery.

However, current conflicts in the Middle East suggest that armed non-State actors can acquire and use means of deliveries, despite being armed, at least hitherto, with conventional weapons.

Most recently, the Houthis' attacks on commercial and military vessels confirmed the significant risk of advanced missile technology proliferation as these non-State actors were the first to deploy anti-ship ballistic missiles in conflict, in addition to the use of anti-ship cruise missiles.¹¹

VULNERABILITIES IN THE GLOBAL ECONOMIC SYSTEM

UNSCR 1540 aims to curb the proliferation of nuclear, biological and chemical

weapons and their means of delivery from their conception to their use. However, this objective is challenged by the unparalleled opportunities offered by the global economy. Nowadays, WMD proliferators can exploit extended global trade networks and different channels to procure WMD-related materials.¹²

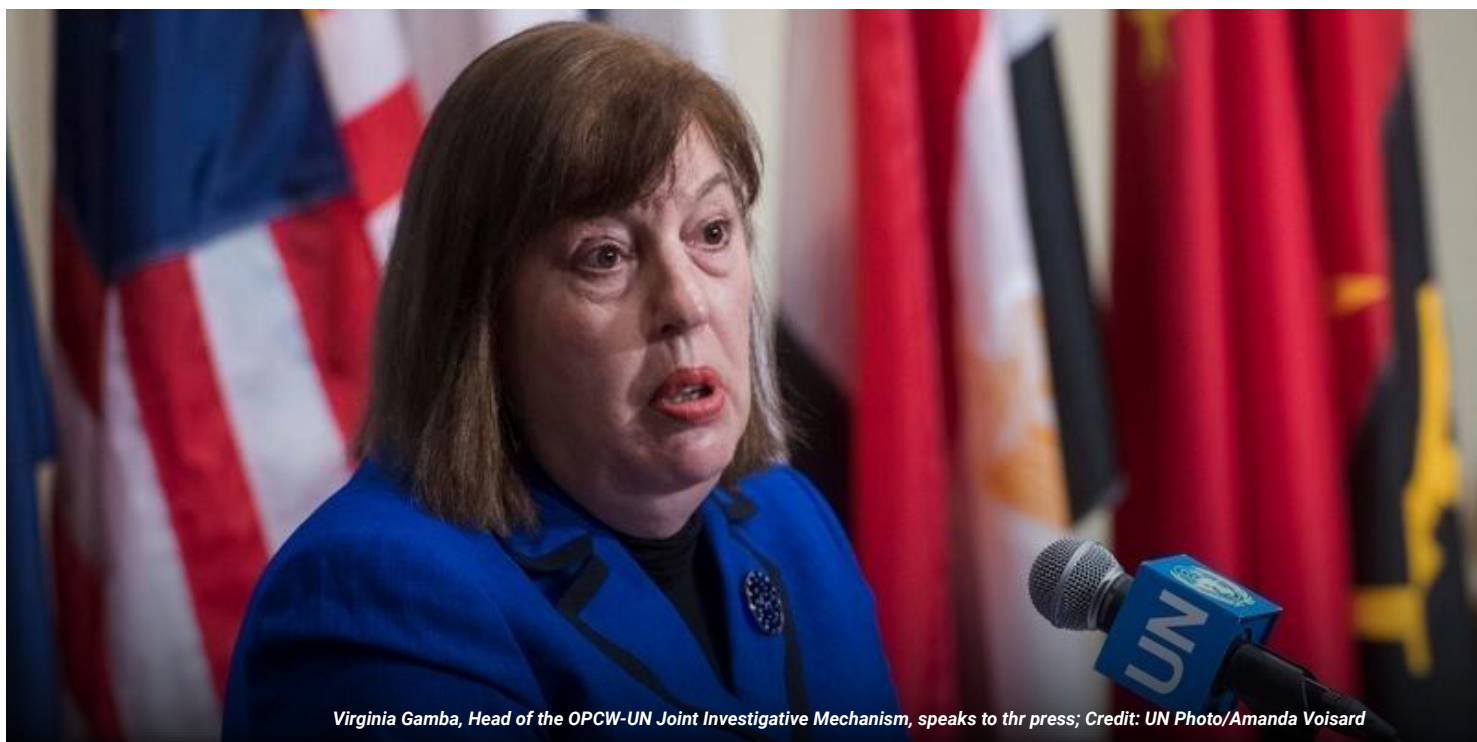
The globalized economy and the delocalization of production processes have fragmented supply chains across multiple jurisdictions. Thus, the difficulties in



Ban Ki-moon, former Secretary-General, meets Head of the OPCW-UN Joint Investigative Mechanism; Credit: UN Photo/Kim Haughton

11 James Brady, "Houthi attacks from Yemen show need for controls on advanced missile technology proliferation", Bulletin of the Atomic Scientists, (January 2024).

12 UNSCR 1540 (2004) defines related materials as 'materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.'



Virginia Gamba, Head of the OPCW-UN Joint Investigative Mechanism, speaks to the press; Credit: UN Photo/Amanda Voisard

detecting malign actors behind apparently legitimate commercial transactions involving dual-use goods, materials or technologies are compounded by the need to trace the products from the origin to the destination to prevent a potential diversion. Moreover, the score of operators involved, including manufacturers, distributors, freight forwarders, brokers and other intermediaries, exacerbate the complexity of the supply chain, as due diligence efforts have to assess the risk associated with multiple parties involved in transactions, potentially based in different jurisdictions.

In parallel, the revolution in financial technology has reshaped the approach to financial services, bringing about, among other advantages, the enhancement of national authorities' capabilities in detecting illicit financial flows. Real-time monitoring and analysis of large volumes of financial transactions enable competent agencies to identify patterns that may indicate financial crimes. At the same time, however, the decentralization and the pseudonymity of transactions through blockchains can circumvent the controls of the traditional international financial system. Furthermore, digital

money and virtual assets have become easier targets for cyber criminals, including WMD proliferators, who have stolen, laundered and used them to fund their weapons programmes.¹³

Against this complex background, the preventive measures mandated by the operative paragraphs 2 and 3 of UNSCR 1540 have never been so pivotal in countering WMD proliferation activities. By embedding the idea that non-State actors may be motivated by interests other than terrorism, such as personal gains, the implementation of prohibitions and

¹³ See, for example, Department of the Treasury, 2024 National Proliferation Financing Risk Assessment, Washington D.C., U.S.A., February 2024, p. 18.

controls on economic operators potentially exposed to the risk of WMD proliferation will increase the likelihood of detecting and disrupting illicit trafficking.

ADAPTIVE MEASURES

In light of the above-mentioned threats and vulnerabilities, successor resolution 2663 (2022) requests that the 1540 Committee consider the evolution of the proliferation risk in the context of the implementation of the resolution.¹⁴ The Security Council prioritizes some measures, emphasizing the need ‘to strengthen export controls, controls on intangible transfers of technology and on information that could be used for WMDs and their means of delivery, proliferation financing and shipments prevention, and securing sensitive materials’.¹⁵

While, overall, Member States are gradually progressing towards the full implementation of the different mandated measures,¹⁶ the pace appears slow and the

regulations adopted do not always reflect the “appropriate-ness” of the measures *vis-à-vis* the new threats. The lack of technical expertise is one of the key challenges faced by countries in the implementation process.¹⁷ Achieving full compliance with the obligations requires a sound understanding of the risk they aim to mitigate, as well as of the measures mandated by the resolution.

Because of their knowledge and expertise, the Group of Experts for the 1540 Committee should steer Member States’ efforts towards compliance and cooperate with the network of technical assistance providers to accelerate the process of a consistent implementation. A harmonized and complete implementation of the preventive measures mandated by the resolution would limit the margins of actions for non-State actors currently exploiting loopholes or uneven implementation of the obligations.

Although UNSCR 2663 (2022) renewed the 1540 Committee’s mandate for 10 years, it missed an opportunity to empower the Group of Experts with the resources and the operative independence that technical bodies need to fulfil their missions. Notwithstanding, a more proactive role supported by the 1540 Committee, within the current limited mandate, would allow the Experts to guide technical assistance by leading in the coordination of assistance providers’ efforts to optimize the matchmaking between demand and supply.

Of great interest and great support would be the publication of the best practices, templates and guidance, which were produced by the Experts, but not approved by the 1540 Committee¹⁸. The Group of Experts could address misconceptions related to definitions and scope of the provisions, referring to partially compliant implementation measures or cases showing the conse-

14 United Nations Security Council res. 2663 (30 November 2022) UN Doc S/RES/2663.

15 Ibid.

16 2022 comprehensive review of the status of implementation of Security Council resolution 1540 (2004)

17 See 2022 comprehensive review of the status of implementation of Security Council resolution 1540 (2004) (S/2022/899), p. 2.

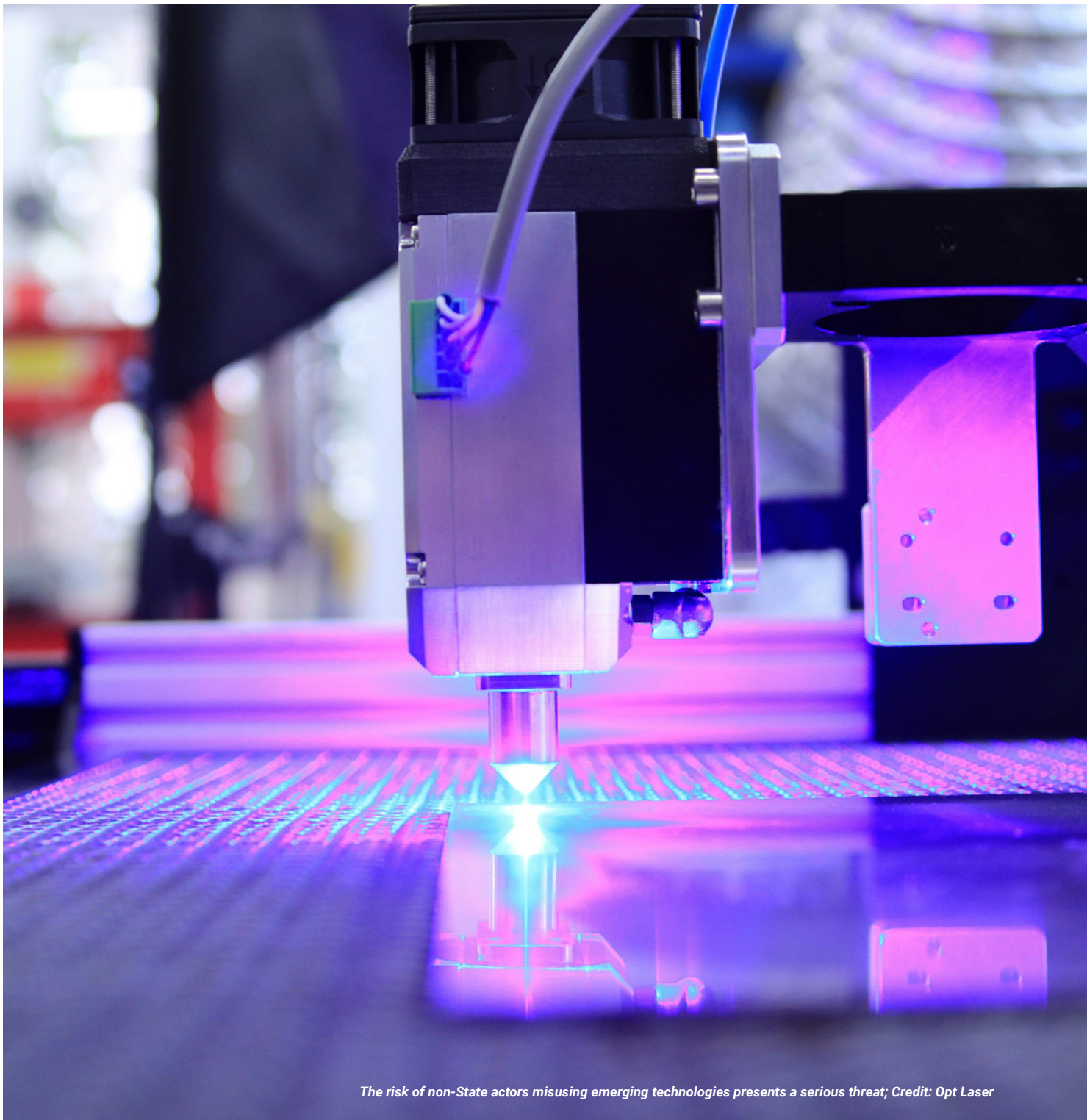
18 Scott Spence, “The 1540 Nonproliferation Regime and United Nations Security Council Resolution 2663 (2022): What’s Been Achieved and What Lies Ahead”, Strategic Trade Review, Volume 9, Issue 10, Winter/Spring 2023, p. 33.

quences of the lack of implementation.

Twenty years ago, the prohibitions targeting non-State actors and controls over

commercial and financial flows were ground-breaking as new mandatory measures to address the threats to WMD non-proliferation. It is high time for the 1540 Committee

and the Group of Experts to strengthen the 1540 non-proliferation regime by guiding Member States in mitigating the current risk and boosting the implementation efforts.



The risk of non-State actors misusing emerging technologies presents a serious threat; Credit: Opt Laser