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Abstract

United Nations Security Council resolution 1540 (2004) established an international framework for the nonproliferation of Weapons of Mass Destruction (WMD) by non-state actors as well as a Committee tasked with carrying out activities in the areas of national implementation, international cooperation, assistance, and transparency and outreach. This article discusses the activities that took place up to and during the third Comprehensive Review of the resolution, as well as challenges to completing this cyclical process due to the coronavirus pandemic.

The article also discusses the adoption of resolution 2663 (2022) by the Security Council on November 30, 2022, once the Comprehensive Review had been completed by the 1540 Committee. The article reflects on how this resolution updates the 1540 nonproliferation framework for the next ten years.

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Keywords


Introduction

This article highlights recent developments regarding United Nations Security Council resolution 1540 (2004), which established the principal international legal framework for the nonproliferation of Weapons of Mass Destruction (WMD). In particular, the article will discuss the delayed and challenging Comprehensive Review of the resolution, which was completed in 2022. The article will also discuss what comes next after the adoption of resolution 2663 (2022), which extends the 1540 framework for an additional decade and reinforces existing elements of it while adding new ones and deemphasizing others.

The article briefly introduces resolution 1540, as well as the 1540 Committee and its Group of Experts responsible for implementing the resolution, for those who may not be familiar with this structure. This will be followed by a discussion of the procedural background leading up to the most recent Comprehensive Review of the implementation of UN Security Council resolution 1540, which took place during 2020 to 2022. The article then discusses the Security Council’s most recent resolution related to the 1540 nonproliferation regime, resolution 2663, adopted on November 30, 2022, and what can be expected in the coming decade.

The article concludes with follow-up observations.


Resolution 1540 was adopted by the UN Security Council nearly nineteen years ago as a response to the attacks on September 11, 2001 in the United States and alarm about the development of biological, chemical, and nuclear weapons programs with the active participation of non-state actors. The Security Council was particularly motivated to address this threat when a network run by Abdul Qadeer Khan, an engineer from Pakistan and educated in Europe, was uncovered as responsible for the illicit trafficking of nuclear material and technologies for decades to Iran, Libya, and North Korea to assist them with their nuclear weapons development programs.

In adopting resolution 1540, the Security Council set about achieving several objectives including the following which are obligatory for all Member States:

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2 The final report of the Comprehensive Review of resolution 1540 (2004), which informed the adoption of resolution 2663 (2022), was not available at the time of publication and will therefore be covered in a longer piece later this year.


4 See, for example, “AQ Khan is Dead – Long Live the Proliferation Network” by Dr Aaron Arnold and Darya Dolzikova, RUSI, October 15, 2021, <https://rusi.org/explore-our-research/publications/commentary/aq-khan-dead-long-live-proliferation-network>.
• Preventing states from providing any form of support to non-state actors who attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical, or biological weapons and their means of delivery (operative paragraph 1 of the resolution); this directly addressed the threat posed by the A.Q. Khan network and others;

• Requiring states to adopt and enforce laws to prohibit non-state actors to manufacture, acquire, possess, develop, transport, transfer, or use WMD, in particular for terrorist purposes as well as preparatory offences such as assisting and financing these activities (operative paragraph 2); this covered gaps in the existing multilateral frameworks for disarmament and nonproliferation; and

• Requiring states to take and enforce measures for domestic controls to prevent the proliferation of WMD and related materials including measures to account for and secure these items in production, use, storage, or transport (operative paragraph 3(a)), physical protection measures (operative paragraph 3(b)), border controls and law enforcement efforts to prevent the illicit trafficking and brokering in such items (operative paragraph 3(c)), and national export, re-export, transit and transshipment controls over such items (operative paragraph 3(d)); this also covered gaps in the existing multilateral frameworks for disarmament and non-proliferation.\(^5\)

The Security Council also established a Committee under operative paragraph 4 of resolution 1540 (2004) to carry out a number of activities in line with the objectives of the resolution. The Committee, commonly called the 1540 Committee, consists of permanent and rotating members of the Security Council. It is supported in its work by a group of nine consultants, also known as the Group of Experts.

**Procedural Background Leading to the 2020-2022 Comprehensive Review**

The Security Council and its Committees operate on the basis of rules and procedures to organize their work and the 1540 Committee is no different. Moreover, the Council has kept abreast of the 1540 Committee’s work through annual reports and longer-term reviews, also known as Comprehensive Reviews. This section describes how the Committee went about complying with Security Council instructions and its own rules and procedures to carry out its activities from the second Comprehensive Review in 2016 (the first one took place in 2009) until the third one was completed in 2022, as it will give the reader some idea of the complexity of the Committee’s work and how this was exacerbated for more than two years by the coronavirus pandemic.

In 2016, and at the direction of the Security Council under resolution 1977 (2011),

\(^5\) “Related material” is the term used in resolution 1540 (2004) to cover “… ‘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.’”
operative paragraph 3, the 1540 Committee undertook a second Comprehensive Review of implementation of resolution 1540 (2004), which included the updating of national matrices for all 193 UN Member States; a number of events with states, international, regional and sub-regional organizations, and civil society; and Open Consultations which took place on June 20-22, 2016.6,7 The results of the Review were a report to the Security Council on the status of implementation of the resolution 1540 (2004) from April 2011 through April 2016 and the adoption of resolution 2325 (2016) by the Security Council on 15 December 2016.8,9

Resolution 2325 (2016), which was informed by the results and recommendations of the Comprehensive Review, led the Security Council to request UN Member States to undertake a number of actions including the submission of first reports or additional reports (if they had already submitted one) on their implementation of resolution 1540 (2004), the development of voluntary national implementation action plans, the designation of points of contact for the Committee, the taking into account of developments in science and technology, the controlling of access to intangible transfers of technology, and the development of national control lists. The Committee for its part was requested inter alia to consider developments in science and technology, consider the specificities of states in their implementation of resolution 1540 (2004), visit states at their request to continue dialogue on resolution 1540 (2004), match assistance requests with offers of assistance, and organize and participate in outreach events.10 Further to operative paragraph 2 of resolution 2325 (2016), annual Programs of Work were adopted by the Committee based on these objectives from February 1, 2017 through January 31, 2021, although no Programs were agreed by the Committee for 2021 and 2022.11

The coronavirus pandemic began to complicate the activities of the Committee and its Group of Experts in early 2020, including those related to the next Comprehensive Review which were scheduled to be completed before April 2021 as requested by the Security Council in operative paragraph 3 of resolution 1977 (2011). On August 27, 2020, the Chair of the 1540 Committee at the time, Ambassador Dian Triansyah Djani, informed the President of the Security Council that activities related to the Comprehensive Review would be delayed until 2021 except for the updating of the national matrices, which was already underway at the time by the Group of

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6 The matrices are the primary tool used by the Committee to organise information from states on how they are implementing resolution 1540 (2004). They are updated on a cyclical basis, normally as part of a Comprehensive Review process, <https://www.un.org/en/sc/1540/national-implementation/1540-matrices/committee-approved-matrices.shtml>.


8 Ibid.


10 Ibid.

Experts, or other activities which could be carried out online.\textsuperscript{12}

In 2021, the mandate of the Committee and its supporting Group of Experts was due to end on April 25 under operative paragraph 2 of resolution 1977 (2011). However, the Security Council gave the Committee more time to complete the Comprehensive Review by adopting resolution 2572 (2021) on April 22, 2021, which extended the mandate of the Committee and the Group of Experts through February 28, 2022 (also known as a technical rollover).\textsuperscript{13} The Committee had already approved all 193 national matrices which were updated by the Group of Experts in 2020 and posted them on the Committee’s website in December of that year.\textsuperscript{14} However, the coronavirus pandemic continued to complicate efforts to conduct other outstanding activities related to the Comprehensive Review in 2021 and early 2022, especially Open Consultations which some Committee members were committed to holding in person. This proved impossible due to UN restrictions on conferences in the Secretariat building in New York, remote working arrangements for key personnel, and building closures after the Omicron outbreak in late December 2021. Accordingly, the Security Council extended the mandate of the Committee once more through 30 November 30, 2022, by way of another technical rollover in resolution 2622 (2022) which was adopted on February 25, 2022.

From March through November 2022, the Committee had no time to waste. With the eventual easing of restrictions on in-person meetings, the Committee and its Working Groups, under the stewardship of Mexico as Chair of the Committee, held several meetings to discuss progress on the remaining activities of the Comprehensive Review. These included the Open Consultations which were ultimately scheduled to take place from May 31 to June 2 at UN Headquarters.\textsuperscript{15} The Committee also managed to succeed in adopting a report on the Comprehensive Review on November 29 and the Security Council adopted resolution 2663 (2022) on November 30, which extended the mandate of the Committee and its Group of Experts for an additional decade.

**What Lies Ahead for the 1540 Nonproliferation Regime?**

After the Committee adopted its report on November 29, 2022, the Security Council unanimously adopted resolution 2663 (2022) the next day, which coincided with the last day of the second extended mandate for the Committee and its Group of Experts. We learn from the online publication Security Council Report that, as with negotiation of the final report, progress towards the adoption of a new resolution to renew the mandate of the Committee


\textsuperscript{14} Ultimately, 190 states consented to their matrices being posted on the Committee’s website.

\textsuperscript{15} The Committee has four Working Groups focused on Monitoring and National Implementation (Working Group 1), Assistance (Working Group 2), Cooperation with international organisations including the Security Council’s 1267 and 1373 Committees (Working Group 3), and Transparency and Outreach (Working Group 4).
and its Group of Experts was fraught and the outcome was uncertain. As penholder, Mexico circulated the first draft of a new resolution on November 14, which was subsequently revised three times before being placed under silence procedure on 28 November. Russia broke silence to oppose an annex about the roles and responsibilities of the Group of Experts and an operative paragraph about the participation of women in the activities of the 1540 Committee.

Two competing drafts were subsequently placed in blue by Mexico and Russia on November 29. Mexico’s draft omitted the annex on the Group of Experts and replaced it with an operative paragraph calling for a review of its internal guidelines as they relate to the experts by April 30, 2023 and altered the operative paragraph about women by changing “urging” to “encouraging.” Russia’s draft simply renewed the mandate of the Committee and its Group of Experts with no new substantive changes. Consensus was only reached when the paragraph about women’s participation in the activities of the 1540 Committee became a preambular paragraph in Mexico’s revised draft in blue and Russia withdrew its own.

Resolution 2663 (2022), which borrows elements from previous resolutions, especially resolutions 1977 (2011) and 2325 (2016), while adding a few new ideas, extends the mandate of the Committee and its Group of Experts through November 30, 2032 (operative paragraphs 2 and 5) and instructs the Committee to carry out a number of activities and achieve certain objectives. The remainder of this section highlights a few preambular and operative paragraphs of the resolution that are interesting because they add new ideas or diverge from previous resolutions, which signals political shifts that have occurred in the Committee in the six and eleven years, respectively, since resolutions 2325 (2016) and 1977 (2011) were adopted.

In preambular paragraph 4 of resolution 2663, the Security Council expresses grave concern posed by the threat of illicit trafficking of WMD and related materials covered in a number of multilateral treaties. It has now included materials listed in national control lists, which it had
not done in resolution 1977 (2011) nor in a preambular paragraph in 2325 (2016). This would signal that the Council has recognized that many states have adopted national control lists and are using them as one tool in their nonproliferation toolbox.

In preambular paragraph 11, the Council highlights the importance of visits to states including joint ones with “other Security Council Committees.” One can safely assume that the Committee is referring to the 1267 and 1373 Committees on ISIL (Da’esh) and Al-Qaeda and Counter-Terrorism, respectively (and this is confirmed in operative paragraph 22). Nevertheless, it is curious that these Committee names were removed and that this is included in a preambular paragraph. This could, of course, be the result of difficult discussions on the role of the 1540 Committee vis-à-vis these other Committees, especially when it comes to joint visits to states. In other words, joint visits will still be encouraged but there is ambiguity about who they will be with until operative paragraph 22.

In preambular paragraph 12, the Council has called on the 1540 Committee to improve its assistance mechanism so that assistance to states is “effective, timely, and tailored, and … meets their needs.” The Council has combined the concepts of effective, timely, and meeting needs from resolutions 1977 and 2325, and has added the new notion of “tailored.” In light of how sub-optimally the assistance mechanism has been functioning since the last Comprehensive Review, this paragraph would appear to be the Council’s way of suggesting to the Committee that it must improve its assistance mechanism and meet states where they are with 1540 implementation.

In preambular paragraph 13, the Council “notes” the importance of technical reference guidance for states, presumably on 1540 implementation which is not specified. This was also called for in operative paragraph 12 of resolution 1977; however, efforts by the Committee to produce such guidance (or a guide as it was called in resolution 1977 (2011)) have so far been unsuccessful. States benefit greatly from implementation guides, such as those produced by various international organizations (IAEA, OPCW) and civil society organizations such as VERTIC.

It is encouraging that preambular paragraph 17 has been included in the resolution, in which the Security Council acknowledges the regional coordinators who have been appointed by the Organization for American States (OAS), the Organization for Security and Cooperation in Europe (OSCE), and the UN Office for Disarmament Affairs (UNODA), however without explicitly naming these organizations. In resolutions 1977 and 2325, the Council called upon


such coordinators to be appointed so clearly this request has been heeded, funded, and is achieving results.

Preambular paragraph 19 on the meaningful participation of women in the 1540 Committee’s activities is also an encouraging development despite it having been changed from an operative to a preambular paragraph in earlier drafts, as discussed previously. Despite general opposition from Russia on considerations of gender in Security Council deliberations, this new paragraph reflects a political shift that has been well underway since the Security Council adopted resolution 1325 (2000) on women, peace, and security over two decades ago.

Moving to the operative paragraphs, the Council has directed the Committee in operative paragraph 5 to “…review its internal guidelines on matters regarding its Group of Experts by 30 April 2023.” This is compromise language after Russia objected to an Annex to resolution 2663 (2022) which would have clearly and transparently laid out the Experts’ roles and responsibilities. This review will nevertheless be an opportunity for the Committee to also examine the Experts’ status as consultants subject to a UN administrative instruction on consultants as well as the “Guidelines for the Recruitment and Administration of Consultants Serving as Experts on Groups and Panels, Including the Office of the Ombudsperson, Established by the Security Council.”

The latter Guidelines are of dubious legality as they were not promulgated as an administrative instruction under the UN’s “Procedures for the Promulgation of Administrative Issuances.” They provide some benefits to experts that are not available to other consultants, such as three weeks of paid “authorized absence” and contracts for up to 60 months without a break. On the other hand, experts do not receive, for example, staff benefits such as post adjustment, paid sick leave, UN health insurance, education grants, or moving expenses and are not integrated into the UN pension scheme. Accordingly, in addition to a review of its internal guidelines with an analysis of the roles and responsibilities of the Experts, it would be advisable for the Committee to review the Experts’ status and entitlements as hybrid personnel working in the UN system.

In operative paragraph 10, the Council has removed language in relation to “specificity” that was included in resolution 2325 (2016), namely, the Council had “urged” the Committee to take into account states’ “ability to manufacture and export related materials.” In resolution 2663 (2022), on the other hand, the importance of “tailored dialogue and engagement…that recognizes specificity of states with regard to implementation and reporting…and to improve the development of customized assistance for effective implementation of resolution 1540 (2004)” is merely stressed. This is rather surprising as there were open consultations on the topic in October 2019 as well as a working paper and, in paragraph 43 of the 2016 report of the Comprehensive Review, the Committee states that “…it is important to bear in mind that there are variations in [states’] economic and industrial capacities. For instance, many states do not

29 This document was issued by the UN’s Office of Human Resources in 2014 and is not publicly available.
have or intend to acquire nuclear materials.”

It will remain to be seen how the Committee will handle the differing states’ circumstances for the implementation of resolution 1540 (2004) now that the importance of specificity is stressed but instructions to the Committee and its Group of Experts for how to go about implementing this are wanting.

Operative paragraph 13 is tied to preambular paragraph 13, which is discussed above, and derives from operative paragraph 12 of resolution 1977 (2011). Paragraph 12 was relatively straightforward as the Committee, with the assistance of its Group of Experts, was to (i) develop a compilation of effective practices, templates, and guidance and (ii) prepare a technical reference guide on implementation of resolution 1540 (2004). Though work was done on (i) and (ii), neither product received Committee approval. In the new paragraph 13, it is unclear what the Council has requested the Committee to do. Develop technical reference guides (plural) and then “review” their own guides? How will the guides be produced “through” implementation guidelines? Are these implementation guidelines the ones developed, for example, by the IAEA, OPCW and civil society organizations such as VERTIC? The paragraph is regrettably confusing, and it seems likely that no more progress on a straightforward compilation of best practices or a technical reference guide to implement resolution 1540 (2004) will be achieved than heretofore.

Operative paragraphs 14 and 15 are near replicas of paragraphs 7 and 8 in resolution 2325 (2016) on rapid advances in science and technology. It is regrettable that with the sheer rate of change in science and technology since the adoption of resolutions 1540 (2004) and 2325 (2016) 18 and six years ago, respectively, there are no references in these paragraphs to such developments as synthetic biology and genomics, artificial intelligence, nanotechnology, quantum computing, autonomous robotics and vehicles, cybersecurity, blockchain (also known as distributed ledger technology), 3D printing, etc., and their associated proliferation risks.

It is also concerning that there has only been one dedicated event on emerging technology since the last Comprehensive Review in 2016: a side event of the First Committee in October 2018 on “Challenges for the Governance of Synthetic Biology and Implications for UN Security Council 1540 (2004),” which was hosted by the Permanent Missions of Bolivia and Sweden. The resolution 1540 nonproliferation regime risks obsolescence in this area if it does not truly take into account rapid advances in science and technology with working papers and events dedicated to this endeavor.

Operative paragraph 17 is tied to preambular paragraph 12 and is particularly encouraging as the Council has recognized that the assistance matchmaking function needs improvement. It has provided tools to the Committee to achieve this through periodic review of the “role, efficiency and effectiveness” of the matchmaking mechanism and the status of requests and offers of assistance. This may ultimately lead to an even more streamlined (and transparent) process and enhanced level of accountability for the internal paper flows and other mechanics that underlie the Committee’s matchmaking process. In paragraph 19, the Council urges the Committee to take an all-hands-on deck approach to assistance requests by making its expertise

“fully available,” providing “dedicated workshops” including for the preparation of requests for assistance, and ensuring that assistance requests are “better fulfilled in line with the specific needs of Member States.” In paragraph 20, the Council encourages assistance requesters and providers to provide feedback on how the matchmaking process is functioning. This explicit encouragement strengthens a layer of accountability that exists in the Committee’s procedures but is woefully underutilized by states. In paragraph 21, the concept of regional assistance conferences has now been expanded to include international conferences, which may expand the scope and type of assistance that can be matched more effectively across and not just within regions.

Operative paragraph 24 is a welcome development as the Council encourages the 1540 Committee and the Group of Experts to develop a multi-year program of outreach to states, which may have more impact than the ad hoc approach that has been the Committee’s modus operandi and which has relied largely on informal channels of communication and a lengthy process of engagement with a state. The Committee should draw on its experience during the coronavirus pandemic by building virtual and hybrid capabilities into this multi-year program and reconsider its curious reluctance to leverage social media to engage a larger audience of international and national officials during its outreach.

In operative paragraph 26, the Security Council has become more specific about the briefings it would like the Committee to give to states and international, regional, and subregional organizations, and what they can bring to the Committee in return. Resolutions 1977 (2011) and 2325 (2016) only required the Committee to “conduct regular meetings open to all Member States on the Committee’s and group’s activities,” in operative paragraphs 20 and 28, respectively. The Council would now like to see: “a summary of activities of the Committee on all aspects of resolution 1540 (2004), including those undertaken on the Committee’s behalf by its Group of Experts, including on assistance matters; “an opportunity to Member States and international, regional, and subregional organizations to present their offers of assistance;” and “an opportunity to Member States to voluntarily share their experiences, lessons learned and best practices regarding implementation.” If implemented effectively and regularly, this could have collateral benefits for the transparency of the Committee’s activities and for the assistance matchmaking process for which there are new measures intended to improve it as described above.

Finally, in operative paragraph 29, the Council has recognized that its requests for inter alia improvement to the assistance matchmaking mechanism and for a multi-year program of outreach will need adequate resourcing. It has also pointedly included the need for adequate resourcing for “correspondence and other communications.” As noted above, paper flows and internal mechanics play a critical role in the assistance matchmaking mechanism, but they have not always functioned optimally. Hopefully, this instruction to the Secretary-General on behalf of the 1540 Support Team will remedy this.

Conclusion

Resolution 2663 (2022), the result of a difficult and delayed Comprehensive Review process, is not perfect; no Security Council resolution ever is. They are the products of shifting politics,
national interests, and internal debates which the public will never learn about. Nevertheless, the Council has set new parameters for how the Committee is to implement the 1540 framework for the next decade, which is no small accomplishment in the current multilateral environment. It has instructed the Committee to make improvements to the assistance matchmaking process, develop a multi-year program of outreach and hold more transparent and organized briefings about its work. It has also explicitly called for the meaningful participation of women in its processes for the first time. It will be important for the Committee to continue to have an engaged Chair to ensure that these objectives, and others in the preambular and operative paragraphs discussed above, are fully met. At the same time, the Council has not included more robust instructions on how to address advanced developments in science and technology and the specificity of states’ circumstances, the development of technical guidance for states on implementing the resolution, and the roles and responsibilities of its supporting Group of Experts.

It therefore remains to be seen what the impact of resolution 2663 (2022) and the Committee’s new instructions will be and what it will mean for non-proliferation efforts in general. For example, will the Committee overhaul its assistance mechanism or will states largely ignore the assistance matchmaking process if its mechanics do not improve? Will the Committee explore the impact of rapid technological and scientific developments on WMD proliferation, or will this be done in other fora thereby shifting attention away from the Committee? The answers are in the hands of the Committee and, to a lesser extent, its Group of Experts whose influence has been waning for some time due in no small part to Russia’s cramped interpretation of their role and responsibilities.\textsuperscript{33} International and regional organizations and civil society can also make a contribution but only if their efforts are fully recognized and embraced.

\textsuperscript{33} The Committee also faces a reduction in personnel in the next couple of months with the departure of five Experts, leaving only three until six new Experts are contracted, a lengthy political and administrative process.