



# EXPORT CONTROLS OVER BIOLOGICAL WEAPONS- RELATED MATERIALS IN AFRICA: STATUS, CHALLENGES AND LOOKING FORWARD

© CDC - Medical research is considered a peaceful use of biological agents and toxins

## ABSTRACT

National implementation of the obligations of the Biological Weapons Convention (BWC) and related requirements of United Nations Security Council resolution 1540 (UNSCR 1540) are at the cornerstone of countering biological weapons development and use. Implementation of export control requirements are essential to ensuring that biological agents and toxins and their related equipment and technology are not diverted and used for malicious purposes, while enabling secure transfers that can benefit the prevention of diseases and other peaceful uses of the life sciences. States may choose to implement export control requirements in a number of ways, depending on what is most appropriate for their own national system, whether through strategic trade or dual-use trade laws, specific biological weapons laws or a patchwork of laws.

National implementation of export controls of biological weapons-related materials in Africa is of particular interest given a number of factors. The status of BWC and UNSCR 1540 implementation in Africa in that area, based on current data from the United Nations Institute for Disarmament Research and Verification Research, Training and Information Centre BWC National Implementation Measures Database, reflects various approaches and legal challenges. It also shows that African States may benefit from many ongoing initiatives to strengthen such controls.



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In 2016, as it was reiterating the decisions made in UNSCR 1540 (2004), the Security Council “[stressed] the need to strengthen national measures of export control of materials related to nuclear, chemical and biological weapons and their means of delivery...”.<sup>1</sup> Six years later, the Comprehensive Review of the Status

of Implementation of UNSCR 1540, conducted by the 1540 Committee, emphasized export controls as one area requiring further attention by many States.<sup>2</sup> The Comprehensive Review showed that implementation of border and export control measures for materials related to biological weapons recorded around 5 per cent

fewer measures compared to measures for materials related to nuclear and chemical weapons.<sup>3</sup>

This article addresses national implementation of obligations on export controls for biological weapons-related materials, including related requirements, approaches,

1 UN Security Council Resolution 2325 (2016), preamble.

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

3 *Ibid*, para. 57.

challenges and efforts to meet the objectives of the resolution and the BWC in that regard. It draws from information in the BWC National Implementation Measures Database, developed jointly by the United Nations Institute for Disarmament Research (UNIDIR) and the Verification Research, Training and Information Centre (VERTIC).<sup>4</sup> The database provides an overview of measures taken by each State Party to the BWC or that may be relevant in this context. As

such, it is a useful tool for States seeking to identify gaps, consider areas for improvement and look at related examples. It includes a section on export controls, among several other areas.<sup>5</sup>

At the time of writing, 103 country profiles have been completed and published on the database. As the geographical region for which a larger number of country profiles have been completed, this paper focuses on the African continent.

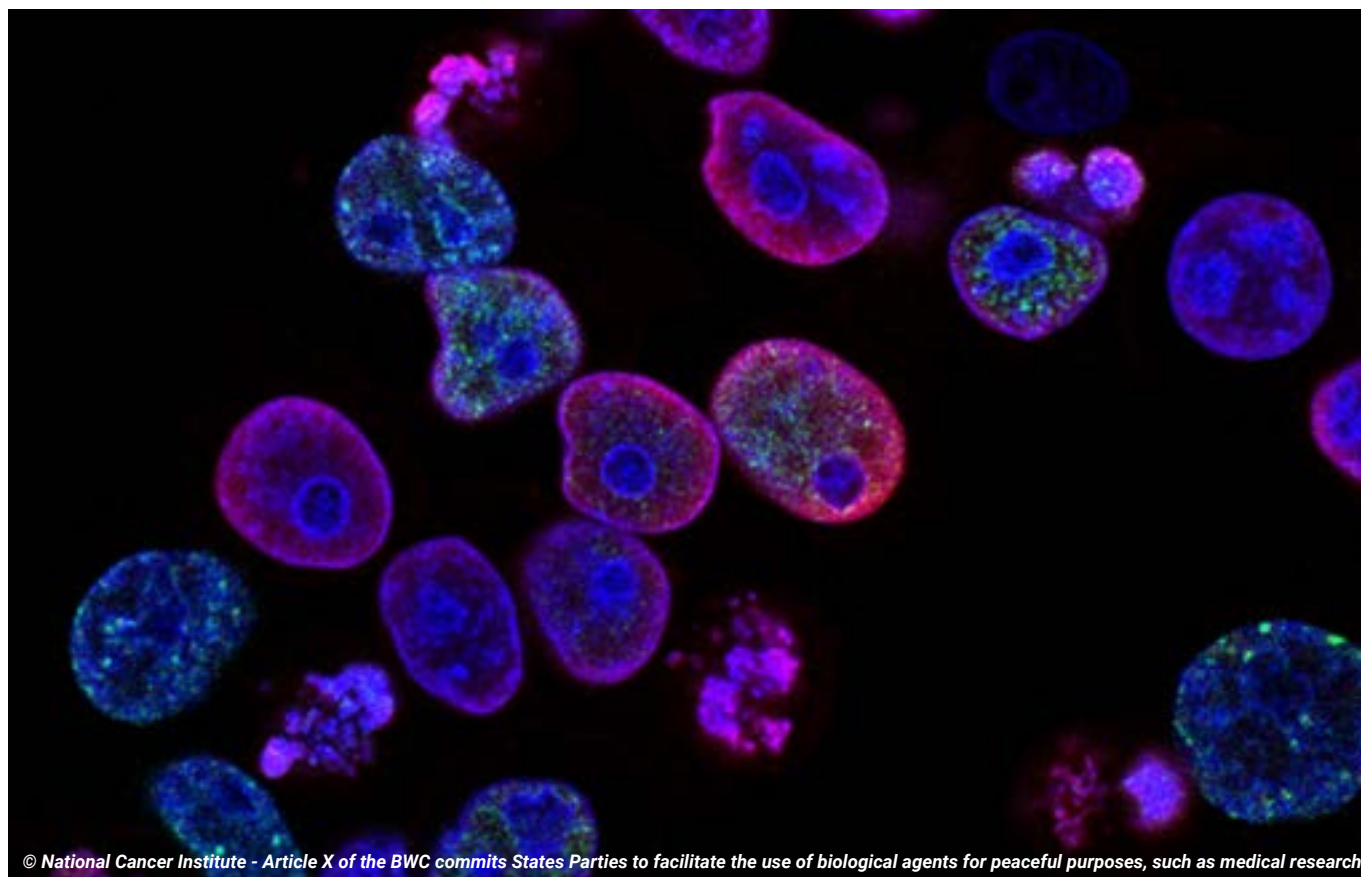
## **NATIONAL IMPLEMENTATION OF EXPORT CONTROLS OVER BIOLOGICAL WEAPONS-RELATED MATERIALS**

The complementarity between UNSCR 1540 and the BWC, which has already been commented on in this journal,<sup>6</sup> exists specifically with regard to export controls. Operative paragraph (OP) 1 of UNSCR 1540 requires States to prohibit any non-State actor to, *inter alia*,

4 UNIDIR and VERTIC, Biological Weapons Convention National Implementation Measures Database, available at: <https://bwcimplementation.org/> (accessed on 20 June 2024).

5 See "Categories of Measures" in the Glossary of the Database, available at: <https://bwcimplementation.org/page/glossary>.

6 Louison Mazeaud and James Revill, 'UNSCR 1540 Lessons Learned from the 'Tending' of the Biological Weapons Regime' in UNICRI 1540 Compass, April 2024, Issue 1, 50-57.





transfer biological weapons and their means of delivery. Similarly, Article III of the BWC obligates each State Party not to transfer biological weapons to any recipient whatsoever, directly or indirectly.

To prevent the transfer of biological weapons, OP 3 (d) of UNSCR 1540 further requires States to “establish, develop, review and maintain appropriate effective national export and trans-shipment controls ... including appropriate laws and regulations to control export, transit, trans-shipment and re-export”. Therefore, not only the export of biological agents, toxins, and related equipment and technology must be controlled, but also their transit, trans-shipment and re-export. The resolution also provides for the establishment of end-user controls and the adoption and enforcement of appropriate criminal or civil penalties for violations of export control laws and regulations. The Convention is less specific about such controls, but successive

BWC Review Conferences have called for appropriate measures by all States Parties to implement Article III, including effective national export controls.<sup>7</sup>

At the same time, in its preamble, UNSCR 1540 affirms that the prevention of proliferation of biological weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes. Article X of the BWC goes further and commits States Parties to facilitate the fullest possible exchange of equipment, materials and information for the use of biological agents and toxins for peaceful purposes. Review Conferences have urged States Parties to “review their national regulations governing international exchanges and transfers.”<sup>8</sup>

Neither UNSCR 1540 nor the BWC prescribe specific approaches of how to implement their terms. Each State determines how best to implement the requirements in their own national

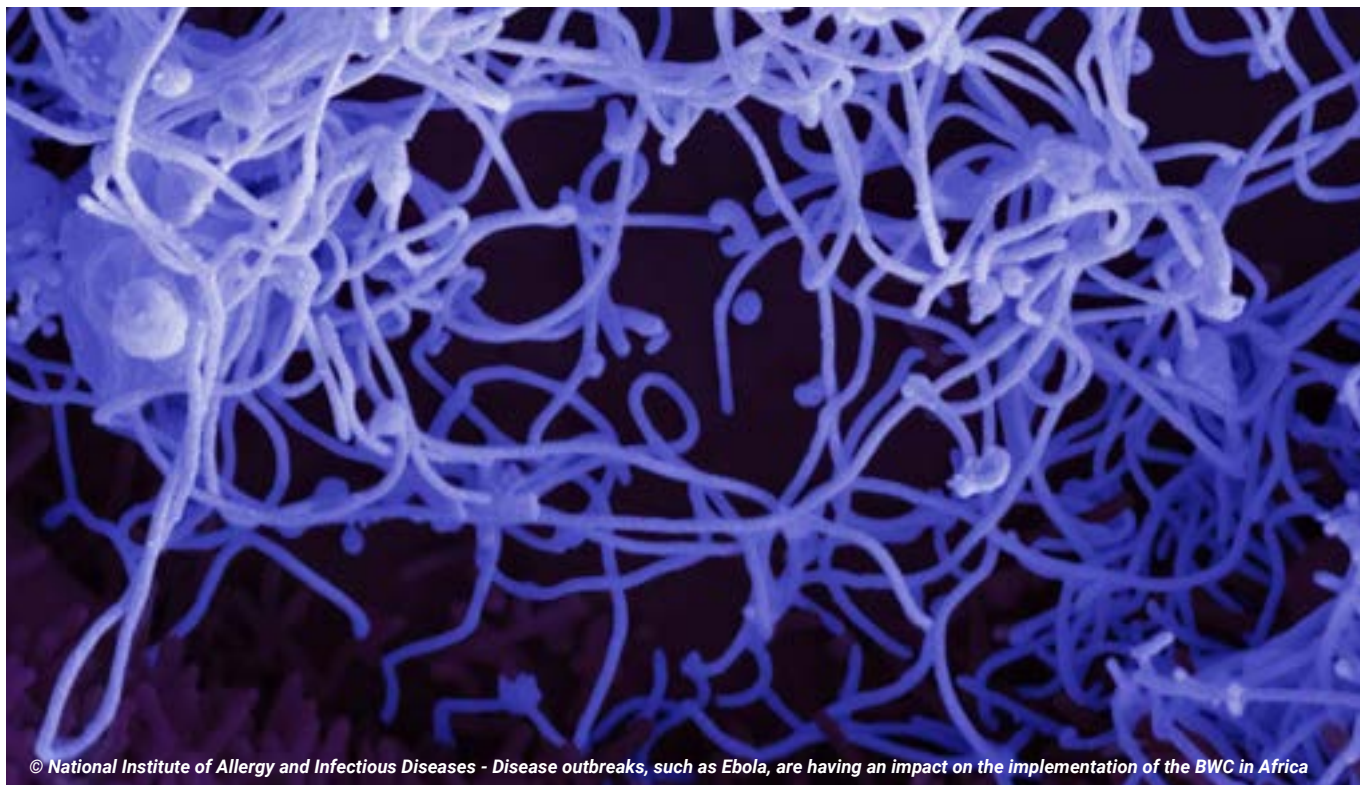
legislation based upon how their legal system functions, and there is no one size fits all. Based on the text of the resolution and the Convention, additional understandings and agreements reached by BWC States Parties,<sup>9</sup> and practice as reflected in measures effectively adopted by States, common elements of an effective and comprehensive export control system typically include:

- national (or in some cases regional) lists of items subject to controls, the utility of which is recognized by OP6 of UNSCR 1540;
- licenses or other control requirements for the export, including re-export, transit, and trans-shipment of controlled items; as well as requirements for related services such as financing;
- end-user controls, as required by OP3 (d);

<sup>7</sup> See Additional understandings and agreements reached by previous Review Conferences relating to each article of the Convention Background information document submitted by the Implementation Support Unit, doc. BWC/CONF.IX/PC/5, para. 29.

<sup>8</sup> *Ibid*, para. 103.

<sup>9</sup> According to doc. BWC/CONF.IX/PC/5, “additional understanding or agreement” is one which: (a) interprets, defines or elaborates the meaning or scope of a provision of the Convention; or (b) provides instructions, guidelines or recommendations on how a provision should be implemented (para.1).



- technical, security and accountability requirements in line with OP3 (a) and (b) and other control requirements for transport;
- related prohibitions and sanctions as required by OP2 and OP3 (d).

### **NATIONAL IMPLEMENTATION OF BW-RELATED EXPORT CONTROLS IN AFRICA**

Several African countries are looking at enhancing implementation of the BWC and related provisions of UNSCR 1540.<sup>10</sup> Factors like the expected growth in chemical and pharmaceuticals industries,<sup>11</sup> existing

illicit commercial networks, expanding terrorist threats,<sup>12</sup> and the impact that disease outbreaks may have, as shown by the COVID-19 and Ebola outbreaks,<sup>13</sup> are likely playing a role in these developments.

The 2022 Comprehensive Review of the Status of Implementation of UNSCR

10 VERTIC, 'NIM holds CWC drafting workshop with Sierra Leone', available at <https://www.vertic.org/2023/06/nim-holds-cwc-drafting-workshop-with-sierra-leone/#:~:text=From%206%2D8%20June%202023,Norwegian%20Ministry%20of%20Foreign%20Affairs>. VERTIC, 'VERTIC and CRDF Global hold two BWC workshops with Kenya', available at: <https://www.vertic.org/2023/08/vertic-and-crdf-global-hold-two-bwc-workshops-with-kenya/>. UNODA, 'Countering the Proliferation and Illicit trafficking of Dual-Use Materials in Botswana', available at: <https://disarmament.unoda.org/update/countering-the-proliferation-and-illicit-trafficking-of-dual-use-materials-in-botswana/>

11 See African Development Bank Group, 'Africa Industrialisation Index 2022', pp. 4 and 10, available at: <https://www.afdb.org/en/documents/africa-industrialization-index-2022> (accessed 20 June 2024) and South African Institute of International Affairs and United Nations Office of Disarmament Affairs, 'Resolution 1540 and the African Continental Free Trade Area', p. 22, available at: <https://front.un-arm.org/wp-content/uploads/2023/07/unoda-saiia-pb-res-unscr1540-afcfta.pdf> (accessed on 20 June 2024).

12 See South African Institute of International Affairs and United Nations Office of Disarmament Affairs, 'Resolution 1540 and the African Continental Free Trade Area', p.16 available at: <https://front.un-arm.org/wp-content/uploads/2023/07/unoda-saiia-pb-res-unscr1540-afcfta.pdf> (accessed on 20 June 2024).

13 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, 'Signature Initiative to Mitigate Biological Threats in Africa (SIMBA)', available at: <https://www.gpwm.com/africa-signature-initiative> (accessed 25 June 2024).

1540 found that the level of national implementation of all measures grew from 30 per cent to 38 per cent between 2016 and 2022 in the Africa Group.<sup>14</sup> However, it seems that further efforts are required to increase this level of implementation, specifically in the area of export controls over biological weapons-related materials.

Further insights can be derived from the UNIDIR–VERTIC BWC National Implementation Measures Database. The section dedicated to export controls provides information covering licensing for export, import, transfer and transit of controlled items, end-user certification, control lists, carrier requirements and technical, security and accountability requirements, that are also relevant to UNSCR 1540 export control-related implementation.

At the time of writing, of the 25 completed African profiles on the database, 80 per cent of these States were found to have some license or other control requirements for the export of BWC-related items. However, in many cases, these requirements are found in

health, environmental or other sectoral legislation, including legislation on genetically modified organisms. Only a limited scope of BWC-relevant items are therefore covered and a specific non-proliferation purpose is often missing. In only eight per cent of the completed profiles were end-user certification requirements for the export of controlled items found. Similarly, in only 38 per cent of the completed States were lists of items subject to export controls found. While it is acknowledged that this does not provide a complete picture, as not all profiles for African States Parties have yet been completed on the database, it provides a good indication of the areas that may benefit from strengthened implementation.

Different approaches have been taken by African States to implement export controls. Examining them can prove to be a useful exercise to provide inspiration and see what may or may not be suitable for a particular State. Certain States are covering export and other transfer measures through dual-use or strategic trade laws, which usually also

include nuclear and chemical related items, and, in some cases, military items. Such laws are sometimes implemented in coordination with BWC-specific implementing laws, with coordination provisions and mechanisms regarding licensing processes. Some countries choose to implement the export control obligations of UNSCR 1540 and the BWC through general export controls or trade laws with specific implementing provisions on dual-use trade.

Export control measures can alternatively be included in BWC-dedicated laws. Examples reflected in the database show, however, that those laws often focus on criminal provisions. In the instances where they do cover export controls, they often lack UNSCR 1540 specific elements such as re-export, trans-shipment and transit. It is also common for these laws to focus on biological agents and toxins, but not related equipment and technology. As mentioned above, export requirements for certain items may also be found in sectoral laws, but these tend to provide incomplete coverage of export control measures.

14 2022 comprehensive review of the status of implementation of Security Council resolution 1540 (2004), summary, p.6, in document S/2022/899.

## FUTURE OF NATIONAL IMPLEMENTATION OF BW-RELATED EXPORT CONTROLS IN AFRICA

Based on this brief overview of the status of implementation of BW-related export controls in Africa and the legal challenges they raise,<sup>15</sup> it appears that, in many States in the region, targeted legislative action may be necessary should they wish to implement a comprehensive control regime covering all relevant items and associated activities. This can be done either by developing dual-use trade legislation or BWC legislation covering export controls, or by amending existing laws.

Against this background, ongoing awareness-raising and knowledge sharing amongst States of the relevance and benefits of UNSCR 1540 for export controls over BW-related materials is key. States should be aware of the specifics of UNSCR 1540 and the BWC, respectively, and how they can be mutually reinforcing instruments. The sharing of best practices and experiences has proven to be an effective tool for further implementation. As mentioned in UNSCR 1540 successor resolutions, one of the most effective mechanisms to

improve implementation is tailored and coordinated international assistance and cooperation.<sup>16</sup> This includes direct tailored support from entities and organizations such as the BWC Implementation Support Unit,<sup>17</sup> the European Union Partner to Partner Export Control Programme<sup>18</sup> or organizations such as VERTIC, which assists States with their national implementation.<sup>19</sup> In addition, there are a variety of existing tools available to States which can be useful, such as databases, guides, gap analysis and model legislation.<sup>20</sup>

15 On non-legal challenges, see South African Institute of International Affairs and United Nations Office of Disarmament Affairs, 'Resolution 1540 and the African Continental Free Trade Area', available at: <https://front.un-arm.org/wp-content/uploads/2023/07/unoda-sai-ia-pb-res-unscr1540-afcfta.pdf> (accessed on 20 June 2024).

16 UN Security Council resolution 1540 (2004), S/RES/1540, OP7. UN Security Council resolution 2325 (2016), OP10, 11 and 12.

17 UNODA, Global Partnership Support, available at <https://disarmament.unoda.org/global-partnership-support/> (accessed on 20 June 2024).

18 European Union, Partner to Partner Export Control Programme, available at: [https://cbrn-risk-mitigation.network.europa.eu/eu-p2p-export-control-programme\\_en](https://cbrn-risk-mitigation.network.europa.eu/eu-p2p-export-control-programme_en) (accessed 20 June 2024).

19 VERTIC, National Implementation Measures Programme, available at: <https://www.vertic.org/programmes/nim/> (accessed 20 June 2024).

20 VERTIC, 'Survey Template of National Implementation Measures for the 1972 Biological and Toxin Weapons Convention and biological weapons-related provisions of relevant international instruments', 2021, available at [https://www.vertic.org/wp-content/uploads/2021/06/VERTIC\\_BWC\\_Legislation\\_Survey\\_Template\\_EN.pdf](https://www.vertic.org/wp-content/uploads/2021/06/VERTIC_BWC_Legislation_Survey_Template_EN.pdf) (accessed 25 June 2024). See also, European Studies Unit, University of Liege, Publications, available at: <https://www.esu.ulg.ac.be/publications/> (accessed 25 June 2024).

### ABOUT VERTIC

VERTIC is a London-based non-profit organization supporting the development, implementation and verification of international agreements and related regional and national initiatives. Its National Implementation Measures Programme conducts research and analysis and provides tailored assistance to interested States for adherence to and implementation of international instruments focusing on the non-proliferation of chemical, biological, nuclear and radiological weapons and the security of related materials.



