

**NOTE BY THE DIRECTOR-GENERAL****THE IMPACT OF DEVELOPMENTS IN SCIENCE AND TECHNOLOGY IN
THE CONTEXT OF THE CHEMICAL WEAPONS CONVENTION**

1. This Note sets out the Director-General's views on the impact of developments in science and technology in the context of the Chemical Weapons Convention (hereinafter "the Convention"), and includes comments on the report of the Twentieth Session of the Scientific Advisory Board (SAB).
2. An understanding of developments in science and technology is crucial to the full and effective implementation of the Convention, especially in regard to Articles III to XI. Therefore, robust technical advice from the SAB is vital to the work of the Technical Secretariat (hereinafter "the Secretariat") and to the States Parties.
3. A call for voluntary contributions to support the work of the SAB has been issued (S/1119/2013, dated 24 July 2013). The Director-General encourages States Parties to carefully consider the Note.
4. The Third Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (hereinafter "the Third Review Conference") strongly reaffirmed the relevance of developments in science and technology to the Convention (paragraph 9.4 of RC-3/3*, dated 19 April 2013), and noted both the SAB's report on developments in science and technology to the Third Review Conference (RC-3/DG.1, dated 29 October 2012), and the Director-General's response to the report (RC-3/DG.2, dated 31 January 2013).
5. States Parties have thus demonstrated a strong commitment to ensuring that effective policy solutions are developed and that they are grounded in the science underpinning the SAB's advice. In RC-3/DG.2, the Director-General made 29 recommendations, which are being brought forward by the Secretariat for implementation. In the event that action by the policy-making organs is required, the Secretariat will develop appropriate policy advice. The Secretariat intends to brief States Parties at an early opportunity.

**THE REPORT OF THE SCIENTIFIC ADVISORY BOARD OF ITS
TWENTIETH SESSION**

6. The SAB met in The Hague, the Netherlands, for its Twentieth Session (from 10 to 14 June 2013). The report of that session was issued as SAB-20/1, dated 14 June 2013.



7. The Director-General thanked Stefan Mogl for chairing the Twentieth Session, and congratulated Alejandra Graciela Suárez on her election as Chairperson and Christopher Timperley on his election as Vice-Chairperson of the SAB (both starting as from 15 June 2013). He also welcomed four new members of the Board: Carlos David González Berrutti (of Uruguay), Nicia Maria Fusaro Mourão (of Brazil), Christopher Timperley (of the United Kingdom of Great Britain and Northern Ireland), and Francois Mauritz van Straten (of South Africa), and he expressed his gratitude to Igor Rybalchenko, Shuzo Fujiwara, and Stefan Mogl (who will all be leaving the Board this year) for their contributions to the SAB during their terms of office.
8. After a careful study of the report of the Twentieth Session of the SAB, the Director-General is pleased to submit to the Executive Council (hereinafter “the Council”) the following comments.

Developments in science and technology (paragraph 7 of SAB-20/1)

Convergence of chemistry and biology

9. The Director-General would like to express his appreciation to the members of the temporary working group (TWG) on the convergence of chemistry and biology for the report of their third meeting, and for their engagement with experts. The fourth meeting of this TWG will be held from 5 to 7 November 2013.
10. This TWG has been established for a two-year period, and the Director-General looks forward to receiving from the SAB a report on the convergence of chemistry and biology. Such a report should capture both the depth and breadth of the discussion that the TWG has held and should set out the recommendations of the SAB. After reviewing the report, the Director-General will determine whether further analysis of the convergence of the sciences is needed.
11. The Director-General intends to continue the practice initiated last year of organising side events (with TWG members and other experts) in the margins of the Biological Weapons Convention (BWC) Meeting of States Parties and the Meeting of Experts. Such events also have an important education-and-outreach dimension. The next such side event is being scheduled for 14 August, in cooperation with the BWC Implementation Support Unit. Furthermore, the Director-General notes that convergence-related events are being planned by a variety of entities.

Other issues

12. The Director-General notes the SAB’s recommendation for the Secretariat to engage with organisations such as the European Chemicals Agency (ECHA), in order to identify shared interests. The Secretariat is continuing to expand its outreach to a wider range of relevant organisations and entities.
13. The Director-General looks forward to a collaborative effort between the Secretariat and the SAB in considering which science and technology developments should be considered in the context of implementation of the Convention (see subparagraph 7(b) and paragraphs 8, 9, and 29 of RC-3/DG.2). Two useful tools in this context are technology monitoring and horizon scanning (a technique for detecting early signs of

potentially important advances). Thereafter, the Director-General intends to ask the SAB to produce a technical report on developments in science and technology prior to the Fourth Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (as was done prior to the first three review conferences).

Scientific and technological elements of verification technologies, emerging technologies and new equipment (paragraph 8 of SAB-20/1)

14. The Director-General expresses his appreciation to the SAB for establishing a TWG on verification and to the members of this TWG for the report of its first meeting and for the intersessional work carried out. The Director-General agrees with the SAB's recommendation and encourages the TWG to build momentum in advance of its second meeting, which will be held on 23 to 25 September 2013.

Further scientific and technological advice relevant to the Convention (paragraph 9 of SAB-20/1)

Education and outreach in science and technology

15. The Director-General expresses his appreciation to the members of the TWG on education and outreach in science and technology for the report from its second meeting. Education and outreach is a collective effort that requires the active support of States Parties, and also involves collaboration with other actors, including international organisations, professional associations, industry associations, and scientific unions. The Director-General supports efforts to reflect the objectives of the Convention into existing codes of ethics of chemistry organisations, such as the International Union of Pure and Applied Chemistry (IUPAC) and industry associations such as the International Council of Chemical Associations (ICCA). The Director-General also thanks members of the TWG for their continued support in the development of educational materials for students of chemistry.
16. The Secretariat is developing a strategy to guide education-and-outreach activities, and a non-paper on this topic was made available to States Parties on 15 July 2013. Furthermore, the Secretariat is planning a series of regional meetings on education and outreach for 2014 and in relation to the commemoration of the centenary of the first use of chemical weapons in 2015. The Director-General would like to encourage States Parties to support such events, and notes the positive signals received from several of them.
17. The Director-General recognises the significant efforts by some States Parties in reaching out to a variety of stakeholders, and encourages these and others to share information about their efforts (for example, during the annual meetings of National Authorities and regional meetings).
18. Following the highly positive engagement on education and outreach during the Fourteenth Meeting of National Authorities in 2012, the Secretariat has included this topic also on the agenda of the Fifteenth Annual Meeting of National Authorities, which will take place at the end of November this year (along with a separate agenda item on science and technology). The third meeting of the TWG on education and outreach will take place in parallel with the National Authorities meeting.

19. The Director-General is grateful to the SAB and to TWG members for continuing to participate in and make interventions at relevant events, meetings, networks, and projects arranged by other organisations. He notes that members of the TWG will be participating in the 44th IUPAC World Chemistry Congress in Istanbul, Turkey, in August 2013. For its part, the Secretariat is augmenting its outreach to scientific communities (for example, through attending and making presentations at a variety of science and technology conferences, such as the above-mentioned IUPAC event and the 15th Asian Chemical Congress in Singapore in August 2013).

Other issues

20. During the SAB's Twentieth Session, the Director-General introduced two new questions for analysis—one on riot control agents (RCAs) (see paragraphs 9.1 to 9.3 of SAB-20/1) and the second on assistance and protection (see paragraphs 9.12 to 9.15 of SAB-20/1). He thanks the SAB for agreeing to provide technical advice and looks forward to receiving responses to these questions in early 2014.

FUTURE WORK AND OTHER BUSINESS OF THE SCIENTIFIC ADVISORY BOARD

21. Interaction between the SAB and the policy-making organs has increased in the past two years. The Director-General is pleased that this continued during the Twentieth Session of the SAB: Interested States Parties were briefed by the Chairperson and Vice-Chairperson on 13 June 2013. The high degree of participation of delegates is another indicator of the interest in science and technology demonstrated by States Parties. The Chairperson of the SAB will continue to be invited to provide such briefings in the margins of relevant sessions of the Council, as well as during sessions of the Conference of the States Parties. Additional means by which interaction can be enhanced will continue to be explored (and could include having a standing item on science and technology on the agenda of the annual meetings of National Authorities).
22. The Twenty-First Session of the SAB is tentatively scheduled for 23 to 27 June 2014. The Secretariat will, as usual, make appropriate arrangements for the Twenty-First Session, and for the TWG meetings that will precede it. The Director-General is extremely grateful to the SAB and TWG members for their intersessional work.
23. Several factors determine the number of SAB sessions held each year, including the following: The scope of the SAB's technical deliberations, the costs involved, and the Secretariat's follow-up to the SAB's recommendations. Looking at matters in terms of a five-year perspective, it can be argued that two sessions need to be held in each of the two years preceding a review conference (when the SAB is developing its report on science and technology for the review conference), and that one session will usually be sufficient in the year of a review conference as well as in each of the two subsequent years.