

Preparing for the 4th Review Conference of the Chemical Weapons Convention: Some Observations on Process and Outcomes

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Summary

The 4th Review Conference to the 1993 Chemical Weapons Convention (CWC) will be held in 2018. The Member States will, in light of the recent experiences in Iraq and Syria and in accordance with the regime's seven core objectives, continue to clarify the focus and balance of activities going forward.

The Fourth Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (4th CWC Review Conference) will be held in 2018. A rebalancing of the resources and focus of the Organisation for the Prohibition of Chemical Weapons (OPCW), the body that implements the 1993 Chemical Weapons Convention (CWC), is occurring. The OPCW has a staff authorization of circa 459 (currently about 420) and its 2017 Programme and Budget totals €67,798,200 of which €29,129,200 are earmarked for verification-related costs. The financial allocations in the Annual Programme and Budget reflect the fact that most stockpiled chemical weapons (CW) have been destroyed. Currently approximately 95 per cent of declared CW stockpiles have been verifiably destroyed and four states remain outside the treaty regime (Egypt, Israel, North Korea and South Sudan). The rebalancing is also reflected in planning processes carried out in accordance with Results-Based Management (RBM) principles and objectives and are reflected in the OPCW's Medium Term Plan (MTP).

The OPCW's verification capacity and experience remain relevant in view of recent confirmed cases of CW use in Iraq and Syria, and the investigation of the assassination of Kim Jong-nam (Kim Jong-un's older half-brother) reportedly with VX at the Kuala Lumpur International Airport 2 (KLIA2) on 13 February 2017. The use of sarin on 4 April 2017 in Khan Shaykhun (Idlib governate) and the 6 April retaliatory US Tomahawk cruise missile strikes against the Shayrat Airfield have raised political tensions among governments at the UN Security Council, the OPCW Executive Council (EC) and elsewhere.

Some have argued that, given the repeated CW use in Syria, the taboo against chemical warfare is weakening.¹ Others maintain that while having zero tolerance for CW use is to be preferred as an ideal, its continued use in the armed conflicts in Iraq and Syria does not fundamentally alter international, including customary, law. Also states and civil society do not openly advocate or accept the development, stockpiling or use of such weapons.

Some observers also question why the OPCW does not publicly act in cases of non-official allegations of 'chemical weapons' use.² Some of the allegations are not sufficiently technically grounded. There can be confusion over the significance of fumes on the battlefield. There can also be uncertainty as to whether white phosphorus is prohibited. If used as a tracer round it is not. Also states (not members of the public) must bring such matters forward through, for example, the EC. Having said this, the specific circumstances connected to such allegations can (and should) be further clarified publicly in an authoritative manner.

The OPCW's annual Programme and Budget is structured according to seven 'core objectives' (formerly 4 'pillars'): (a), chemical demilitarisation, (b) non-proliferation/non-re-emergence of chemical weapons, (c) assistance and protection, (d) international cooperation, (e) universality, (f) national implementation, and (g) organizational effectiveness. These objectives inform policy formation, including preparations for the 4th CWC Review Conference.

Chemical demilitarisation

Since the CWC entered-into-force (EIF) in April 1997 the Member States have focused on verifying the destruction of CW stockpiles

and associated infrastructure. At EIF CWC more than 85 per cent of the OPCW's resources were devoted to routine declarations and verification of CW facilities, as well as of the chemical industry. This amount has since dropped to below half of the nominal annual Programmes and Budgets.³

Member States and interested observers have also considered whether Russia and the United States (the two major possessor states) would meet the final extended deadlines in April 2012 and what the penalties should be for their failing to do so. The EC consequently sends special delegations to visit facilities in the two countries annually to underline the political significance attached to the matter by the Member States. Russia and the United States have also provided additional reporting on their efforts to the Conference of the States Parties (CSP) and EC.⁴ The United States will complete its destruction operations by 2025/2030, while Russia expects to complete its operations within the coming months.

Old and/or abandoned chemical weapons (OACW) will continue to be recovered for some years, if not decades.⁵ Work has also been carried out to develop technologies and to conduct evaluations on the environmental effects of sea-dumped CW, principally the possible effects of arsenic (e.g., from Lewisite) and sulphur mustard (H, HD) hydrolysis products. The Secretariat has followed OACW developments, including by sending representatives to the annual UK Dstl-organised Chemical Weapons Destruction (CWD) conferences, and, in principle, following the results of information survey work conducted under the auspices of the UN Secretary-General (in accordance with a 2010 Second Committee decision).⁶ The Secretariat has also provided informal technical advice to some Member States

concerning the occasional recovery of OACW items. Private sector interest and environmental concerns may prompt the Member States to modify the role of the OPCW on sea-dumped-related matters.⁷

Nonproliferation/Non-re-emergence of chemical weapons

Shifts in the priorities of the Member States may be reflected by changes in terminology. During the 1993-1997 Preparatory Commission (PrepCom) and for the period immediately following EIF CWC, the term 'nonproliferation' was avoided and—with the exception of some national papers and statements—discussion of terrorism was largely absent in OPCW documentation. The term nonproliferation began to appear in OPCW documentation with some regularity during the tenure of the second Director-General (DG) Ambassador Rogelio Pfitter of Argentina. Under the OPCW's third and current DG, Ambassador Ahmet Üzümcü of Turkey, the term has become standard, although some Member States continue to view its use as indicative of a mainly Western-driven agenda that seeks to implement global strategic trade controls to the possible detriment of International Cooperation and Assistance (ICA) activities (Article XI). As such 'non-re-emergence of chemical weapons' is also used.

The Member States traditionally took the view that non-state actor threats were largely an internal matter that should be addressed by the full implementation of the relevant CWC provisions ensuring that all legal persons under a State Party's jurisdiction and control are held legally accountable for any acts of chemical warfare. The Member States have since adopted a more pluri-lateral framework/consultative approach to such threats. The OPCW has, since 2001, contributed to The Open-Ended Working Group on Terrorism (OEWG-T)

and, more recently a sub-working group on non-state actor threats. Secretariat and 1540 Committee officials have also interacted since the UN Security Council passed Resolution 1540 in 2004.

The OPCW has also been a member of the UN Counter-Terrorism Implementation Task Force (CTITF) since it was established in 2005. In 2011 the Secretariat helped to prepare a report within the CTITF framework on interagency coordination in the event of a chemical and/or biological terrorist attack. In addition, the 2016 12-month extension of the OPCW-UN Joint Investigative Mechanism (JIM) in Syria carries a greater emphasis to investigate suspected cases of CW use by terrorist groups.

It should also be noted that the OPCW Laboratory has conducted work on computational approaches to the study of sulphur mustard (H, HD), including through the identification of two main impurities that are associated with using the Levinstein [production] Process and their degradation/reaction products in the environment. These findings have been compared against samples taken from Iraq and Syria for the purposes of attribution of responsibility for CW attacks. This work has contributed to the confirmation of the use of sulphur mustard in the Kurdistan Region of Iraq.⁸ Further authoritative literature on alleged chemical weapons comprises cohort studies such as family members exposed to sulphur mustard from an artillery shell attack in August 2015 in Marea, Syria.⁹

Assistance and protection

The OPCW has advised and supported Iraq on sampling and analysis related to the self-described Islamic State (IS) in the context of recent and ongoing combat operations, as well as the verified destruction of items

leftover from the period of Saddam Hussein at the al-Muthanna Complex. In 2016 the OPCW established the Rapid Response Assistance Mission (RRAM) to help address such requirements.

Strengthening chemical security through the relevant articles of the CWC remains a priority for the Member States which, in turn, is reflected in various planning documentation such as the MTP. In March 2017 the Secretariat circulated to the Member States a survey on needs assessment and compilation of tools, guidance, and best practices on chemical safety and security management in partial fulfillment of a decision by the 16th CSP to identify and agree a framework for the full implementation of Article XI.¹⁰

In practice, chemical safety and security concepts are inter-linked. Within a CWC context, it is important to clarify and maintain appropriate distinctions with respect to linkages (actual and potential) between chemical safety and security on the one hand and the full implementation of Article XI on the other hand. The Member States may possess differing understandings on the appropriateness of linking some (or all) chemical security measures and concepts with Article XI. Such considerations can be addressed partly by focusing on operational or technical aspects of chemical security in particular.

International cooperation

In the years following EIF of the CWC the African Group supported the opening of an OPCW office in the region partly with a view towards strengthening Article XI implementation on economic and technological development. This proposal was not supported by some other Member States on the grounds that to do so would suggest a need to open similar offices in other

geographic regions based on the CWC-defined geographic groupings. Such a development would have financial and other implications for the treaty regime. Many of the OPCW capacity-building and outreach meetings have nevertheless been held in Africa.

The OPCW maritime removal operations of chemicals from Syria (2013-2014) and Libya (2016) demonstrate an increased use of operational planning groups (OPGs) or equivalent that coordinate verification and destruction-related activities. For example, the donor architecture of the 2016 Libyan chemicals removal operation (OPRECLIB) cost approximately \$(USD)7 million and included financial and in-kind contributions from inter alia Canada, Denmark, Finland, France, Germany, Italy, Malta, Spain, the UK and the United States. In addition, the United Nations Office for Project Services (UNOPS), private sector actors and others contributed to these efforts.

There are limits to which the published literature can address international assistance—particularly ICA activities such as the Associate Programme—and organisational effectiveness (which is more in the realm of management theory as it relates to the UN) (please see below).

Universality

Although the CWC's membership is nearly universal, two or three states may remain outside the treaty over at least the medium term. North Korea has continued the practice of not acknowledging letters by OPCW DGs and outreach efforts by other officials requesting dialogue on possible CWC accession.

An enormous literature, mainly in the nuclear weapons/Non-proliferation Treaty (NPT) context, has been developed on achieving a WMD Free Zone in the Middle

East (WMD-FZ ME).¹¹ Iran maintains a long-held position of not wishing to engage in direct talks with Israel. Israel maintains that its participation in multilateral disarmament and arms control regimes concerning nuclear, biological and/or chemical (NBC) weapons and their delivery systems cannot practically occur until the region's broader peace and security concerns are sufficiently addressed.

Iran is an original party to the CWC and was one of the more active delegations during the PrepCom. Iran has generally interpreted 'managed access' verification questions fairly narrowly (e.g., by opposing some proposed changes to the content of and procedures for utilising the OPCW Central Analytical Database (OCAD) during inspections). As a signatory to the CWC, Israel actively participated at the PrepCom, including on the development of 'managed access' verification procedures, such as the development of blinding software to give a yes/no response for gas chromatography/mass spectrometry (GC/MS) readings. Israel has also attended OPCW CSPs as an observer for some years and has interacted with OPCW officials and facilitators tasked with promoting universal treaty membership.

Many Middle East and North African (MENA) states have maintained that Israel must first accede to the NPT prior to their joining the CWC.¹² This position began to break down with the accession of Libya to the CWC in 2004, followed by the accession of Iraq (2009), Lebanon (2008) and Syria (2013). The current and previous OPCW DGs have publicly questioned whether any state should maintain the view that it might engage in chemical warfare.

The case for a stepwise approach for states in the region to accede to the CWC has been recently revisited¹³ Proposals have included confidence-building measures (CBMs)

combined with track 1.5/2 processes, such as in the fields of counter-terrorism, and chemical and biological safety and security. Some processes and other engagement are desirable and necessary.

However, any decision to join the multilateral NBC disarmament and arms control regimes partly depends on whether actors in the region agree or, in effect, accept delinking some of the WMD-FZ ME policy positions and, perhaps, establishing new or revised political linkages. Politically-motivated challenge inspections (CI) of Israel must be avoided. CWC managed access provisions should also be respected—not abused—by both the host country and the CWC Member States collectively. This includes cases where other sensitive security and defence activities are co-located at, or are adjacent to, inspection sites. Reductionist disagreements in the Syria context should also be avoided (or at least mitigated) by the Member States by keeping separate technical and political matters and by attempting to adhere to longer-term perspectives.

National implementation

The Member States undertake to adopt the necessary measures to implement their CWC obligations (Article VII). Progress in this area, while much improved, was uneven in the period immediately following EIF CWC. The OPCW therefore developed a national legislation implementation kit (available on its website) and implemented several action plans with European Union (EU) support. The Secretariat regularly updates the Member States on the status of these efforts, including at the annual CSPs. Currently 188 National Authorities (NAs) have been established, 118 States Parties (SPs) have legislation in place to implement and fulfill their obligations under Article VII,¹⁴ and 149 SPs have informed the OPCW of the

legislative and administrative measures they have taken to implement the CWC.

Institutional and political fractures are currently worsening over how to handle Syria—a CWC party since 2013. At a special EC meeting in April 2017 some Member States used pointed language in stating that Syria is in fundamental non-compliance with its CWC obligations and withheld chemical weapons. At least two SPs maintained that opposition forces in Syria are responsible for the sarin casualties of 4 April. At least one SP expressed regret that the United States chose to carry out the missile strike in lieu of pursuing CWC investigation of alleged use (IAU) provisions. Several SPs also supported proposals tabled at the UN, the OPCW and elsewhere that a further international technical investigation body—in addition to the JIM and the OPCW Declaration Assessment Team (DAT) and the OPCW Fact-Finding Mission (FFM)—be established to assess the 4 April incident. Other SPs argued that to do so would be superfluous to the mandates of the existing international bodies' work and would further complicate international efforts to agree attribution of responsibility for the 4 April attack and other cases. On 20 April the reconvened special EC meeting voted down (6 in favour, 21 against, 13 abstentions) a draft decision tabled by Iran and Russia to establish such a technical investigative body.¹⁵ On 5 May 2017 the FFM issued its latest public report concerning the confirmed presence of sulphur mustard related to a 16 September 2016 incident reported by Syria at Um-Housh. This finding is based on an examination of samples and material evidence handed to the FFM in the presence of official representatives of the Russian military.¹⁶

Organizational effectiveness

There has been an increased acceptance by the Member States to submit declarations

digitally (via the Electronic Declarations Tool for National Authorities, EDNA). Following EIF CWC essentially all the Member States' declarations were submitted in paper format. Digitisation (and making searchable) the Member States' declarations and inspection reports is ongoing and should result in a streamlining of verification procedures and analysis.

A further trend is the incorporation by the OPCW of private-sector management approaches, including ensuring staff turnover. This was initially done through the adoption of results-based-budgeting (RBB) and the adoption of a 7-year tenure policy. Today this is reflected in the issuance of MTPs, the implementation of enterprise-resource-planning (ERP)—including through the development of an information-services strategic plan, and the use of *SMARTStream* software to implement ERP. The OPCW has allocated €782,500 to ERP under the 2017 Programme and Budget. The structure of RBB further evolved in 2011 under the rubric of RBM. The annual Programmes and Budgets are structured accordingly.

Structuring Review Conferences

Review Conference planning typically follows standard procedures and templates. Some of the outcomes are process-oriented, while other outcomes meet the standard definition of a 'decision' (some 'decisions' taken within multilateral disarmament and arms control treaty regimes are actually process-oriented, or are statements of concern or political commitment).

Expertise associated with implementing the CWC include: arms control verification, chemistry, convergences between chemistry and the life sciences, decontamination methods and strategies, engineering, history, industrial process design and control, intelligence methods, international relations,

law, medicine, and particulate modeling. It can be difficult for non-specialists to judge competing narratives of ongoing (suspected and confirmed) cases of CW use in Iraq and Syria. Partly for this reason, it is useful for the OPCW to have some personnel who combine a scientific and technical background with operational expertise in the security and defence sector. This can include those familiar with munitions development, testing and/or disposal, or those familiar with how dual-purpose technology, equipment and items might be used for prohibited purposes. The majority of OPCW policy positions are held by former diplomats or individuals with diplomatic experience (e.g., within the UN system). As such, they are experienced in the sending and receiving of political signals and the drafting of documentation that can attract consensus support.

As a matter of general principle, the Member States undertake to improve the effectiveness of strengthened review processes. This typically includes: (a) clarification or confirmation of the purposes of the Review Conference, Preparatory Committee, Committee of the Whole (CoW) and Open-ended Working Group (OEWG), respectively; and (b) agreeing agendas, dates, institutional contacts, officer appointments, programmes of work, reporting mechanisms, rules-of-procedure, timetables, and venues.

Facilitators (or similar) should ideally develop a good sense of the 'landscape' of political cross-linkages. They should understand when (and how) to limit discussions when they risk creating unhelpful complications. Such officials should also ideally maintain a good sense of the significance and nature of documentation flows so that the relevant information goes where it is needed in a timely manner and is

retained (as appropriate) for future reference.

Review Conferences traditionally evaluate the implementation of the regime article-by-article. The Member States reaffirm their political commitment to the regime and its legal norms. The Review Conference should also ideally put in place or strengthen mechanisms for consultations and clarification in order to maintain and strengthen implementation practice both politically and operationally.

On 14 July 2016 the EC established an Open-Ended Working Group on the Future Priorities of the OPCW (OEWG-FP).¹⁷ This body is to serve as 'an informal mechanism for receiving, discussing, prioritising, elaborating, and integrating ideas and proposals' from the Member States and the Secretariat on future OPCW priorities concerning 'any aspect of the Convention or developments relevant to it with a view to supplying a holistic, coherent, forward-looking, and action-oriented document'. The group is also tasked to generate recommendations for the 4th CWC Review Conference as 'a contribution to the full, effective, and non-discriminatory implementation of all [of the] provisions of the Convention'.¹⁸

The first CWC Review Conference, chaired by Ambassador Nourreddine Djoudi of Algeria, was convened in 2003 in the wake of the ouster of Ambassador José Bustani of Brazil as DG the previous year. This Review Conference was structured as an article-by-article review combined with thematic elements. The OPCW was experiencing budgetary pressures partly due to an inability to transfer funds leftover from the end of a given calendar year into the next, non-payment (or late payment) of annual contributions, and the absence of a working

capital fund (WCF) to smooth expenditures. Full and effective implementation of the CWC (i.e., fulfilling the key provisions of Article VII), as well as achieving universal membership, were major priorities. The OPCW was transitioning to a 7-year tenure policy for most staff.¹⁹ This Review Conference was planned and implemented by many who had participated in the PrepCom. Substantial attention was devoted to riot control agents (RCAs) and Non-Lethal Weapons (NLWs) at a side event held at The Hague Peace Palace. The importance of maintaining readiness to conduct CIs was also given some prominence in view of the uncertainty among the Member States as to whether one would actually be triggered.

The Second CWC Review Conference was held in 2008. Ambassador Lyn Parker of the UK chaired the OEWG, while Ambassador Benchaâ Dani of Algeria chaired the CoW which both first met in July 2006. The Chair of the Review Conference was Ambassador Waleed El Khereijsi of Saudi Arabia. Several facilitators, each of whom held responsibility for specific areas (e.g., general obligations, functioning of the organisation, national implementation, Article VI), assisted consultations among the delegations and kept the DG apprised of developments. The CoW found itself in increasingly protracted discussions and developing a draft report with a growing number of brackets (the 'Parker text'). This text was reviewed by approximately 21 member states who met in parallel. Once the 'other group's' draft document was circulated to the general conference, it became evident to many delegations that they had not been fully consulted. Many of those involved considered this exercise to be necessary in order to achieve a successful outcome within the CSP's timeframe. Issues of some prominence included full and effective implementation of Article XI (including a recurring proposal by the African Group to establish a regional

OPCW office in Africa), and a consideration of what the consequences should be for Member States not meeting their CW destruction deadlines. The OPCW introduced RBB in 2004 and RBB principles and objectives were reflected in the outcomes of this Review Conference.

In preparing for the Third CWC Review Conference in 2013, the DG used the 2011 report prepared by the Advisory Panel on Future OPCW Priorities (prepared under the chairmanship of Ambassador Rolf Ekéus of Sweden) as a basis for consultations with delegations.²⁰ Chemical industry verification issues had, by this time, been addressed to a significant extent. SPs not meeting CW destruction deadlines had become less of a concern among the members. The Ekéus Report also influenced the development of longer term OPCW strategy development, including the MTP.

Looking ahead

The OPCW's cooperation and outreach activities have substantially expanded under the current DG. In 2016 the Advisory Board on Education and Outreach (ABEO) was established. Its work is partly informed by reports by 'coordination groups' in at least nine areas which, in turn, provide a useful basis for structuring goals and actions to promote the OPCW's relevance and visibility.²¹ While ABEO activities should have an element of comprehensiveness in approach, the outcomes must also possess relevance (actual and perceived) and interest among stakeholders. Private sector activities and planning strategies (including integration of sub-strategies) and associated documentation may offer a useful basis for ensuring that the ABEO (in particular) and OPCW (more broadly) can maintain systematic engagement with all relevant stakeholders, while achieving operationally-relevant goals.

Training and outreach seminars with customs and licensing officials are now well-established. The OPCW continues to adopt elements of organizational structuring and policy objectives that are derived from the private sector such as ERP, RBM and a knowledge management programme designed to retain institutional memory and expertise. The Member States have generally adopted digital reporting (e.g., through the use of EDNA). The OPCW also has well-established operational experience resulting from its work in Iraq, Syria and Libya. This includes using private contractors for drafting elements of destruction plans, coordinating the provision of destruction assistance by the Member states, and cooperating with UNOPS, the World Health Organization (WHO), the World Customs Organization (WCO), Interpol and the United Nations Office for Disarmament Affairs (UNODA).

As previously mentioned, the OEWG-FP is mandated to look at future OPCW priorities. It is not expressly tasked to organize the Fourth CWC Review Conference (although the EC may modify the group's mandate to do so if it so wishes). Should the Member States so decide, the Secretariat can function as the principal planning and organizing body for the Review Conference. It is unclear who (institutionally or individually) is working to obtain a better understanding of the structural and planning elements of the Review Conference among the Member States. This includes attempting to identify possible political cross-linkages, especially with respect to Syria's treaty status.

In previous Review Conferences a limited number of delegations have undertaken such 'mapping' exercises. It might be useful for the OPCW to designate one or more Review Conference facilitators to ensure that Syria-related matters are well-managed and do not detract from achieving successful Review

Conference outcomes in other CWC implementation areas. It should also be noted that the terms of reference for the OEWG-FP make clear that while informal consultation processes are part of normal practice, there must not be an 'in-group' and 'outer-group' of 'most interested parties' and 'interested parties' in the lead up to and holding of the 4th CWC Review Conference.

The default position of the Member States for the routine declaration and verification system remains to limit the cost, scope and level of intrusiveness to that deemed to be sufficient for effective CWC implementation. This position might be modified somewhat in light of Syria-related developments.

There is continued concern of an effective 'backdoor' developing to the legal prohibition against chemical warfare (i.e., riot control agents (RCAs), non-lethal weapons (NLWs), less-than-lethal weapons, incapacitants, and central nervous system (CNS)-acting chemicals). Switzerland deserves great credit for moving the discussion on CNS-acting chemicals forward, including at the 2016 CSP and into 2017.

There is further scope to support the capacities of the newly-established RRAM teams, remote monitoring capacities (e.g., through the use of the secure information exchange (SIX) system based on the experience of the 2016 Libyan maritime chemicals removal operation to Germany), and the various verification-related work streams of the OPCW's Scientific Advisory Board (SAB) (e.g., best practices for sample stability, biomedical sample analysis, and the handling of chemicals that have parent structures listed in the CWC's Annex on Chemicals but which are altered via isotopic labeling or by isolating a unique stereoisomer). Medical pathology video and questionnaire best practices may also have verification relevance in the further

assessment of evidence of CW use in Syria and (possibly) Iraq.

The process of identifying and electing a new DG has already begun. This process presents new opportunities for cross-linking political positions within (and outside) the CWC regime. This work will reflect a political calculus for achieving equitable geographic balance among the 4th CWC Review Conference officers and similar changes in the top Secretariat management (which, in turn, must also reflect an appropriate geographic balance). Such processes should be characterized by appropriate discretion and proper consultations, as well as being carried out in a spirit of good will, including with regard to achieving successful 4th CWC Review Conference outcomes.

4th CWC Review Conference principles:

- observe the principles of transparency and inclusiveness when implementing consensus-driven processes, while avoiding loss of control and focus by Review Conference officers/facilitators (or equivalent).

- support the development of a longer-term balanced programme of work and associated capacities vis-à-vis relevant vision(s) for the treaty regime.

- examine options for retaining specialised expertise at OPCW (irrespective, initially, of their potential implications for geographic balance).

Longer-term activities

- analytical support for sample taking and forensics analysis.

- chemical safety and security best practices and training.

- logistics support, including contingency operations by ad hoc operational planning groups.

- further develop and agree key performance indicators based on RBM objectives and principles to better focus concepts of 'international outreach', 'capacity-building' and similar.

- identify potential measures to integrate the work of the ABEO with that of other OPCW bodies.

- review social media platforms and information exchange apps used in industry, research and training sectors for possible adoption by the OPCW.

- review current practices by national academies of science to promote peaceful uses of chemistry and their potential relevance for assessing and structuring ICA programmes and activities.

- review technology absorption indicator systems (e.g., by the Organisation for Economic Co-operation and Development, OECD) and their potential relevance for assessing and structuring ICA programmes and activities.

- develop case studies involving inter-and intra-regional cooperation on chemical security.

- map chemical security certification frameworks and practices.

- review state-of-the-art autonomous and semi-autonomous platforms for chemical security (e.g., the use of UAVs for chemical facility security and safety monitoring).

- incorporate, as appropriate, autonomous and semi-autonomous platforms into approved inspection equipment list for use in investigations of alleged use (IAU), and/or routine/non-routine inspections.

- consider the RRAM capabilities/model for counter-terrorist scenarios.

Conclusions

The balance and focus of the CWC regime are changing. At least two visions may be realized: one of an OPCW focused on CW threats with most resources allocated accordingly; the other for the OPCW to serve as a model of international outreach and capacity-building for the peaceful uses of chemistry.

It is important that the Secretariat remains focused on technical matters, while the political matters (including preferred interpretations and outcomes) are dealt with by the CWC Member States. Finally, the Member States will, in accordance with the seven core objectives, continue to clarify the focus and balance of OPCW activities going forward.

*The views expressed are the author's and do not necessarily reflect those of the Stockholm International Peace Research Institute (SIPRI).

Endnotes:

- ¹ E.g., Bentley, M., 'Strategic taboos: chemical weapons and US foreign policy', *International Affairs*, vol. 90, no. 5 (2014), pp. 1033-1048.
- ² E.g., whether the use of white phosphorus in the Gaza Strip by Israeli security personnel as part of Operation Cast Lead in 2008-2009 constituted chemical warfare.
- ³ It should also be noted that destruction and removal operations involving Libyan and Syrian chemical weapons have been offset by special assistance funds and in-kind contributions by many of the Member States.
- ⁴ Only Iran has clearly objected to the US (only) not meeting its final CW destruction deadline which, in turn, were drafted by the CWC negotiators based on political, rather than technical, considerations.
- ⁵ See CWC, article II, paras. 5-6.
- ⁶ A/C.2/65/L.32/Rev.1 (24 Nov. 2010).

- ⁷ CW dumped at sea prior to 1 Jan. 1985 need not be declared.
- ⁸ SAB-25/1*, paras. 9.17-9.20 (31 Mar. 2017).
- ⁹ The immediate and longerterm effects of the single family exposed to the HD shell are documented by researchers at the Dept. of Medical CBRN Defence at the Saglik Bilimieri University (Ankara, Turkey), and Tarsus State Hospital (Mersin, Turkey). (Saglik Bilimieri University was transformed into a civilian university in late 2016 in reaction to the July 2016 coup attempt.) The researchers are S. Sezigen, K. Ivelik, R. K. Eyison, Z. Kuna, M. Ortatatli and L. Kenar. The baby died on 4 Sep. 2015 from severe respiratory failure and secondary bacterial infection due to bone marrow suppression.
- ¹⁰ S/1483/2017 (30 Mar. 2017); and RC-3/3* (19 Apr. 2013).
- ¹¹ The 2010 NPT Review Conference called for convening a conference for to be held in 2012 to be attended by all states of the ME in order to establish a zone free of nuclear weapons and all other weapons of mass destruction.
- ¹² The term MENA is objectionable to some in the region. The author does not wish to imply he endorses the term.
- ¹³ E.g., Bar-Yaacov, N., 'Achieving universality of the Chemical Weapons Convention in the Middle East', *Survival*, vol. 57, no. 6 (2015), pp. 159-180.
- ¹⁴ S/1485/2017, p. 13.
- ¹⁵ EC-M-54/DEC/CRP/Rev.1, 19 Apr. 2017.
- ¹⁶ S/2017/400, 5 May 2017.
- ¹⁷ 'Decision, establishment of an Open-Ended Working Group on the Future Priorities of the OPCW', OPCW document EC-82/DEC.2, 14 July 2016.
- ¹⁸ 'Decision, establishment of an Open-Ended Working Group on the Future Priorities of the OPCW', OPCW document EC-82/DEC.2, 14 July 2016, para. 1, pp. 1-2.
- ¹⁹ The decision was taken in April 2003 and effectively implemented starting in 2012. The DG has flexibility to retain or to rehire a limited number of key staff on a limited basis.

²⁰ Note by the Director General, report of the Advisory Panel on Future Priorities of the Organisation for the Prohibition of Chemical Weapons', OPCW document S/951/2001, 25 July 2011, <https://www.opcw.org/fileadmin/OPCW/PDF/Advisory_Group_report_s-951-2011_e_.pdf>.

²¹ ABEO-3/1, 16 March 2017, para. 8.