



**OPCW**

**Working Group for the Preparation of  
the Third Review Conference**

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**NOTE BY THE TECHNICAL SECRETARIAT**

**REVIEW OF THE OPERATION OF THE CHEMICAL WEAPONS CONVENTION  
SINCE THE SECOND REVIEW CONFERENCE**

**1. INTRODUCTION**

- 1.1 The Director-General, in accordance with the practice established by the Open-Ended Working Group for the Preparation of the First Special Session of the Conference of the States Parties to the Chemical Weapons Convention (hereinafter “the First Review Conference”) and the Second Special Session of the Conference of the States Parties to the Chemical Weapons Convention (hereinafter “the Second Review Conference”), herewith submits this Note to the Open-Ended Working Group for the Preparation of the Third Special Session of the Conference of the States Parties to the Chemical Weapons Convention (hereinafter “the Third Review Conference”) with the aim of providing inputs by the Technical Secretariat (hereinafter “the Secretariat”) in order for States Parties to review the operation of the Chemical Weapons Convention (hereinafter “the Convention”) and discuss ways forward in the next five years and beyond at the Third Review Conference, to be held in April 2013 in accordance with paragraph 22 of Article VIII of the Convention.<sup>1</sup>
- 1.2 This Note is composed of four sections. The introductory comments by the Director-General in Section 2 summarise the major developments and achievements of the Convention since the Second Review Conference. The background information on the operation of the Convention since the Second Review Conference is provided thematically in Section 3. Section 4 looks at the challenges ahead and presents the Director-General’s concluding remarks and his views on mid-term and long-term strategies for the operation of the Convention.
- 1.3 The background information on the operation of the Convention since the Second Review Conference covers the following areas:
- (a) the role of the Chemical Weapons Convention in enhancing international peace and security;
  - (b) ensuring the universality of the Chemical Weapons Convention;
  - (c) developments in science and technology;

<sup>1</sup> The cut-off date of this Note is, in principle, 30 June 2012.



- (d) general obligations and declarations related thereto;
- (e) destruction of chemical weapons and destruction or conversion of chemical weapons production facilities;
- (f) verification activities of the OPCW;
- (g) activities not prohibited under the Chemical Weapons Convention;
- (h) national implementation measures;
- (i) consultations, cooperation, and fact-finding;
- (j) challenge inspections and investigations in cases of alleged use of chemical weapons;
- (k) assistance and protection against chemical weapons;
- (l) economic and technological development;
- (m) Articles XII to XV and final clauses;
- (n) the protection of confidential information;
- (o) the general functioning of the Organisation for the Prohibition of Chemical Weapons; and
- (p) the relationship of the OPCW with the chemical industry and other stakeholders.

## **2. INTRODUCTORY COMMENTS BY THE DIRECTOR-GENERAL**

### **Success of multilateralism**

- 2.1 The experience of the implementation of the Convention has illustrated the success of multilateralism. The Convention has remained one of the most successful instruments of disarmament, featuring non-discriminatory obligations for the prohibition and destruction of chemical weapons under strict international control. This was noted by the First Review Conference in 2003 and reaffirmed by the Second Review Conference in 2008. The following comments summarise the major developments and achievements of the Convention since the Second Review Conference.

### **Universality**

- 2.2 The Convention has made further progress toward universal adherence. With five more countries (the Bahamas, the Dominican Republic, Guinea Bissau, Iraq, and Lebanon) joining the Convention since the Second Review Conference, 188 States Parties are now committed to a world free of chemical weapons. As a result, only eight States (Angola, the Democratic People's Republic of Korea, Egypt, Israel, Myanmar, Somalia, South Sudan, and the Syrian Arab Republic) remain outside the

Convention. This accomplishment is due to the concerted efforts of States Parties and the Secretariat.

### **General obligations**

- 2.3 States Parties have remained committed to fulfilling their general obligations as set forth in Article I of the Convention.

### **Verification**

- 2.4 The credibility and effectiveness of the Convention have been demonstrated to the international community through a successful verification regime implemented by the Organisation for the Prohibition of Chemical Weapons (OPCW) and comprising systematic verification of the destruction of stockpiles of chemical weapons and the destruction or conversion for peaceful purposes of former chemical weapons production facilities (CWPFs). This regime includes national declarations, as well as on-site inspections at both military installations and chemical industrial facilities. Also included are mechanisms for consultation and clarification, as well as provisions for challenge inspections and investigations of alleged use.
- 2.5 This effective and reliable global verification system is supported by all 188 States Parties and provides assurances regarding both the disarmament process and legitimate chemical activities. It is key to ensuring that chemical weapons never re-emerge and, more generally, to promoting confidence among States Parties. The Convention's verification regime supplements States Parties' own measures aimed at preventing toxic chemicals being used for prohibited purposes.

### Destruction of chemical weapons

- 2.6 Progress towards the elimination of all declared chemical weapons stockpiles has been made, with approximately three-quarters of the declared stockpiles destroyed to date. In total, 69,430.336 metric tonnes (MTs) of Category 1 chemical weapons have been declared by the possessor States Parties.<sup>2</sup> Of this amount, as at 30 June 2012, 52,246 MTs (75.25%) of Category 1 chemical weapons have been destroyed under strict verification by the Secretariat.<sup>3</sup> In addition to Albania, which completed the destruction of all its declared chemical weapons in July 2007, two other States Parties (A State Party and India) completed the destruction of all their chemical weapons in July 2008 and March 2009, respectively. Libya has destroyed 51.21%, the Russian Federation has destroyed 64.15%, and the United States of America 89.75% of their respective declared quantities.
- 2.7 In relation to the destruction of chemical weapons, one of the most challenging issues in the previous years has been how to deal with a situation in which the final extended deadline of 29 April 2012 might not be fully met. This issue was successfully resolved by the Conference of the States Parties (hereinafter "the Conference") at its

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<sup>2</sup> This amount does not include declarations by Iraq.

<sup>3</sup> This figure includes 2.914 MTs chemical warfare agents withdrawn from chemical weapons stockpiles pursuant to paragraph 2 of Part VI of the Verification Annex for purposes not prohibited under the Convention.

Sixteenth Session in a decision<sup>4</sup> that provided for a number of transparency and confidence-building measures to be implemented by the Secretariat and the possessor States Parties concerned if this deadline was not to be fully met.

- 2.8 Progress also continues to be made with respect to old and abandoned chemical weapons (OCWs and ACWs) in the States Parties concerned. New discoveries of OCWs continue to be made by States Parties and reported to the Secretariat, and the recovery and excavation of ACWs also continue. Destruction of both OCWs and ACWs continues to take place in accordance with the Convention.

#### Industry verification

- 2.9 The industry verification regime, set up pursuant to Article VI of the Convention and operating through declarations, data monitoring, and on-site inspections, continues to work towards providing assurances that chemical weapons will not re-emerge.
- 2.10 Significant efforts have been made to improve the timeliness of declarations, so that the verification tasks of the OPCW may be performed on the basis of updated information from States Parties. In this regard, the expanding use of the electronic declarations tool for National Authorities (EDNA) continues to play an important role.
- 2.11 Between the entry into force of the Convention and 30 June 2012, the OPCW had carried out 2,269 industry inspections (884 industry inspections conducted since the Second Review Conference) in 80 States Parties. Over the past 15 years, the OPCW has conducted 233 inspections of Schedule 1 facilities. All Schedule 1 facilities have been inspected repeatedly. During the same period, 588 inspections of Schedule 2 facilities and 356 inspections of Schedule 3 facilities were conducted. The OPCW has also inspected 1,092 out of the more than 4,277 other chemical production facilities (OCPFs) that are inspectable.
- 2.12 At its Sixty-Sixth Session, the Executive Council (hereinafter “the Council”) adopted a decision on policy guidelines for industry verification<sup>5</sup> and decided that these guidelines should be taken into account in a balanced manner, recognising that the number of Article VI inspections would continue to be determined pursuant to both the requirements of and the limits set by the Convention.

#### **National implementation and capacity building**

- 2.13 The objectives of Articles VII, X, and XI of the Convention continue to be achieved in accordance with the relevant decisions of the policy-making organs as well as through a variety of programmes conducted by the Secretariat in close cooperation with States Parties.

#### National implementation

- 2.14 Following the recommendations of the Second Review Conference and the relevant decisions of the Conference, the Secretariat continues to develop its

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<sup>4</sup> C-16/DEC.11, dated 1 December 2011.

<sup>5</sup> EC-66/DEC.10, dated 7 October 2011.

implementation-support programmes. As a result, there has been some progress in respect to national implementation in accordance with the provisions of Article VII.

- 2.15 As at 30 June 2012, 186 States Parties had established or designated their National Authorities; 140 States Parties had made their submissions under paragraph 5 of Article VII; 87 had notified the Secretariat of the adoption of legislation that is considered to cover all key areas; 122 had provided the text of adopted measures; and 65 had confirmed the review of existing national regulations regarding the trade in chemicals under subparagraph 2(e) of Article XI.

#### Assistance and protection

- 2.16 Since the entry into force of the Convention, 146 States Parties have submitted information on their national programmes for protective purposes at least once, in accordance with paragraph 4 of Article X, while 78 States Parties have made offers of assistance to the OPCW pursuant to paragraph 7 of Article X.
- 2.17 The Secretariat has continued to assist States Parties in the development and improvement of their protective capacities against chemical weapons, as well as in maintaining a state of readiness to respond to a request for assistance in the case of the use or threat of use of chemical weapons, in accordance with Article X.
- 2.18 The third OPCW exercise on delivery of assistance (ASSISTEX 3), held in Tunisia in 2010, enabled the Secretariat to test the capacity of the OPCW to coordinate and deliver assistance in case of the use or threat of use of chemical weapons.

#### International cooperation

- 2.19 Following the workshop on Article XI in 2010 and as a result of several rounds of informal consultations during 2011, a decision on the components of an agreed framework for the full implementation of Article XI was adopted by the Conference at its Sixteenth Session.<sup>6</sup> The decision marks a key point in the ongoing implementation of Article XI and provides a clear framework for future activities in promoting the peaceful use of chemistry.
- 2.20 In a collaborative and mutually reinforcing manner, the Secretariat and supporting States Parties have continued to provide States Parties whose economies are developing or in transition with a variety of international-cooperation programmes in order to build national capacity to promote peaceful activities in regard to chemicals.

#### **Contribution to global anti-terrorism efforts**

- 2.21 A major concern of States Parties is the possible use of chemical weapons by terrorists and other non-state actors. The Open-Ended Working Group on Terrorism has served as a forum for sharing information and best practices among States Parties, as well for discussions on the issue of the OPCW's contribution to global efforts in this area. The Secretariat has continued to offer its support to the activities of the Open-Ended Working Group on Terrorism.

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<sup>6</sup> C-16/DEC.10, dated 1 December 2011.

- 2.22 The OPCW has established and maintained channels of communication with a number of regional, subregional, and international organisations and agencies. As a member of the United Nations Counter-Terrorism Implementation Task Force, the OPCW has actively participated in the implementation of the United Nations Global Counter-Terrorism Strategy through continued efforts, within its mandate, in helping States Parties to build the capacity to prevent terrorists from acquiring chemical materials, to ensure security at related facilities, and to respond effectively in the case of an attack where such materials are used.

### **Chemical safety and chemical security**

- 2.23 Since the Second Review Conference, issues of chemical safety and security have increasingly drawn the attention of States Parties. In the context of international cooperation, the Secretariat embarked on the Chemical-Safety-and-Security Management programme in 2009. The OPCW Conference on International Cooperation and Chemical Safety and Security, held in 2011, underscored the critical importance of the use of chemistry for exclusively peaceful purposes and served to further strengthen support for the Convention. The decision on the implementation of Article XI<sup>7</sup> also refers to concrete measures to be undertaken by States Parties and the Secretariat for promoting chemical safety and security, among other things. The Secretariat is considering how best to implement this decision and to define an appropriate role for the OPCW in chemical safety and security. Experts from across the world have been consulted by the Secretariat in this context.

### **Function and profile of the OPCW**

- 2.24 After maintaining a zero-nominal growth for six years, the regular budget for the OPCW decreased to EUR 70.6m in 2012, as compared to EUR 74.6m in 2011. This reduction mainly reflected a reduction in activities related to the destruction of chemical weapons. Authorised fixed-term staff levels also decreased to a total of 482 posts in 2012, from 523 posts in 2011. The reduction in budget notwithstanding, the OPCW is making efforts to fulfil the goals of the Convention and achieve results with fewer resources through more efficient and effective management.
- 2.25 The OPCW has progressively augmented its organisational governance. For example, in 2011 it introduced the principles of result-based management (RBM) in its management processes and practices in order to better ensure that the work of the Secretariat contributes to the achievement of clearly defined results and of the core objectives of the Organisation.
- 2.26 The Secretariat has adopted a public diplomacy initiative aimed at improving the international profile of the OPCW. In this regard, the Secretariat has conducted a large variety of outreach activities, such as the annual Summer Programme on Disarmament and Non-Proliferation of Weapons of Mass Destruction in a Changing World, the Seminar on the OPCW's Contribution to Security and the Non-Proliferation of Chemical Weapons, and the OPCW Conference on International Cooperation and Chemical Safety and Security. A significant increase in the number

of media citations of the OPCW and the Convention was observed in the period following these events and activities.

### **Third Review Conference**

- 2.27 Building on the past successes illustrated above, we need to explore future directions for the OPCW in the next five years and beyond. The Third Review Conference provides States Parties with an excellent opportunity to do so and to review the past developments and accomplishments related to the Convention.
- 2.28 States Parties can also benefit from the Report of the Advisory Panel on Future OPCW Priorities<sup>8</sup> and the views of the States Parties expressed during “Ambassadors’ Retreats on Future OPCW Priorities” held on 22 September 2011, 2 February 2012, and 24 May 2012.

## **3. BACKGROUND INFORMATION ON THE OPERATION OF THE CHEMICAL WEAPONS CONVENTION SINCE THE SECOND REVIEW CONFERENCE**

### **THE ROLE OF THE CHEMICAL WEAPONS CONVENTION IN ENHANCING INTERNATIONAL PEACE AND SECURITY**

- 3.1 Against the historical backdrop of nearly a century of effort by the international community to ban the use of chemical weapons in warfare, with a view to ultimately completely eliminating an entire category of weapons of mass destruction, and after almost 20 years of negotiation in the Conference on Disarmament, the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction—the Chemical Weapons Convention—was finally opened for signature on 13 January 1993.
- 3.2 The Convention, with its implementing institution, the OPCW, entered into force on 29 April 1997, providing the international community with the necessary international legal framework to accomplish the long-cherished objective of complete prohibition and elimination of chemical weapons and their production facilities, under strict and effective international control.
- 3.3 As an effective step toward general and complete disarmament, the Convention contributes to international peace and security and, in particular, the realisation of the purposes and principles of the United Nations Charter, complementing the principles and objectives of the 1925 Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, and reaffirming the principles and objectives of the 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (hereinafter “the Biological Weapons Convention”).
- 3.4 The Convention is the first multilateral treaty to address chemical disarmament in a comprehensive and non-discriminatory manner, supported by a viable and effective

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<sup>8</sup> Annex 2 of S/951/2011, dated 25 July 2011.

international verification regime, while at the same time establishing an unequivocal prohibition on the use of chemical weapons under any circumstances.

- 3.5 In the face of a risk of the use of chemical weapons, the Convention contains provisions for improving the preparedness and emergency-response capabilities of States Parties if there is the threat of or an actual chemical attack by any perpetrator.
- 3.6 The Convention aims not only to achieve chemical disarmament and ensure the prevention of the re-emergence of chemical weapons, under strict and effective international control, it also supports effective national implementation and promotes international cooperation in the peaceful uses of chemistry.
- 3.7 States Parties have committed to the complete exclusion of the possibility of the development, production, stockpiling and use of chemical weapons and to ensuring that attainments in the field of chemistry are used only for peaceful purposes.
- 3.8 States Parties recognise and have stressed that the full and effective implementation of all provisions of the Convention is an important contribution to the global fight against terrorism.
- 3.9 The Convention is also the first disarmament treaty to establish an organisation that oversees the overall implementation of its provisions, as well as verifying compliance. Together with carrying out the task of verification, the OPCW provides a forum for consultation and cooperation among States Parties and, when needed, facilitates clarification, cooperation, and fact-finding, thereby contributing to building confidence among States Parties.
- 3.10 In short, the success of the chemical disarmament regime, as defined by the Convention, and the record of its implementation over the past 15 years have clearly established the Convention as an indispensable instrument for the promotion of international peace and security.

## **ENSURING THE UNIVERSALITY OF THE CHEMICAL WEAPONS CONVENTION**

### **Introduction**

- 3.11 The Second Review Conference reiterated that the concept of the universality of the Convention is essential to achieving its object and purpose and to enhancing international peace and security. It underlined the fact that the goal of universality shall be pursued by the Secretariat and States Parties as a matter of high priority.<sup>9</sup>
- 3.12 The Second Review Conference strongly urged all 12 remaining States not Party to the Convention (Angola, the Bahamas, the Democratic People's Republic of Korea, the Dominican Republic, Egypt, Guinea-Bissau, Iraq, Israel, Lebanon, Myanmar, Somalia, and the Syrian Arab Republic) to ratify or accede to it as a matter of urgency and without preconditions.<sup>10</sup>

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<sup>9</sup> Paragraph 9.12 of RC-2/4, dated 18 April 2008.

<sup>10</sup> Paragraph 9.16 of RC-2/4.



- 3.13 The action plan for the universality of the Convention<sup>11</sup> provides key guidance to the Secretariat, the Director-General, the policy-making organs, and States Parties. It continues to be implemented following the decisions of the Conference in 2009<sup>12</sup> and 2011<sup>13</sup>.

### **Status of universality**

- 3.14 Since the Second Review Conference, five more countries have joined the Convention. These were Guinea Bissau and Lebanon (in 2008) and the Bahamas, the Dominican Republic, and Iraq (in 2009). As a result, the number of States not Party had decreased from 12 to seven. In 2011, South Sudan obtained its independence, thus increasing the number of States not Party to eight (Angola, the Democratic People's Republic of Korea, Egypt, Israel, Myanmar, Somalia, South Sudan, and the Syrian Arab Republic).

### **Progress in the implementation of the universality action plan**

- 3.15 Following the action plan and the relevant decisions adopted by the Conference, the OPCW as a whole has made intensive efforts to achieve universal adherence to the Convention, and the Director-General has submitted annual reports to the Conference<sup>14</sup> and regularly briefed the Council on developments relating to universality, as well as the relevant activities and plans of the Secretariat. Furthermore, synergies and coordination in the activities between States Parties and the Secretariat have been enhanced and sustained through regular consultations on universality.
- 3.16 The Secretariat has continued high-level contacts with senior officials of States not Party to create awareness of the need for them to join the Convention. It has also maintained contacts with heads of regional organisations, such as the African Union (AU), the Organization of American States (OAS), the EU, and the League of Arab States (LAS). Universality has also featured prominently in the statements delivered by the Director-General at regional and international forums, as well as at the United Nations.
- 3.17 A number of programmes and activities on universality have been conducted in concert with States Parties, which hosted events and provided critical support. The Secretariat has organised two seminars in support of its universality efforts: one was held in Istanbul, Turkey, in 2009 and the other in Berlin, Germany, in 2010. In addition, representatives of States not Party have been sponsored to participate in OPCW events, including training programmes for States Parties, to assist them in their preparations for ratification or accession.

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11 EC-M-23/DEC.3, dated 24 October 2003.

12 EC-58/DG.9 C-14/DG.8, dated 29 September 2009.

13 EC-66/DG.16 C-16/DG.15, dated 30 September 2011.

14 EC-54/DG.13 C-13/DG.5, dated 29 September 2008; EC-54/DG.13/Add.1 C-13/DG.5/Add.1, dated 18 November 2008; EC-58/DG.9 C-14/DG.8; C-14/DEC.7, dated 2 December 2009; EC-62/DG.11 C-15/DG.8, dated 23 September 2010; EC-66/DG.16 C-16/DG.15; C-16/DEC.16, dated 2 December 2011.

- 3.18 Since the adoption of the action plan, activities related to universality have also been supported through voluntary contributions provided by the EU.
- 3.19 With the progressive reduction in the number of States not Party, the strategy of the Secretariat in implementing the action plan has shifted from a focus on regional seminars and events to a bilateral approach, in terms of both technical-assistance visits (TAVs) and bilateral contacts at the diplomatic level with the States concerned.
- 3.20 At the same time, more emphasis has been placed on outreach and on regular interactions with relevant international and regional organisations, particularly in relation to those regions where the chances of organising bilateral visits are low, such as the Middle East and South East Asia.

### **Developments in Africa**

#### Guinea-Bissau

- 3.21 On 20 May 2008, Guinea-Bissau deposited its instrument of ratification of the Convention. On 19 June 2008, the Convention entered into force for this State and Guinea-Bissau became the 184th State Party to the Convention.

#### Angola

- 3.22 Efforts to sustain contacts and dialogue with Angolan authorities have continued. Sustained contacts have also been maintained with the Ministry of Foreign Affairs of Angola and with its Embassy to Belgium, with a view to promoting early accession, as well as to organising a bilateral visit to assist the Angolan authorities in taking the required steps towards joining the Convention.
- 3.23 After various approaches to Angola through letters and bilateral meetings in previous years, in May 2012, the Ambassador of Angola to the Netherlands indicated that his country was ready to accede to the Convention. In a follow-up meeting between the Angolan Ambassador and the Secretariat, he was provided with guidance on the process for depositing instruments of accession with the United Nations Secretary-General.

#### Somalia

- 3.24 The conflict in Somalia remains a factor impeding its prospects for acceding to the Convention. The country continues to face serious challenges and instability, making it unlikely for any authority there to consider joining the Convention at this stage. The Secretariat, however, continues to monitor the development of the situation regarding Somalia, in the context of promoting universality. On several occasions, the Director-General has met with representatives of Somalia to the United Nations based in New York.

#### South Sudan

- 3.25 On 14 July 2011, South Sudan became the 193rd Member of the United Nations. On 13 September 2011, the Director-General of the OPCW addressed a letter to the

Hon. Lieutenant-General Nhial Deng Nhial, Minister of Foreign Affairs of South Sudan, encouraging the newly established State to join the Convention and offering the OPCW's assistance in this regard. In October 2011, the Director-General met with the Ambassador of South Sudan to Belgium and the EU and further encouraged accession to the Convention by this State.

#### Cooperation with regional partners

- 3.26 The Secretariat continues its cooperation with the AU to promote the goals of the Convention and its universality within the framework of the Memorandum of Understanding signed between the AU and the OPCW in January 2006, as well as within the framework of the decision on the implementation and universality of the Convention, adopted at the 38th Ordinary Session of the Assembly of Heads of State and Government of the Organisation of African Unity, held in Durban, South Africa, in July 2002 (AHG/Dec.182 (XXXVIII)).
- 3.27 The Secretariat has also continued its cooperation with the Kofi Annan International Peacekeeping Training Centre, in Accra, Ghana, with a view to gathering support for the goals of the Convention, its universality, and its effective implementation in the continent, as well as to raising awareness and integrating relevant aspects of the Convention and its universality into the Centre's curriculum.

#### **Developments in Asia**

##### Democratic People's Republic of Korea

- 3.28 Notwithstanding the repeated efforts made by the Secretariat to reach out to the Democratic People's Republic of Korea, the government of this country has remained unresponsive. No response has been received to the invitation letters sent by the Secretariat inviting representatives of the Democratic People's Republic of Korea to participate in OPCW activities.

##### Myanmar

- 3.29 Myanmar signed the Convention in 1993 but has not ratified it. The Secretariat has maintained a continued and fruitful dialogue with Myanmar, both by inviting representatives of this country to various OPCW events (including the regular sessions of the Conference, seminars, and workshops) as well as through high-level contacts carried out by the Director-General. In total, 19 representatives of Myanmar were sponsored to participate in OPCW events and seminars.
- 3.30 At the invitation of the Government of Myanmar, a delegation from the Secretariat visited the country in June 2011. The delegation held meetings with senior government officials and representatives of academia. Myanmar reiterated its interest in the Convention and in the work of the OPCW. The efforts by the Secretariat will be sustained in order for this signatory State to take the necessary steps to ratify the Convention. Furthermore, the Director-General wrote to the newly appointed Minister of Foreign Affairs of Myanmar, H. E. Mr U Wunna Maung Lwin, underlining the importance of ratifying the Convention and offering technical assistance.

- 3.31 In May 2012, on the occasion of the Seminar on the Chemical Weapons Convention and Chemical-Safety-and-Security Management, the Director-General visited Kuala Lumpur, Malaysia, and met with Mr Wing Naing, Director-General of the International Organisations and Economic Department of Myanmar. The Director-General of the OPCW reiterated the readiness of the Secretariat to assist Myanmar in its efforts to join the Convention at the earliest opportunity.
- 3.32 The Secretariat also looks forward to more active cooperation with both the Association of Southeast Asian Nations (ASEAN) and the ASEAN Regional Forum, which represent an emerging regional arrangement with strong potential to contribute towards the goals of disarmament, non-proliferation, and international cooperation. They have expressed strong support for the Convention and appreciation for the verification work of the OPCW.

### **Developments in Latin America and the Caribbean**

#### Bahamas and Dominican Republic

- 3.33 The Bahamas and the Dominican Republic (both signatory States) remained the only two States not Party in the region as at the end of April 2008, although both countries had indicated their support for the Convention and their intention to join it.
- 3.34 With the ratification by the Dominican Republic on 27 March 2009 and by the Bahamas on 21 April 2009, the universality of the Convention was achieved in the Americas. In this connection, the former Director-General of the OPCW addressed a communication to Mr José Miguel Insulza, Secretary-General of the OAS, to convey the gratitude of the OPCW for the support provided to the efforts of the Secretariat by the OAS, through its relevant resolutions urging early ratification of the Convention and adoption of the necessary legislative and other implementing measures.

### **Developments in the Mediterranean Basin and the Middle East**

#### Iraq and Lebanon

- 3.35 Iraq and Lebanon have expressed their full support for the Convention and have taken concrete steps towards joining. Representatives of Iraq and Lebanon have been sponsored to participate in OPCW activities, including sessions of the Conference, while the Secretariat has provided assistance in preparing for accession, particularly in the areas of preparing the required initial declarations, establishing a National Authority, and drafting national implementing legislation.
- 3.36 Lebanon acceded to the Convention on 20 November 2008, and Iraq on 13 January 2009. Iraq has been the last country to join the Convention since the Second Review Conference, increasing the number of States Parties to its current number: 188.

#### Egypt, Israel, and the Syrian Arab Republic

- 3.37 Despite constant efforts by the Secretariat and their engagement with the OPCW, Egypt, Israel (a signatory State), and the Syrian Arab Republic have continued to cite

issues of regional security as a justification for not joining the Convention. They have linked accession or ratification to a broader political settlement. Although unlikely to join the Convention in the near future, Egypt and Israel have shown willingness in maintaining contacts with the Secretariat. Contacts remain interrupted with the Syrian Arab Republic.

- 3.38 Since the Second Review Conference, representatives from Egypt and Israel have been regularly sponsored to participate in OPCW events, including the sessions of the Conference. The Syrian Arab Republic has also been invited to participate in various OPCW events, but to date it has not appointed any representatives.
- 3.39 The Director-General has maintained bilateral contact with Egypt and Israel through letters and meetings, while the Secretariat has had an opportunity to visit these States not Party.
- 3.40 A Secretariat team visited Israel in June 2009, during which Israel reassured the Secretariat of its continued support for the goals of the Convention and of the disposition of the Israeli Government to ensure representation at OPCW events.
- 3.41 Due to the internal situation in Egypt, contacts have been interrupted, although in February 2011, Egypt initially indicated its acceptance to receive a goodwill mission from the Secretariat. The Secretariat will remain in contact with the Egyptian Embassy in The Hague to follow up on this matter.

#### Zone free of weapons of mass destruction (WMD)

- 3.42 It should be recalled that the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (2010 NPT Review Conference), which concluded in New York in May 2010, requested that the OPCW and other relevant international organisations prepare background documentation for a conference, expected to be convened in 2012, “regarding modalities for a zone free of nuclear weapons and other weapons of mass destruction and their delivery systems, taking into account work previously undertaken and experience gained”<sup>15</sup>.
- 3.43 In his meeting with H. E. Mr Ban Ki-moon, the Secretary-General of the United Nations, the Director-General expressed the readiness of the OPCW to play its part in contributing to the success of this initiative. The Director-General reiterated this position to the United Nations High Representative for Disarmament Affairs, Mr Sergio Duarte.
- 3.44 In July 2011, a seminar entitled “EU Seminar to promote confidence building and in support of a process aimed at establishing a zone free of WMD and means of delivery in the Middle East” was held in Brussels, Belgium. In her statement to the seminar participants, the OPCW’s Deputy Director-General reiterated the full support of the OPCW for the establishment of a WMD-free zone, but also stressed the importance of avoiding linkages that might prove to be counterproductive. In terms of the role of the Convention in a WMD-free zone, the Deputy Director-General’s statement made it clear that accession to or ratification of the Convention would fulfil all the

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15 NPT/CONF.2010/50 (Vol. I).

necessary conditions of extending the international legal regime against chemical weapons to the Middle East.

### **Analysis**

- 3.45 As mentioned above, the number of States Parties to the Convention has increased from 183 in April 2008 to 188 in June 2012. No other disarmament treaty has shown such progress toward universal acceptance as the Convention.
- 3.46 The Convention now covers about 98% of the world population. There are 196 nations in the world that are capable of becoming a party to international treaties, including those for which the Secretary-General of the United Nations is the depository. Almost 96% of them have ratified or acceded to the Convention, which demonstrates the success of the action plan for universality.
- 3.47 As the majority of the remaining States not Party cite security and other concerns for not joining the Convention, more emphasis is put on the cooperation between the Secretariat and the States Parties, and the support that can be provided in this area. States Parties are also encouraged to raise the issue in their bilateral contacts with States not Party.

### **Future considerations**

- 3.48 It is expected that, with the intensification of efforts by States Parties and the Secretariat, further developments on universality could be achieved in Africa and Asia. Angola and Myanmar have progressed closer to joining the Convention. The case of Somalia depends on the evolution of the country's security and political situation.
- 3.49 The need for the Democratic People's Republic of Korea to join the Convention is of the utmost importance if a universal ban on chemical weapons is to be achieved in Asia.
- 3.50 In the Middle East, success has been achieved with Iraq and Lebanon. In the long term, however, universality will continue to pose difficulties with respect to Egypt, Israel, and the Syrian Arab Republic, which have all made a conscious political decision to stay out of the Convention.
- 3.51 The remaining challenges to universality are diverse and unique to each State not Party. This calls for a targeted approach to universality, tailor-made to meet specific national requirements for adherence. Current experience indicates that the programmes of the Secretariat, complemented by bilateral contacts with States Parties, have been effective in promoting universality.

### **Conclusion**

- 3.52 The Secretariat will continue to give priority to achieving universal adherence to the Convention; however, given the current challenges, such efforts are likely to be more

successful if they are accompanied by the continued cooperation and assistance of States Parties.<sup>16</sup>

## **DEVELOPMENTS IN SCIENCE AND TECHNOLOGY**

### **Introduction**

- 3.53 The Second Review Conference “underlined the importance for the OPCW of keeping abreast of the developments in science and technology in order to achieve the object and purpose of the Convention”.<sup>17</sup> The Scientific Advisory Board (SAB) has continued to meet since the Second Review Conference, and its report on developments in science and technology of relevance to the Convention will be issued in October 2012.
- 3.54 The following paragraphs provide an overview of general trends and developments in science and technology since the Second Review Conference. More detailed analysis will be provided in the SAB report presented to the Third Review Conference, and the Director-General will also respond to that report. States Parties are, of course, welcome to submit their own views and assessments on developments in science and technology to the Third Review Conference.

### **Developments**

- 3.55 All of the developments highlighted below are the result of scientific endeavour and are aimed at benefiting humanity. Such developments should therefore be encouraged and their global spread should not be unnecessarily hindered. Advances in science and technology have been recognised as key contributors to sustainable global development. However, as with any other field of science, developments in chemistry inherently have multiple uses, and advances bring with them the potential risk of misuse. It is therefore critical for such developments to be monitored and assessed on a regular basis, and for their implications for the Convention to be carefully evaluated.

### Convergence of scientific disciplines

- 3.56 As science reveals ever-greater degrees of interconnectedness in virtually every domain and between most areas of adaptive knowledge, the scientific and technological boundaries between the most novel areas of new knowledge are becoming blurred. Scientific convergence has been described as “the merging of distinct technologies, processing disciplines, or devices into a unified whole that creates a host of new pathways and opportunities. It involves the coming together of different fields of study—particularly engineering, physical sciences, and life sciences—through collaboration among research groups and integration of approaches that were originally viewed as distinct and potentially contradictory.”<sup>18</sup>

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<sup>16</sup> Paragraphs 27 and 28 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

<sup>17</sup> Paragraph 9.129 of RC-2/4.

<sup>18</sup> Massachusetts Institute of Technology, *The Third Revolution: The Convergence of the Life Sciences, Physical Sciences, and Engineering*, (January 2011). Available online (accessed 4 September 2012): <http://dc.mit.edu/sites/dc.mit.edu/files/MIT%20White%20Paper%20on%20Convergence.pdf>.

- 3.57 Of direct relevance to the Convention is the increasing convergence between chemistry and biology, as already reported by the SAB to the Second Review Conference.<sup>19</sup> This can be seen in the creation of interdisciplinary teams of researchers and is reflected in scientific journals such as ACS Chemical Biology, Nature Chemical Biology, Journal of the Royal Society Interface and ChemBioChem. Certain classes of chemicals, including toxins and bioregulators, are covered by the scope of both the Chemical and Biological Weapons Conventions. At its Seventh Review Conference, States Parties to the Biological Weapons Convention noted “the increasing convergence of chemistry and biology and its possible challenges and opportunities for the implementation of the [two] Conventions”.<sup>20</sup>
- 3.58 These advances result in increasing the use of biologically mediated processes (catalysts, naturally occurring organisms, and genetically modified organisms) for the production of chemicals (biosynthesis), the development of DNA chemical synthesis of replicating organisms (synthetic biology), and recombinant-DNA technology that allows the replacement of the original genome in bacterial cells with synthetically produced genomes, to produce bacteria with new capabilities (synthetic genomics). These advances promise major benefits, including improved medical and health care, more efficient food production, renewable energy resources, and pollution management. However, there is the potential that they could be misused for the production of large quantities of toxic chemicals, including toxins and bioregulators, for use as chemical weapons.
- 3.59 It is not only convergence between chemistry and biology that has implications for the Convention. For example, increased computational power means that the entirety of synthetic-organic knowledge reported in the literature can now be translated into a vast interconnected “network of organic chemistry”.<sup>21</sup>

#### Global diffusion of science and globalisation of industry

- 3.60 As with politics, economics, and industry, science is also subject to the forces of globalisation. Scientific knowledge and expertise are being diffused globally, although the distribution is still uneven. The Organisation for Economic Co-operation and Development (OECD) reported that from 1985 to 2007, the number of scientific articles published by a single author decreased by 45%. During that same period, the number of scientific articles published with domestic co-authorship increased by 136%, and those with international co-authorship increased by 409%.<sup>22</sup> According to a report for the UK Horizon Scanning Centre: “The coming world of global science is likely to be more diffuse, with high mobility among scientists, the emergence of multiple centers of excellence, and a more even (but far from uniform) distribution of

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<sup>19</sup> Paragraph 2.2 of RC-2/DG.1, dated 28 February 2008.

<sup>20</sup> Paragraph 49 of Part II of BWC/CONF.VII/7, dated 13 January 2012.

<sup>21</sup> Chris M. Gothard, Siowling Soh, Nosheen A. Gothard, Bartłomiej Kowalczyk, Yanhu Wei, Bilge Baytekin, and Bartosz A. Grzybowski, “Rewiring Chemistry: Algorithmic Discovery and Experimental Validation of One-Pot Reactions in the Network of Organic Chemistry,” *Angewandte Chemie International Edition*, 2012, 51: 7922–7927.

<sup>22</sup> Robert D. Homats, “Science Diplomacy and Twenty-First Century Statecraft”, *Science & Diplomacy*, March 2012. Available online (accessed 4 September 2012): <http://www.sciencediplomacy.org/perspective/2012/science-diplomacy-and-twenty-first-century-statecraft>.



scientific and technical talent”.<sup>23</sup> In addition, smaller States are focussing on “building excellence in interdisciplinary fields, in applied sciences, or in areas that draw on a mix of scientific expertise and local culture”.<sup>24</sup>

- 3.61 As recognised in earlier reports, the chemical industry is now a global enterprise and is very different from the time of the negotiations of the Convention. An analysis of Article VI declarations submitted since entry into force clearly shows the increase in the number of States Parties that have declared facilities in certain regions, particularly Asia and Latin America. This echoes data from the chemical industry itself, which shows that emerging economies now outpace developed countries in chemicals production and that production of chemicals in Asia equals that in Europe and North America combined. In addition, Asian countries are attracting the bulk of capital spending within the chemical industry.

**TABLE 1: CHANGE IN THE NUMBER OF STATES PARTIES THAT HAVE DECLARED FACILITIES, FROM 2001 to 2011<sup>25</sup>**

	Schedule 2	Schedule 3	OCPF
Africa	0 → 1	1 → 1	4 → 6
Asia	5 → 6	6 → 8	7 → 20
Eastern Europe	4 → 9	9 → 9	15 → 19
GRULAC <sup>26</sup>	3 → 3	4 → 4	5 → 13
WEOG <sup>27</sup>	17 → 19	13 → 13	21 → 22

Advances in industrial production methods

- 3.62 Emerging technologies that are being integrated into the chemical industry could pose new challenges to the verification regime under the Convention. One such example is microreactors, as their inherently small physical size and the small space they require could make them attractive for clandestine operations.<sup>28</sup> The adoption of microreactor technology in the chemical industry has not been as rapid as some originally predicted, but it is now gaining momentum; by one prediction, as much as 30% of the fine chemicals and drugs currently in production could be made more efficiently using microreactors. The cumulative forecast is that within a decade, 30% of all chemical processing will be performed in micro-devices and there will be 100 chemical micro-device manufacturers worldwide.<sup>29</sup> There continue to be differences of opinion regarding the implications of such developments for the Convention, but they require

<sup>23</sup> UK Horizon Scanning Centre, Paper ID 542, “Global Diffusion of Science.” Available online (accessed 4 September 2012): <http://www.sigmascan.org/Live/Issue/ViewIssue.aspx?IssueId=542&SearchMode=1>.

<sup>24</sup> *Ibid.*

<sup>25</sup> Sources: Annual report of the OPCW for 2001 (C-7/3, dated 10 October 2002) and draft annual report of the OPCW for 2011 (EC-69/3 C-17/CRP.1, dated 11 July 2012).

<sup>26</sup> GRULAC = Group of Latin American and Caribbean States.

<sup>27</sup> WEOG = Western European and Other States Group.

<sup>28</sup> Tuan Nguyen, “Microchallenges of Chemical Weapons Proliferation”, *Science*, Vol. 309 (12 August 2005): 1021.

<sup>29</sup> ICIS, “Microreactors Gain Popularity among Producers”, 30 April 2009. Available online (accessed 4 September 2012): <http://www.icis.com/Articles/2009/05/04/9211877/microreactors-gain-popularity-among-producers.html>.

careful monitoring, and OPCW inspectors will need to be fully familiar with the new technologies and the associated production changes they could encounter.

#### “Green chemistry” and industrial biotechnology

- 3.63 Green chemistry methods and technologies are designed to develop economically feasible products and processes that require fewer reagents, less solvent, and less energy than conventional processes, while being safer, generating less waste, and having a lower environmental impact. The emerging commercialisation of this approach within the chemical industry is driven by a number of factors, including economics (competitive manufacturing costs), advances in biotechnology, sustainability, and the desire to use green chemistry (which can also have cost benefits), the tight supply and high price of some petroleum-based feedstocks, and the fact that some chemical markets are growing (which creates opportunities for new production capacity). There are already several examples of commercial activities for the production of chemicals using biomediated processes, and more are in the pipeline.
- 3.64 By limiting the size of stocks of hazardous chemicals and reducing the volumes of toxic chemicals produced either as by-products or intermediates, green chemistry methods and technologies may mitigate some of the risks posed by traditional production methods. On the other hand, the production of smaller quantities of chemicals might also mean that certain facilities will no longer be subject to inspection under the verification regime of the Convention, and the new production processes could also potentially introduce new chemicals of concern.

#### Advances in neuroscience

- 3.65 As with the other developments described here, advances in understanding the brain and nervous system will bring many benefits to humanity: in the treatment of neurological impairments, diseases, and psychiatric illnesses, for example. However, while offering such opportunities, these advances also present certain risks that could have implications for the Convention. In particular, advances in neuropharmacology and drug delivery have the potential to be misused for hostile purposes, such as through the development and use of incapacitating chemical agents. However, it is also apparent that there are significant technical challenges to the effective weaponisation of such agents, in addition to the legal and ethical issues raised by such developments.

#### Nanotechnology

- 3.66 Past reports have addressed the opportunities and risks posed by developments in nanotechnology, such as equipment and methods for controlled analysis, manipulation, processing, fabrication, or measurement with precision below 100 nanometres. Advances have continued since the Second Review Conference and are particularly relevant with regard to protection against chemical weapons. In this area, the application of nanotechnology to improve materials and systems is gradually developing. Some areas of ongoing research that should be monitored include the development of nanofibres for protective clothing, nanocatalysts for decontamination, and nano-based drug-delivery mechanisms for medical countermeasures. However, some of the potential risks associated with nanotechnology include, for example,

providing enhanced delivery of toxic materials to their biological target or protecting, by means of encapsulation, dispersed chemical agents from degradation.

#### Awareness of the prohibitions and provisions of the Convention

- 3.67 The Second Review Conference recognised the importance of raising the awareness of all stakeholders about the prohibitions and requirements of the Convention, particularly in relation to national implementation.<sup>30</sup> While there is little detailed data available, it is widely accepted that awareness of the prohibitions and provisions of the Convention within the scientific community, academia, and the chemical industry is low. Several States Parties have reported difficulties in raising awareness of the Convention domestically. Low levels of awareness among such key stakeholder groups means that individuals might not appreciate the potential risks of misusing toxic chemicals, might not be cognisant of the international and national prohibitions on misusing such chemicals, and might not be aware, for example, of declaration obligations under the Convention.

#### **Analysis**

##### Benefits and risks

- 3.68 Advances in science and technology bring considerable benefits for humanity in general, in terms of economic and technological development, and for the Convention in particular, in terms of improved verification methodologies and protective equipment, for example. However, such advances also bring with them the potential risk of misuse, given the inherent dual-use nature of many toxic chemicals and much of the related technology and equipment. Many of the developments described above are contributing to changes in the nature of the chemical risk spectrum. The implications of these changes for the Convention are not always clear, but given their potential impact, they deserve careful monitoring.
- 3.69 It is apparent that certain aspects of science and technology relevant to the Convention are advancing at a rapid pace, especially in the life sciences. It is also apparent that others are advancing less rapidly, for example, microreactor technology. Therefore, the pace and manner in which advances in science and technology have implications for the Convention vary considerably. While there would appear to be no major paradigm shifts yet from advances in science and technology, there are areas in which scientific breakthroughs could lead to rapid changes that could have implications for the Convention.
- 3.70 While the diffusion of scientific knowledge has already brought significant benefits and is likely to continue to do so, it could also increase access to toxic chemicals and the requisite technology and equipment for their production, perhaps to groups or individuals with malicious intent. The increasing importance of intangible technologies and expertise will also add to the challenges facing the verification regime under the Convention, which was established to deal with tangible technologies such as specific chemicals and related facilities.

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30 Paragraphs 9.77 and 9.116(h) of RC-2/4.

### Monitoring of developments in science and technology

- 3.71 Key trends in the chemical sciences and technology and the infrastructure supporting scientific advances should be monitored at regular intervals, as significant discoveries and developments become more applicable, inexpensive, and broadly distributed. It will be important not only to monitor the key trends, but also to identify and monitor the significant drivers for these trends.
- 3.72 For the OPCW, the convergence of chemistry and biology requires further technical understanding in which the SAB temporary working group should play a key role. It is possible that convergence could blur the boundaries of the Convention's verification regime and increase the relevance of developments within the Biological Weapons Convention, potentially requiring an intensified dialogue between the two treaty regimes. Convergence also brings potential benefits for the Convention: for example, in the areas of detection, protective measures, medical countermeasures, and diagnostics.

### Outreach and coordination

- 3.73 Convergence means that the review and evaluation of science and technology can no longer be limited to specific disciplines. Developments in related disciplines, such as the life sciences or information and communications technology, have the potential to significantly affect the future implementation of the Convention. These overlaps have been recognised, for example, by States Parties to the Biological Weapons Convention through the inclusion of science- and technology-related developments relevant to the activities of multilateral organisations such as the WHO<sup>31</sup>, OIE<sup>32</sup>, FAO<sup>33</sup>, IPPC<sup>34</sup> and OPCW under the standing agenda item on science and technology in their series of annual meetings.<sup>35</sup> In order to maintain such a broad overview, the OPCW will need to reach out to related organisations and entities and to work more closely with them.<sup>36</sup> The OPCW's relationship with the International Union of Pure and Applied Chemistry (IUPAC) is a possible model for future collaborative partnerships with similar organisations. The OPCW will also need to explore ways in which to ensure that the SAB and the Secretariat have access to sufficient expertise in these related areas.

### Awareness raising

- 3.74 Given the acknowledged low levels of awareness about the Convention among some key stakeholders, the OPCW needs to identify target audiences and develop approaches specific to each of them. Such approaches could include educational materials for secondary and tertiary level students (utilising new technologies such as e-learning and social networks), codes of conduct for scientists in academia and

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31 WHO = World Health Organization.

32 OIE = World Organisation for Animal Health.

33 FAO = Food and Agriculture Organization of the United Nations.

34 IPPC = International Plant Protection Convention.

35 Paragraph 22(f) of Part III of BWC/CONF.VII/7.

36 Paragraph 79 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

industry, and incorporation of the norms and prohibitions under the Convention into courses on the responsible conduct of research and discussions on the social responsibility of scientists. Some work has already been conducted in this area by the OPCW and IUPAC,<sup>37</sup> and the temporary working group on education and outreach, recently established by the SAB, which convened its first meeting in April 2012,<sup>38</sup> will make recommendations on how to take this work forward.

### **Future considerations**

- 3.75 The SAB and its temporary working groups will play a key role in monitoring developments in science and technology.<sup>39</sup> This role is already reflected in the terms of reference of the SAB,<sup>40</sup> but could need to be strengthened in light of the pace and complexity of current advances. To explore the issue of convergence between chemistry and biology in further detail, the SAB has established a temporary working group on this subject, which convened its first meeting in November 2011.<sup>41</sup>
- 3.76 The Secretariat is also exploring the extent to which it can use “horizon-scanning” techniques to monitor developments in science and technology, particularly those that are not yet on the agenda of the SAB and its temporary working groups.<sup>42</sup> Using these techniques would allow the Secretariat to conduct a systematic examination of advances in science and technology, while allowing the SAB to focus in depth on issues identified as being of direct relevance to the Convention. Assessments emanating from the Secretariat’s “horizon-scanning” activities could also be shared with States Parties, particularly those without the resources to conduct such analyses themselves, thus contributing to their capacity development.

### **Conclusion**

- 3.77 The Convention remains a singular legal treaty regime. However, it is apparent that the scientific and technological environment in which the Convention exists has changed significantly since the time of the treaty’s negotiation. While scientific and technological convergence does not imply legal or political convergence of any of the relevant treaty regimes, it has implications for them and requires closer collaboration and more intensive dialogue between them. Looking to the future, it will be necessary for the OPCW to strengthen its monitoring of scientific and technological advances, which will require calling on the expertise of a broader network of stakeholders than has previously been the case.<sup>43</sup>

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37 For example, Graham S. Pearson, Edwin D. Becker, and Leiv K. Sydnese, “Why Codes of Conduct Matter”, *Chemistry International*, Vol. 33, No. 6 (November-December 2011).

38 Annex 2 of SAB-18/1, dated 19 April 2012.

39 Page 4 of the Informal Summary of Discussions at the Ambassadors’ Retreat on Future Priorities of the OPCW, held in The Hague on 24 May 2012.

40 Paragraph 2 of the Annex to C-II/DEC.10/Rev.1, dated 2 December 2004.

41 Annex 3 of SAB-17/1, dated 23 November 2011.

42 Paragraph 71 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

43 Paragraphs 76 and 78 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

## **GENERAL OBLIGATIONS AND DECLARATIONS RELATED THERETO**

### **Introduction**

- 3.78 General obligations on the prohibition and destruction of chemical weapons and CWPFs, definitions and criteria of key terms, and initial declarations are stipulated in Articles I to III.

### **Developments**

- 3.79 All States Parties remain committed to their obligations under Article I of the Convention.
- 3.80 It is well recognised that the definitions contained in Article II, particularly of the terms “chemical weapons” and “chemical weapons production facility” are comprehensive enough to cover developments in science and technology. In this regard, the general-purpose criterion has provided the most important legal protection against the re-emergence of chemical weapons.
- 3.81 As at 30 June 2012, 180 States Parties had submitted their initial declarations under Article III and/or Article VI. Of these, one State Party (Saint Vincent and the Grenadines) did not provide any information required under Article III, while two States Parties (Kiribati and Solomon Islands) did not provide any information required under Article VI. Eight States Parties (Cape Verde, the Congo, Guinea-Bissau, Haiti, Timor-Leste, Tonga, Tuvalu, and Vanuatu) had yet to submit any initial declarations. Between 1 January 2008 and 30 June 2012, the Secretariat received 13 initial declarations under Articles III and/or VI (two States Parties, Suriname and Yemen, have submitted the outstanding parts of their initial Article VI declarations).
- 3.82 In addition to States Parties that have provided their initial declarations under Article III since the Second Review Conference, a number of States Parties have amended and/or supplemented their initial declarations with regard to chemical weapons, CWPFs, riot control agents (RCAs), and other chemical weapons facilities, or have provided declarations of new finds of OCWs and/or ACWs.
- 3.83 Since the Second Review Conference, one additional State Party, Iraq, has declared the possession of chemical weapons—mainly the remnants of the 1991 military operations—stored in two bunkers at Al-Muthanna, as well as five former CWPFs. This initial declaration was based on available information from the United Nations Special Commission, as it was not possible for Iraq to conduct a detailed on-site inventory due to the hazardous conditions within the bunkers.
- 3.84 In November 2011, Libya declared a “previously undeclared chemical weapons stockpile” consisting of Category 1 and Category 3 chemical weapons and informed the Secretariat of the recovery of an amount of munitions, suspected to be chemical weapons. In February 2012, following an OPCW inspection of the declared Category 1 and Category 3 chemical weapons and a technical assessment of the recovered munitions (which took place in January 2012 and which confirmed that these munitions were chemical weapons), Libya submitted a declaration with respect to

munitions not previously declared. At its Sixty-Seventh Session, the Council approved a decision on the declaration of chemical weapons in Libya not previously declared.<sup>44</sup> The Secretariat addressed the situation in Libya bilaterally, in accordance with the Convention and keeping in mind the rights and obligations of the State Party. The process of clarifying certain issues arising from the newly submitted declarations is ongoing in order to ensure continued compliance by the State Party with all relevant obligations stipulated by the Convention.

- 3.85 Since 2008, the development of RCAs has been closely followed by the Secretariat through participation in relevant conferences and seminars. The Secretariat also continues to work with States Parties in order to assist them in determining whether RCAs identified as part of recovered munitions require declaration. Multiple internal technical assessments have been developed on this subject.
- 3.86 In parallel with developments relating to RCAs, the Secretariat is also following developments relating to new chemicals, such as those designated as incapacitating chemical agents (ICAs), drawing on the advice of the SAB.

### **Analysis**

- 3.87 When it comes to the submission of initial declarations (in general) and Article III (in particular), there has been significant progress since the Second Review Conference. It should be noted that many of the initial declarations that have been received are the result of concerted efforts on the part of various units within the Secretariat. With the exception of Iraq, which became the seventh chemical weapons possessor State, most of the 11 initial declarations submitted under Article III since the Second Review Conference have been provided by non-possessor States Parties, which mainly declared RCAs. Only two States Parties submitted their declaration within the time required by the Convention: no later than 30 days after the Convention entered into force for them. The rest of the initial declarations were submitted well after the deadline, ranging from 94 to 2,697 days late.
- 3.88 The progress in the submission, timeliness, and quality of Article III declarations is apparent. However, despite this notable progress, some States Parties are still not submitting their declarations, or they submit them with a significant time delay.

### **Future considerations**

- 3.89 The Secretariat has used and will continue to use every opportunity to address the issue of outstanding initial declarations, reminding States Parties of their obligations under the Convention. Various meetings and events, such as annual and regional meetings of National Authorities, bilateral meetings, and contacts are used as opportunities for raising awareness among States Parties regarding the importance of complete, timely, and accurate declarations, as required under the Convention.
- 3.90 Moreover, the Secretariat has been working closely with the respective States Parties on identifying the new declaration and reporting requirements that have arisen from the following: developments leading up to the final extended deadline for the

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44 EC-67/DEC.9, dated 27 March 2012.

destruction of chemical weapons (29 April 2012); developments since that date; the decisions of the Council and the Conference governing the declaration and/or verification regimes for chemical weapons, OCWs, and ACWs after 29 April 2012; and the nature of continued verification measures at converted facilities 10 years after the Director-General's certification of their conversion. This has included finding the most appropriate and practical ways of communicating the required information. To this end, new declaration forms for chemical weapons and/or CWPFs have been designed and have already been used by some States Parties. The Secretariat stands ready to provide assistance to States Parties in order to make it easier for them to meet the new requirements.

- 3.91 In spite of these new declaration and reporting requirements, no major issues are foreseen in the submission of Article III declarations related to chemical weapons, CWPFs, OCWs, and ACWs. On the other hand, given the constant developments related to chemicals used by States Parties for riot control purposes, as well as developments in the area of incapacitating chemical agents, the SAB, based on a request from the Secretariat, has included this issue on its agenda. It will be monitoring this situation and will inform States Parties and the Secretariat of any actions that may need to be taken.

### **Conclusion**

- 3.92 Article III and other relevant parts of the Convention (along with the Council's and the Conference's related decisions and guidelines) stipulate the requirements for declaring chemical weapons, CWPFs, OCWs, ACWs, OCPF's, and RCAs. In general, all States Parties are familiar with these declaration requirements, and their compliance is at a very high level.
- 3.93 Due to the constant developments in RCAs and the trend of many States Parties to switch from relatively old types of RCAs (ortho-chlorobenzylidene-malononitrile: CS gas) to other types (capsaicin/pepper spray), the Secretariat and the SAB will be monitoring these developments and will keep reminding States Parties of their important role in keeping national stakeholders aware of the obligation to communicate any changes in chemicals held for riot control purposes to the Secretariat within 30 days.
- 3.94 There is no doubt that many years of accumulated experience and expertise, which were reflected in the successful cooperation with the last two possessor States Parties that joined the Convention (Iraq and Libya), are a guarantee that the Secretariat is ready and capable of providing all necessary assistance to any other States that may wish to join the Convention in the future.

## **DESTRUCTION OF CHEMICAL WEAPONS AND DESTRUCTION OR CONVERSION OF CHEMICAL WEAPONS PRODUCTION FACILITIES**

### **Introduction**

- 3.95 Pursuant to the Convention, each State Party undertakes to destroy any chemical weapons it owns or possesses or that are located in any place under its jurisdiction or



control. In addition, each State Party shall destroy or convert any CWPFs, in accordance with the Convention.

- 3.96 The Second Review Conference reaffirmed that the complete destruction of chemical weapons and the conversion or complete destruction of CWPFs are essential for the realisation of the object and purpose of the Convention.<sup>45</sup>

### **Destruction of chemical weapons**

- 3.97 Significant progress towards the achievement of this key objective has been made by States Parties since the Second Review Conference. Completing the destruction of their chemical weapons in the shortest time possible, however, remains an obligation for the remaining possessor States Parties, which, in doing so, will need to keep up the momentum and spare no effort.

### Progress

- 3.98 In total, 69,430.336 MTs<sup>46</sup> of Category 1 chemical weapons had been declared by the possessor States Parties as at 30 June 2012. Of this amount, 52,246 MTs<sup>47</sup> (75.25%) had been destroyed under strict verification by the Secretariat. In addition to Albania, which completed the destruction of all its declared chemical weapons in July 2007, two other States Parties—A State Party and India—completed the destruction of all their chemical weapons in July 2008 and March 2009, respectively. As at the same cut-off date, the United States of America had destroyed 89.75% of its declared Category 1 chemical weapons. The Russian Federation had destroyed 64.15%, and Libya had destroyed 51.21%.
- 3.99 At the cut-off date for this Note, the United States of America had completed a total of 11 operations at chemical weapons destruction facilities (CWDFs). Seven of these—Anniston, Newport, Tooele, Umatilla, the incineration plant at Pine Bluff, the explosive destruction system at Pine Bluff, and the explosive destruction system at Dugway Proving Ground—completed destruction operations in the period following the Second Review Conference. Therefore, the total amount of Category 1 chemical warfare agents destroyed and withdrawn pursuant to paragraph 2 of Part VI of the Verification Annex by the United States of America amounted to 24,923.671 MTs (89.75%) as at 30 June 2012. The remaining chemical weapons stockpiles of this State Party will be destroyed at two facilities (Pueblo, Colorado, and Blue Grass, Kentucky), which are currently under construction and expected to start operations in 2015 and 2020, respectively. The United States of America had also destroyed 0.010 MTs of its declared Category 2 chemical weapons as well as all of its declared Category 3 chemical weapons.
- 3.100 As at 30 June 2012, the Russian Federation had completed the destruction of 25,640.08 MTs (64.15%) of its declared Category 1 chemical weapons. This includes

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45 Paragraph 9.26 of RC-2/4.

46 This amount does not include declarations by Iraq.

47 This figure includes 2.914 MTs chemical warfare agents withdrawn from chemical weapons stockpiles pursuant to paragraph 2 of Part VI of the Verification Annex for purposes not prohibited under the Convention.

the quantity of chemical-warfare agent withdrawn from Category 1 chemical weapons stocks for purposes not prohibited under the Convention. This State Party plans to destroy its remaining Category 1 chemical weapons by December 2015. Since the Second Review Conference, one CWDF, located at Kambarka, completed the destruction of all chemical weapons designated for destruction at this facility in 2009. Destruction operations are currently ongoing at four facilities: Leonidovka, Maradykovsky, Pochep, and Shchuchye. The Russian Federation has also destroyed all of its declared Category 2 (10,616 MTs) and Category 3 chemical weapons.

- 3.101 The Russian Federation continues to implement its concept of gradually bringing CWDFs into operation by commissioning individual units, designed for the destruction of a particular type of chemical agent or munitions. New destruction capacities are being built at currently operational facilities. The Russian Federation reports that the commissioning of the building for the destruction of munitions filled with nerve agents at Leonidovka and of the second process building at Shchuchye is scheduled for the last quarter of 2012. Similarly, the destruction of other aerial munitions filled with nerve agents at Maradykovsky is scheduled to begin in 2013. The destruction operations at Kizner are also planned to begin in the second quarter of 2013. The unit for destruction of two types of missile warheads at Shchuchye is planned to start activities in 2014.
- 3.102 In March 2009, Libya commenced the reloading of sulfur mustard and of other declared chemicals from their original storage containers into safer, specially designed storage containers; the reloading operations were completed in April 2009. The destruction of Category 1 chemical weapons commenced in October 2010 and continued until 8 February 2011, when destruction operations were halted due to the breakdown of the heating unit in the disposal station. In November 2011 and February 2012, Libya submitted to the Secretariat declarations of chemical weapons not previously declared, which have been subsequently verified by the Secretariat during on-site inspections conducted with the full cooperation of Libya and with support provided by the United Nations Department of Safety and Security (UNDSS), Germany, and Canada. Libya indicated that it intends to restart operations for the disposal of the remaining chemical weapons by March 2013 and expects to complete destruction, including the remaining precursors, by December 2016.
- 3.103 Libya and some other States Parties have looked for ways to coordinate support to assist them in completing the destruction of their remaining chemical weapons. In this regard, under the Global Partnership Programme, Canada has provided financial support to the Secretariat to assist Libya in fulfilling its obligations under the Convention.
- 3.104 As at 30 June 2012, Libya had destroyed 13.48 MTs (51.21%) of its declared stockpiles of Category 1 chemical weapons, as well as 555.71 MTs (39.64%) of its Category 2 chemical weapons. Libya had previously destroyed all its Category 3 chemical weapons; however, in November 2011, Libya submitted a declaration of additional items that had not been destroyed prior to the cut-off date for this report.
- 3.105 As for Iraq, the first chemical weapons-related inspections were carried out in this State Party in 2011. Four former CWPFs, as well as the chemical weapons storage facility (CWSF) bunkers, were inspected in cooperation with the United Nations

Assistance Mission in Iraq. Discussions are continuing on the destruction of declared chemical weapons in Iraq, and the Secretariat has continued to provide assistance to Iraq in clarifying remaining matters regarding its declarations. It has also worked with Iraq and other interested States Parties to identify suitable methods of assessing the CWSF bunkers in order to proceed at a later stage with a destruction programme.

- 3.106 Pursuant to the decision of the Conference on visits by representatives of the Council to the CWDFs that are in operation or under construction,<sup>48</sup> five such visits have taken place since the Second Review Conference. These included three visits in the Russian Federation: at the Shchuchye CWDF in 2008, at Pochep in 2010, and at the Kizner CWDF in 2012. Two such visits have taken place in the United States of America: at the Pueblo and Umatilla CWDFs in 2009 and at the Pueblo and Tooele CWDFs in 2011. These visits were designed to address questions or concerns about each State Party's programme for fulfilling its destruction obligations by its extended deadline.
- 3.107 Possessor States continue to implement changes and upgrades in their destruction technologies. The OPCW will work closely with these States to ensure that CWDFs are constructed and operated in a manner that complies with the verification requirements provided for in the Convention. Complementing this, the Secretariat constantly seeks to improve its own inspection procedures and equipment. Furthermore, the Secretariat continues to review its verification approach during quality-review visits.
- 3.108 A number of States Parties have been assisting some possessor States in their efforts to eliminate their chemical weapons stockpiles. Such assistance remains of paramount importance and it is hoped that it will continue in the future.

Decision on the final extended deadline of 29 April 2012

- 3.109 The possessor States have shown commitment towards upholding their obligations under the Convention and a firm resolve to overcome the many challenges of the destruction process.
- 3.110 The Conference at its Sixteenth Session adopted a decision on the final extended deadline of 29 April 2012,<sup>49</sup> which enables the remaining possessor States to fulfil their obligations in due course while providing additional transparency measures and enhanced reporting requirements. As requested by the Conference in this decision, three of the possessor States (Libya, the Russian Federation, and the United States of America) submitted detailed plans for the destruction of their remaining chemical weapons, and each included a planned completion date. Pursuant to the same decision, the Chairperson of the Council, the Director-General, and a delegation representing the Council will continue to visit these States Parties in the future and will include, as appropriate, meetings with parliamentarians and government officials.
- 3.111 Such increased reporting on destruction activities and the undertaking of comprehensive reviews for each possessor State Party by the policy-making organs will provide the international community with the necessary reassurances that

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48 C-11/DEC.20, dated 8 December 2006.

49 C-16/DEC.11.

progress is being made by the States Parties concerned, with respect to the destruction of their remaining chemical weapons stockpiles, in accordance with their plans for destruction and planned completion dates.

### **Chemical weapons storage facilities**

- 3.112 Progress in destruction activities has already led to a decrease in the number of CWSFs. Among the 35 declared CWSFs, 26 have been closed and nine currently remain subject to verification.<sup>50</sup> Moreover, improvements in stockpile configurations and enhanced cooperation between the Secretariat and possessor States Parties have also led to more efficient and cost-saving inspection processes at these facilities.
- 3.113 Chemical weapons stockpiles at storage facilities continue to be inspected by OPCW inspectors to confirm declarations and remaining chemical weapons holdings with a view to ensuring that no undetected removal of chemical weapons from such facilities takes place.

### **Abandoned chemical weapons**

- 3.114 China and Japan have continued their cooperation in dealing with the historic legacy of chemical weapons abandoned by Japan on the territory of China. The agreed detailed plans for verification of destruction and the arrangements for the destruction at the ACW Mobile Destruction Facility (MDF) and at the Haerbaling ACW Test Destruction Facility have been approved by the Council in 2010<sup>51</sup> and 2011<sup>52</sup>, respectively.
- 3.115 The Council adopted a decision proposed by China and Japan on the deadline of 29 April 2012 and future destruction of the chemical weapons abandoned by Japan in China.<sup>53</sup>
- 3.116 As part of the ACW destruction plan attached to EC-67/DEC.6, China and Japan have agreed to the use of MDF systems for sites located both in the South and in the North of China. In October 2010, China and Japan commenced operations at the first MDF located in Nanjing in southern China. The Secretariat verified the destruction of 35,681 ACW items at this facility. The final inspection took place in June 2012. Since the destruction operation at Nanjing is completed, the MDF will be relocated to Wuhan. A second MDF dedicated to the North will commence operations in Shijiazhuang in near future.
- 3.117 Haerbaling is the largest Japanese ACW burial site in China; China and Japan work together with the aim to begin excavation, recovery and destruction at this site as soon as possible.

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50 These figures do not include facilities declared as “CWSFs at CWDFs” as they are verified as part of the respective CWDF.

51 EC-61/DEC.1 and DEC.2, dated 29 June 2010.

52 EC-66/DEC.4 and DEC.5, dated 5 October 2011.

53 EC-67/DEC.6, dated 15 February 2012.

- 3.118 The destruction of the eight CW items declared by Panama as abandoned and verified by the Secretariat in 2002 has not yet started.

### **Old chemical weapons**

- 3.119 States Parties continue to declare new discoveries of OCWs and to destroy them in accordance with the requirements of the Convention. There are currently 15 States Parties<sup>54</sup> that have made declarations in excess of 132,000 OCWs, manufactured both before 1925 and between 1925 and 1946, and it is expected that this number will continue to rise. Of these 15 States Parties, 11 have declared OCWs manufactured in the period between 1925 and 1946, which are subject to an assessment of usability in order to determine whether they are usable and therefore meet the definition of a chemical weapon.
- 3.120 In relation to OCWs, the issue of guidelines to determine the usability of chemical weapons produced between 1925 and 1946 remains outstanding.<sup>55</sup> The Secretariat developed its internal usability criteria, which have, since 2000, been applied uniformly and efficiently to all States Parties declaring OCWs and/or ACWs from the period between 1925 and 1946.
- 3.121 Consequently, the allocation of resources related to OCW inspections also awaits clarification, as no decision has been adopted by the policy-making organs. As a result, the Secretariat continues to treat all OCW-declaring States Parties equally, with the costs for OCW inspections being reimbursed by the Secretariat.

### **Destruction or conversion of chemical weapons production facilities**

- 3.122 Since the Second Review Conference, Iraq has declared the possession of five former CWPFs. Consequently, the total number of declared CWPFs is now 70 in 13 States Parties.
- 3.123 Of these, all have been deactivated and over 90% have been destroyed (43) or converted for peaceful purposes (21), in accordance with the Convention. Of the remaining six facilities, four in Iraq remain to be destroyed and two (one in Iraq and one in the Russian Federation) remain to be converted.
- 3.124 All former CWPFs that are scheduled for destruction or conversion that have been converted or that are under conversion, are subject to systematic verification by the Secretariat. At present, 27 such facilities in five States Parties (A State Party, Iraq, Libya, the Russian Federation, and the United Kingdom of Great Britain and Northern Ireland) are subject to systematic verification.
- 3.125 Of all the inspectable facilities, nine (one in A State Party, six in the Russian Federation, and two in the United Kingdom of Great Britain and Northern Ireland) have been converted for more than 10 years after certification of completion of their

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<sup>54</sup> Australia, Austria, Belgium, Canada, France, Germany, Italy, Japan, Poland, the Russian Federation, Slovenia, Solomon Islands, Switzerland, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.

<sup>55</sup> Paragraph 5 of Part IV(B) of the Verification Annex.

conversion was issued by the Director-General. In May 2012, the Secretariat resumed verification of those facilities in accordance with the decision<sup>56</sup> that was adopted by the Council at its Sixty-Seventh Session.

### **Other activities**

- 3.126 Since 2008, the Secretariat has also conducted two TAVs in Cambodia and in Libya. Both of these missions were aimed at assessing items of concern and at providing the requesting States Parties with the necessary information to determine whether declarations were required. It should be noted that the Secretariat has been informally approached by various States Parties that have initiated investigative activities for addressing explosive remnants of war that might contain chemical agents or RCAs.
- 3.127 The Secretariat participates annually in conferences regarding munitions dumped at sea. Although the Convention is very specific on the relevance of this issue and the related requirements for declaration, the Secretariat has chosen to follow developments in this area.

### **Analysis**

- 3.128 The pace of destruction of chemical weapons has continued in accordance with national annual plans, depending on the number of destruction facilities in operation in any given year and the type and form of storage of the chemical weapons being destroyed, as well as the technology selected for their destruction. Thus, the annual amount of chemical weapons destroyed has varied from a minimum of 4,137 MTs destroyed in 2008 to a record of 9,696 MTs in 2009.
- 3.129 The period under review marked the completion of chemical weapons destruction in two possessor States Parties, while three others have been unable to meet the final extended deadline of 29 April 2012. Overall, during the last five years, the aggregate amount of Category 1 chemical weapons destroyed and withdrawn pursuant to paragraph 2 of Part VI of the Verification Annex by the possessor States Parties doubled from 25,411 MTs (the equivalent of 36.53%) at the end of December 2007 to 52,246 MTs (75.25%) as at the end of June 2012.
- 3.130 Verification of the destruction of chemical weapons has continued to be a major priority for the OPCW. Through verification, the Secretariat provides the required assurances regarding the identity and quantities of chemical weapons that have been declared, destroyed, or have yet to be destroyed—and that no chemical weapons have been diverted during the process. This has been accomplished through a combination of the continuous presence of inspectors during destruction operations, the use of monitoring and recording equipment (including equipment dedicated specifically to OPCW inspectors), and the review of relevant documentation. During the last five years, the Secretariat has continued to fulfil its responsibilities in a timely manner and to do so at the requisite levels.
- 3.131 The decision on the final extended deadline of 29 April 2012<sup>57</sup> demonstrated the spirit of cooperation which characterises the work of the OPCW. It also fully preserved the

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<sup>56</sup> EC-67/DEC.7, dated 16 February 2012.

integrity of the Convention and upheld its credibility as an instrument that serves our collective security interests.

### **Future considerations**

- 3.132 While notable progress has been made towards the destruction of chemical weapons stockpiles worldwide, more than 25% of these still remain to be destroyed. The destruction of remaining chemical weapons will continue in accordance with the detailed plans submitted by the States Parties concerned, in which they include planned completion dates.
- 3.133 New destruction facilities or additional destruction capacities at already operational facilities are being built, which will ensure that the remaining chemical weapons are destroyed in accordance with national plans.
- 3.134 The Secretariat will continue to verify, in an efficient and reliable manner, that destruction is carried out in accordance with the provisions of the Convention, the decisions of the Conference and the Council, relevant agreements with the States Parties concerned, internal quality-control documents, and verification policy guidance. To this end, there will be a continuing need to retain a level of core expertise related to chemical weapons in order to meet operational needs as well as additional resource requirements associated with the possible ratification or accession of new possessor States Parties.<sup>58</sup>
- 3.135 In the last 12 months the Secretariat has carried out three TAVs to three States Parties. This trend indicates that States Parties recognise the expertise and assistance that the Secretariat can provide via the TAV mechanism.

### **Conclusion**

- 3.136 The destruction of chemical weapons is an ambitious task, which involves a huge human effort, many technical challenges, and high financial expenditure. Safety standards and the protection of the environment, as set forth in the Convention, are paramount.
- 3.137 States Parties with remaining chemical weapons stockpiles reaffirm their commitment to faithfully implementing their obligations with regard to the destruction of their chemical weapons and to completing such destruction in the shortest time possible.
- 3.138 The Secretariat has undertaken, and will continue to undertake on a regular basis, an assessment of its verification activities with the aim of improving and optimising them. The cooperation and support of the States Parties are of equal importance in improving the efficiency of the verification activities while maintaining the required degree of confidence, credibility, and transparency. This will allow the Secretariat to continue to meet its verification responsibilities with the available resources.

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<sup>57</sup> C-16/DEC.11.

<sup>58</sup> Paragraph 23 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011); page 1 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future Priorities of the OPCW, held in The Hague on 24 May 2012.

## **VERIFICATION ACTIVITIES OF THE OPCW**

### **Introduction**

- 3.139 Since the Second Review Conference, the Secretariat has continued to strengthen the verification system, which has been effective in meeting the requirements of the Convention and which contributes to improving effectiveness and efficiency. In this context, three areas of verification activities stand out: optimisation/ effectiveness of the regime, sampling and analysis (S&A), and reporting.

### **Optimisation/effectiveness of verification**

- 3.140 The Second Review Conference “noted with satisfaction that the OPCW had established an effective verification system with a view to achieving the non-proliferation and confidence-building aims of the Convention”<sup>59</sup> and “stressed that there is still room for improvement and therefore efforts to strengthen the implementation of the Article VI verification system should continue, including increasing its efficiency and effectiveness.”<sup>60</sup>

### Developments

- 3.141 The Secretariat issued its most recent report on optimisation efforts to the Council at the end of 2008.<sup>61</sup>
- 3.142 Currently, at all the operational CWDFs, the Secretariat is verifying the destruction of chemical weapons under the “optimised verification regime” with a team of approximately five inspectors at each facility. Based on the destruction activities to be carried out at CWDFs in the future and the adequacy and availability of monitoring equipment, the on-site team size might be revised. The Secretariat is constantly reviewing its verification approach and, together with possessor States Parties, is further optimising activities in the field during the systematic quality-assurance visits.
- 3.143 An important element for reducing the cost of Article VI inspections is the ability of the Secretariat to conduct sequential inspections (two inspections in one trip), carried out both within a State Party and between States Parties. Currently, 51 States Parties have agreed to receive sequential inspections, and among these, 47 have agreed to sequential inspections between States Parties. Two additional States Parties have agreed to a trial in 2012.
- 3.144 Since the Second Review Conference, the average size of inspection teams assigned to Article VI inspections has been reduced by 20%. This was mainly achieved by the reduction of team sizes for Schedule 3 and OCPF inspections from three to two inspectors.

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59 Paragraph 9.5 of RC-2/4.

60 Paragraph 9.57 of RC-2/4; paragraphs 50, 56, and 57 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

61 EC-54/S/6, dated 6 October 2008.



- 3.145 Upon the request of the Second Review Conference to review operational requirements and technical specifications,<sup>62</sup> the Secretariat has revised and updated the list of approved equipment specified in the decision adopted by the Conference at its First Session.<sup>63</sup> The updated list was approved by the Conference at its Fifteenth Session.<sup>64</sup>
- 3.146 In order to improve the quality of on-site verification reporting, the Secretariat has revised the format for preliminary findings and final inspection reports.<sup>65</sup> In addition, based on the experience gained, the Secretariat has emphasised handling issues in the most consistent way possible. The Secretariat has also made a change to the process for handling inspection correspondence, reducing the burden of paper for the Secretariat as well as the inspected States Parties.
- 3.147 In order to further improve the efficiency, effectiveness, and consistency of Article VI inspections, the Secretariat initiated a quality review of inspections in 2010.<sup>66</sup> More than 20 inspections will be subject to a quality review before the end of 2012, and the Secretariat intends to continue such reviews.
- 3.148 The Secretariat is also analysing final inspection reports from recent years in a systematic manner, as part of a project to augment the capability of the Verification Information System (VIS) to include the results of inspections in searchable electronic format. For example, a review of final inspection reports for OCPF inspections in 2011 has demonstrated that around 80% of OCPF inspections reported some variance between the information declared and the information verified on site. All except one of the reported differences were reported as “gather information to be provided in future declarations”. The main variances reported related to: the product group codes, reported for 37% of OCPF inspections; the “approximate number of plants”, reported for 38% of OCPF inspections; and the range of aggregate amount of production, reported for 18% of OCPF inspections.
- 3.149 The Second Review Conference welcomed the progress made in introducing the VIS, including the option of submitting declarations in electronic form.<sup>67</sup>
- 3.150 The VIS is an important software application tool for processing declarations, planning inspections, and analysing verification data. Significant progress has been made with its implementation, and it is now the key business-enabling technology platform supporting verification activities. All the annual Article VI declarations of past and anticipated activities are now routinely evaluated using the VIS.
- 3.151 The secure records registry and archive is central to verification activities, and the professional management of records is essential. Considerable work has been done to

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62 Paragraphs 9.42 and 9.147 of RC-2/4.

63 C-15/S/2, dated 4 November 2010.

64 Paragraph 9.19 of C-15/5, dated 3 December 2010.

65 New report templates were introduced for Schedule 1 inspections in 2010 (S/850/2010, dated 8 June 2010) and for Schedule 2, Schedule 3, and OCPF inspections in 2011 (S/960/2011, dated 2 September 2011; Corr.1, dated 20 September 2011).

66 Paragraph 31 of EC-61/DG.17, dated 29 June 2010.

67 Paragraph 9.46 of RC-2/4.

make progress with plans for the long-term management of confidential and other verification-related records. A Note by the Secretariat providing an update on work on the development and implementation of guidelines for the long-term handling of confidential information was issued in May 2010,<sup>68</sup> and this work is continuing.

- 3.152 A survey of all classified holdings, begun in 2007, was finalised in February 2009. At present, storage areas are being assessed against a professional standard for archival storage, and a disaster recovery plan is being prepared. This work will also be extended to unclassified holdings.

#### Analysis

- 3.153 While the efforts for optimisation were previously focussed mainly on verification activities in relation to chemical weapons, the Secretariat has turned its attention to Article VI inspections with a special emphasis on the efficiency and effectiveness of such inspections.
- 3.154 In this regard, carrying out as many sequential inspections as possible significantly helps to reduce the cost, largely due to savings in travel time and travel costs (for example, for the daily subsistence allowance). Conducting two OCPF inspections on a sequential basis typically reduces the number of inspector days required for each inspection by 25%.
- 3.155 In this respect, it is encouraging that the number of sequential inspections continues to grow, from 52 (26 pairs of sequential inspections) in 2007 to 94 (47 pairs of sequential inspections) in 2011. The number could still increase, especially if all the States Parties that usually receive six or more industry inspections per year agree to the use of sequential inspections in their territory.
- 3.156 A number of States Parties have set restrictions on the facilities that can be inspected sequentially (including the types of facilities concerned and/or the distances between the facilities to be inspected), which limits the number of sequential inspections and reduces the gains in efficiency.
- 3.157 As a result of the quality review of inspections and analysis of final inspection reports, it is clear that differences among States Parties in national legislation and in the interpretation of several provisions of the Convention have an effect on the consistency of implementation of the verification regime. For example, variances were observed for (a) the declarability of mixtures of discrete organic chemicals and (b) the meaning of “production by synthesis” and, for example, whether it includes biologically mediated processes.

#### Future considerations

- 3.158 The Secretariat is of the view that further improving the accuracy and completeness of declarations would contribute to efficient, effective, and consistent implementation of the Convention.

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68 EC-61/S/3, dated 21 May 2010.

- 3.159 In addition, the Secretariat suggests that States Parties and the chemical industry explore innovations, for example:
- (a) instead of only conducting two inspections during a single week as part of sequential inspections, carrying out three to four consecutive inspections in two weeks in the States Parties that usually receive six or more industry inspections per year;
  - (b) combining inspections in mixed plant sites that are covered under different parts of the Verification Annex and/or in plant sites located in the same industrial park, which could be operated by the same company; and
  - (c) receiving information from the inspected State Party about the plant site to be inspected, which could be provided, on a voluntary basis, in advance or upon receipt of notification.
- 3.160 Further improvements to the VIS are in progress, including the development of a module to enhance the analysis of inspection reports and mission planning. In addition, a structured data-quality programme has been initiated.

### **Sampling and analysis**

- 3.161 S&A is one of the verification tools identified by the relevant provisions of the Convention.

#### Schedule 2 sampling and analysis inspections

- 3.162 The Secretariat has been using S&A in a limited number of subsequent inspections at Schedule 2 plant sites. Since 2006, 50 inspections with on-site S&A have been conducted during Schedule 2 inspections in 22 States Parties that have declared inspectable Schedule 2 plant sites.<sup>69</sup>
- 3.163 The analytical equipment has worked well without any major problems in all the inspections except in one case where part of the equipment was found to have been damaged during transport.
- 3.164 Special attention has been paid to the protection of a plant site's confidential business information. The inspection teams ensure that the S&A methodology is explained to site personnel, so that confidence in the inspection procedure is established and transparency is ensured.
- 3.165 Through lessons learned, the Secretariat has upgraded inspection equipment (the auto-sampler/auto-injector, the sample-preparation kit, and so on) and has made improvements in the practices and procedures related to S&A inspections. The inspection teams are now able to handle a higher number of samples from a variety of sample types, enhancing the overall efficiency and effectiveness of such inspections.

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<sup>69</sup> S/688/2008, dated 10 April 2008; S/719/2008, dated 10 November 2008; and S/953/2011, dated 29 July 2011.

- 3.166 Confidence in and knowledge about S&A have increased over the period since the Second Review Conference, leading to an expansion in the number of possible locations for samples collected for analysis.

Technical support provided by the OPCW Laboratory

- 3.167 The OPCW Laboratory is the focal point for the technical aspects of chemical S&A. To this end, the Laboratory maintains sophisticated analytical instrumentation, trains analytical chemists (as inspectors) in the use of this equipment, creates a database of analytical data, and maintains a network of OPCW designated laboratories in the event that off-site sample analysis is required:

- (a) An instrumental replacement plan (the purchase of one new gas chromatograph/mass spectrometer a year) keeps the set of six instruments used for S&A missions relatively young.
- (b) The OPCW Central Analytical Database (OCAD) has grown significantly in the past five years with one new release per year (in December). The statistics of the mass spectra and gas chromatographic retention index (GC/RI) show the growth of the database (number of entries in each type of data):

**TABLE 2: STATISTICS OF MASS SPECTRA AND GC/RI**

<b>Release month</b>	<b>Mass Spectra</b>	<b>GC/RI</b>
December 2008	3950	3324
December 2009	4183	3494
December 2010	4382	3649
December 2011	4826	4137

- (c) Proficiency tests continue to be conducted by the OPCW Laboratory in order to test partner laboratories that are, or wish to become, an OPCW designated laboratory. The number of OPCW designated laboratories is as follows:

**TABLE 3: NUMBER OF OPCW DESIGNATED LABORATORIES**

<b>Year ending</b>	<b>Spring test</b>	<b>Autumn test</b>
2008	20	19
2009	19	18
2010	18	19
2011	22	21

- (d) Biomedical sample analysis confidence-building exercises have been undertaken twice (November 2009 to January 2010, and February to March 2012) in order to ascertain the readiness of external laboratories for the analysis of these biomedical samples in the event of an investigation of alleged use.

Analysis

- 3.168 On-site S&A constitutes an objective and powerful verification method to check for the absence of undeclared scheduled chemicals. This activity is performed in addition

to regular inspection activities, i.e., physical inspection of the facilities and a review of records.

- 3.169 In the view of the Secretariat, the number of S&A inspections, currently between eight and 10 every year, provides a balance between the verification requirements in the Convention and the availability of resources within the Secretariat.
- 3.170 Until now, the Secretariat, being aware of additional requirements from inspected States Parties for preparation and logistic arrangements, has made an effort to distribute S&A inspections geographically, by limiting the number of S&A inspections for each State Party to one per calendar year. However, in the future, a few States Parties, which have declared a higher number of plant sites, are likely to receive more than one such inspection in a calendar year. Furthermore, the Secretariat has avoided using S&A inspections at plant sites that have already been subject to an S&A inspection in the past. This can be reviewed further, as more Schedule 2 plant sites receive an S&A inspection in the future.
- 3.171 The Secretariat continues to review its internal processes in order to align the analytical paperwork with the findings of on-site inspections. In the past, this has led to more consistent reports and a reduction in the time required on site for the preparation of analytical reports.
- 3.172 Biomedical sample analysis confidence-building exercises have demonstrated several key factors. Some laboratories are quite skilled in this type of analysis, and others require more effort. These exercises will continue with the goal of implementing a scheme to test proficiency, leading to the designation of laboratories for this type of analysis.

#### Future considerations

- 3.173 Having gained a great deal of experience in the conduct of on-site S&A during Schedule 2 inspections, the Secretariat is now also preparing to conduct on-site S&A during Schedule 3 and OCPF inspections. Paragraph 22 of Part VIII and paragraph 19 of Part IX of the Verification Annex, dealing with S&A for the regimes for Schedule 3 and OCPFs, state: "Sampling and analysis may be undertaken to check for the absence of undeclared scheduled chemicals."
- 3.174 Therefore, the Secretariat is optimising all steps dealing with on-site S&A, the aim of which is to ensure that collection, preparation, and analysis of the samples take place within the inspection period, which is shorter for Schedule 3 and OCPF inspections than for Schedule 2 inspections.
- 3.175 Conducting S&A would increase the effectiveness of verification at the Schedule 3 facilities and OCPFs that receive such inspections (as it has done for Schedule 2 inspections). The key reasons for this are the following:
- (a) S&A is performed in addition to regular inspection activities (such as physical inspection of the facilities and a review of records). It does not replace any other verification activities.

- (b) The conduct of S&A is an objective method of on-site verification.
- (c) A broader range of facilities would receive S&A missions, including those plant sites that have highly flexible equipment and the type of infrastructure that makes them easily diverted for prohibited purposes.
- (d) The geographic distribution of inspections with on-site S&A would also be broadened. Around 80 States Parties have declared at least one Schedule 3 or OCPF plant site and, of these, 22 have received at least one inspection with S&A during Schedule 2 inspections. By expanding S&A to the Schedule 3 and OCPF regimes, up to 58 more States Parties that are not likely to receive S&A under the Schedule 2 regime could eventually receive inspections with S&A.

### **Improving verification reporting**

3.176 The OPCW's verification activities have been regularly reported to States Parties by the Secretariat. The Second Review Conference encouraged the Secretariat to continue its efforts to improve verification reporting and to provide more information (consistent with confidentiality requirements) about the sites inspected and the issues that had arisen. It was suggested that this be done through more precise classification of portions of text and by making charts and tables available in spreadsheet form to facilitate analysis by States Parties.<sup>70</sup>

### Developments

3.177 In keeping with the guidance provided by the Second Review Conference, the Secretariat has taken a number of steps to improve verification reporting:

- (a) The Verification Implementation Report (VIR) has become more user-friendly and useful to States Parties and the Secretariat. Major improvements include the introduction of summarised information, separation of the statistical information from the main text to the annexes, inclusion of more detailed information on key implementation matters, and making the VIR available on CD-ROM. Practices such as circulating comments and views by States Parties, as well as informal consultations on the VIR, have continued.
- (b) A Summary of Verification Activities was introduced in 2007. This yearly summary does not contain any confidential information and is made available on the OPCW website. It provides valuable feedback on the OPCW verification activities to States Parties that are not in a position to avail themselves of the highly protected VIR, as well as to interested members of academia and the public.
- (c) Presentations by the Secretariat to the Council have become part of the official deliberations of the Council since May 2012, replacing the traditional informal briefings before each session of the Council.

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<sup>70</sup> Paragraphs 9.51 and 9.67(a) of RC-2/4.

### Analysis

- 3.178 Recent developments in the Secretariat's factual reporting on verification have further enhanced transparency and the continued assurance of States Parties' compliance.

### Future considerations

- 3.179 The Secretariat will continue its efforts to improve the way it reports on verification results.

### **Conclusion**

- 3.180 The Secretariat will continue to make efforts to conduct its verification activities in a more efficient, effective, consistent, and accountable manner, based on the mandate provided by the Convention.

## **ACTIVITIES NOT PROHIBITED UNDER THE CHEMICAL WEAPONS CONVENTION**

### **Introduction**

- 3.181 Article VI of the Convention regulates activities concerning toxic chemicals and their precursors for purposes not prohibited under the Convention. In light of this, each State Party is required to subject its Schedule 1, Schedule 2, and Schedule 3 chemical facilities, as well as OCPFs, to the verification measures that are based on declarations and inspections.

### **Article VI declarations**

- 3.182 Each State Party is obliged to submit declarations on activities not prohibited under the Convention. The Second Review Conference stressed the importance of the timely submission of these declarations in an accurate and complete manner.<sup>71</sup> In this context, the Second Review Conference encouraged the Secretariat to provide appropriate assistance, upon request, to any State Party with a view to meeting its declaration obligations.<sup>72</sup>

### Status of submissions

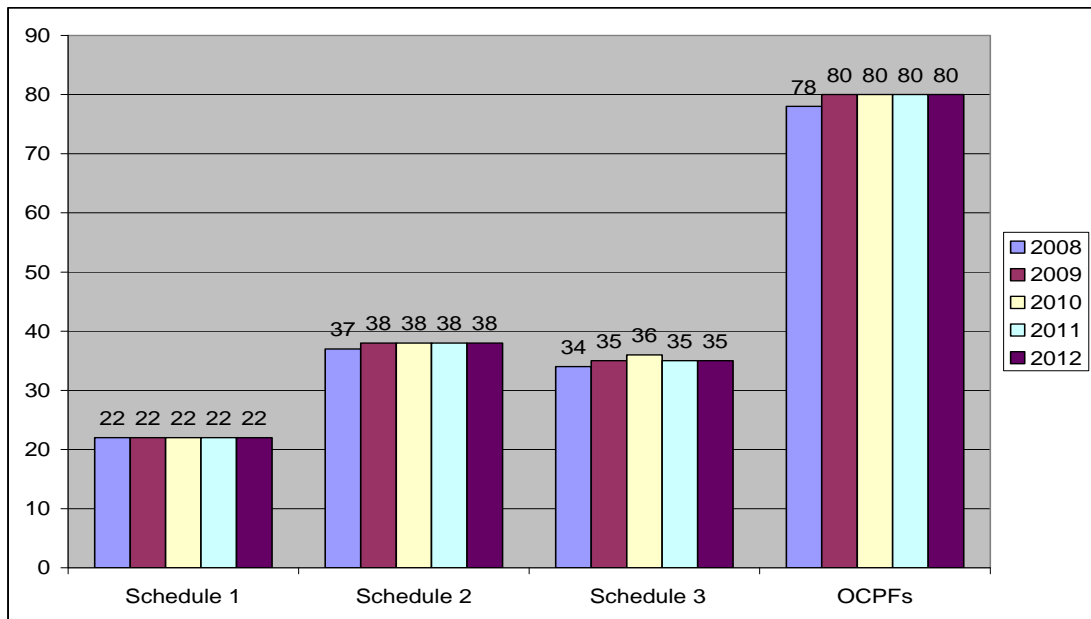
- 3.183 The number of States Parties making Article VI facility declarations has remained relatively constant in the last five years, as seen below.

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71 Paragraphs 9.44 and 9.60 of RC-2/4.

72 Paragraph 9.45 of RC-2/4.

**CHART 1: NUMBER OF STATES PARTIES HAVING DECLARED FACILITIES – 2008 TO 2012<sup>73</sup>**

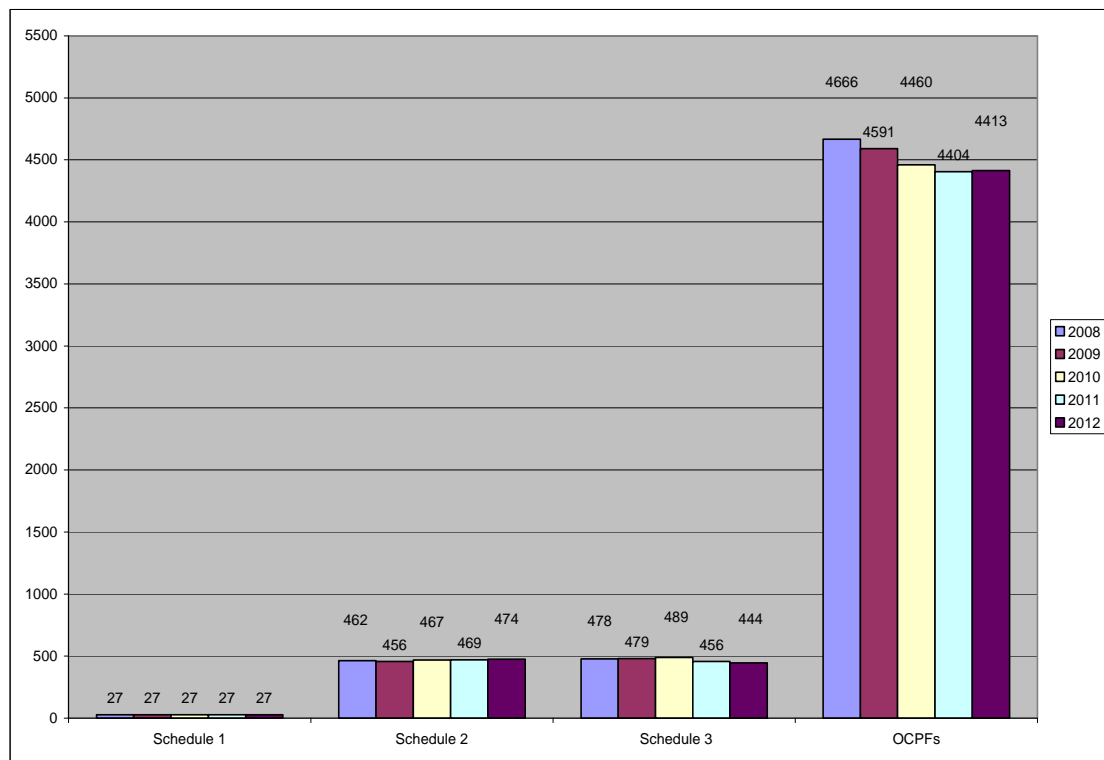


3.184 The numbers of declared Schedule 1 facilities and Schedule 2 plant sites have remained relatively stable in the period since the Second Review Conference. The numbers of declared Schedule 3 plants sites and OCPFs have decreased slightly over the same period by 7% and 5%, respectively.

<sup>73</sup> Figures in 2008 to 2011 show the status as at 31 December of the respective year. Figures for 2012 show the status as at 30 June 2012.



**CHART 2: NUMBER OF DECLARED FACILITIES – 2008 TO 2012<sup>74</sup>**



3.185 The decrease in the number of declared OCPFs was partly due to the ongoing initiative by the Secretariat to highlight the need for States Parties to review their lists of declared OCPFs and remove those that are no longer declarable. Following this initiative, approximately 99% of all OCPFs are now updated annually, compared to approximately 85% updated in 2008.

#### Late submissions

3.186 The importance of timely submission of initial and annual declarations was stressed by the Second Review Conference<sup>75</sup> because late declarations have a significant impact on verification activities.

3.187 At its Fifty-First Session, the Council adopted a decision in which, inter alia, it called upon States Parties that had yet to do so to take the necessary measures to ensure that their declarations were submitted in accordance with the deadlines provided for in the Convention. It also requested States Parties that anticipated difficulties in regard to timely submission of their declarations to inform the Secretariat of the circumstances of such difficulties.<sup>76</sup> In accordance with this decision, the Secretariat has prepared regular status reports to the Council on the implementation of this decision.<sup>77</sup>

<sup>74</sup> Figures in 2008 to 2011 show the status as at 31 December of the respective year. Figures for 2012 show the status as at 30 June 2012.

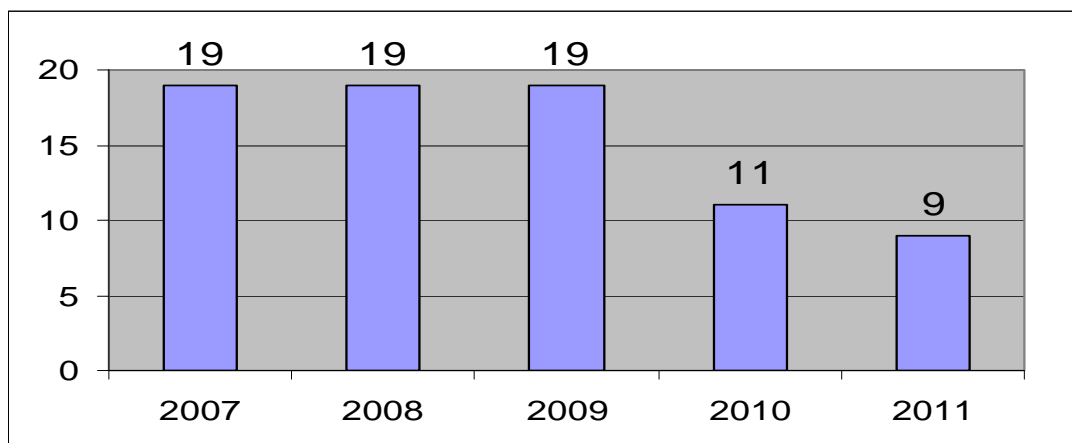
<sup>75</sup> Paragraph 9.60 of RC-2/4.

<sup>76</sup> EC-51/DEC.1, dated 27 November 2007.

<sup>77</sup> EC-53/DG.8, dated 5 June 2008; EC-55/DG.12, dated 5 February 2009; EC-57/DG.8, dated 11 June 2009; Corr.1, dated 18 June 2009; EC-59/DG.8, dated 29 January 2010; EC-61/DG.11, dated

3.188 While some improvements have been seen since the adoption of this decision, over a third of submitting States Parties still provide their annual declarations on past activities (ADPAs) for declarable facilities and activities late, many of which are received weeks or months late. The Secretariat started an initiative in 2010 to focus on those States Parties that submit their declarations more than 30 days late. This resulted in a significant reduction in the number of States Parties doing so.

**CHART 3: NUMBER OF STATES PARTIES MORE THAN 30 DAYS LATE IN SUBMITTING ADPAS<sup>78</sup>**



Declared chemicals<sup>79</sup>

3.189 The Secretariat devotes substantial effort to processing and evaluating annual declarations received under Article VI (ADPAs and annual declarations on anticipated activities (ADAAs)).

*Schedule 1 chemicals*

3.190 An analysis of the Schedule 1 chemicals produced from 2007 to the end of 2011, based on declarations submitted, indicates that an aggregate amount of just over 0.6 tonnes was produced in all the Schedule 1 facilities of all States Parties. Of this amount, about 0.5 tonnes was produced in single small-scale facilities (SSSFs).

3.191 The question of how to deal with industrial processes involving Schedule 1 chemicals as intermediates has arisen. The case that gave rise to this question was resolved by a change in the process chemistry, but States Parties may wish to address the possibility of this issue re-emerging and ensure that their industries are aware of the issue.<sup>80</sup>

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11 June 2010; EC-63/DG.5, dated 18 January 2011; EC-65/DG.8\*, dated 27 June 2011; and EC-67/DG.4, dated 19 January 2012.

<sup>78</sup> All figures are based on declarations received up to and including 30 June 2012.

<sup>79</sup> Data on activities for 2007 and 2011 are based on declarations received in 2008 (and any subsequent amendments) and 2012 (as at 30 June 2012) respectively.

<sup>80</sup> EC-62/NAT.6, dated 17 September 2010 and S/881/2010, dated 1 November 2010.

*Schedule 2 chemicals*

- 3.192 Based on information declared to the Secretariat, the production and consumption of Schedule 2 chemicals has continued to increase since the Second Review Conference. The total amount of Schedule 2 chemicals produced and consumed rose after 2007, from 23,000 tonnes to 33,000 tonnes in 2011. This increase was primarily due to five chemicals.<sup>81</sup> The total amount produced for these five chemicals, compared to the total amount of Schedule 2 chemicals produced, increased from 64.8% in 2007 to 76.5% in 2011. Two other Schedule 2 chemicals are produced on a large scale, that is, in quantities above 1,000 tonnes. The quantity of thiodiglycol produced increased only slightly between 2007 and 2011, whereas the amount of diethyl ethylphosphonate produced fell by over 40% (1,050 tonnes in 2007 compared with 600 tonnes in 2011).
- 3.193 The total amount of Schedule 2 chemicals consumed follows the same trend as their production, rising from 19,100 tonnes in 2007 to 28,100 tonnes in 2011, with the increase being due to the chemicals mentioned above. This represents 80% of the total Schedule 2 chemicals produced each year.
- 3.194 The difference between the amounts produced and consumed corresponds very approximately to the quantities processed. The amount processed, however, decreased from 3,100 tonnes (14% of the total amount produced in 2007) to 2,800 tonnes (8% of the total amount produced in 2011).
- 3.195 In the period since the Second Review Conference, two cases of transfers of Schedule 2 chemicals (amounting to a total of 6.16 tonnes) to States not Party, in breach of the ban on such transfers, have been reported to the Secretariat by the State Party from which the chemicals were exported. The State Party concerned has indicated that the company involved has been prosecuted.
- 3.196 The Conference took a decision in 2009 that set out guidelines for the declaration of mixtures containing Schedule 2A and 2A\* chemicals.<sup>82</sup>

*Schedule 3 chemicals*

- 3.197 Since the Second Review Conference, declarations indicate that the total production amounts of Schedule 3 chemicals<sup>83</sup> have increased from about 8,200 Ktonnes in 2007 to just over 9,100 Ktonnes in 2011. This increase was primarily due to one chemical.<sup>84</sup> The total amount produced for the chemical, compared to the total

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81 Butyl methylphosphonate, methylphosphonous dichloride, perfluoroisobutene (PFIB), methylphosphinic acid, and dimethyl methylphosphonate.

82 C-14/DEC.4, dated 2 December 2009.

83 These figures are indicative, as a small number of States Parties declare their aggregate national data (AND) for Schedule 3 production in ranges. The question of declaring ranges versus exact figures for the AND of Schedule 3 production is still an outstanding issue under consideration in the Industry Cluster. When the amount produced is declared as a range, the average figure for each range is used to arrive at the aggregate amount. If the range is declared as code B25 (more than 100,000 tonnes), then 100,000 tonnes is used in the calculation.

84 Carbonyl dichloride (Phosgene) (3A01).

amount of Schedule 3 chemicals produced, increased from just over 49% in 2007 to almost 50% in 2011. Over the period 2007 to 2011, three Schedule 3 chemicals have been produced on a large scale. One Schedule 3 chemical<sup>85</sup> has been produced in large quantities (above 4,000 Ktonnes); the other two Schedule 3 chemicals<sup>86</sup> are mostly produced in quantities above 1,000 Ktonnes. Production amounts of dimethyl phosphite (3B10) have increased steadily since 2007 (192 Ktonnes in 2007 compared with 283 Ktonnes in 2011), while the amounts of sulfur dichloride (3B13) produced fell by 89% (109 Ktonnes in 2007 compared with 12 Ktonnes in 2011).

- 3.198 The Second Review Conference reaffirmed a decision by the Council calling upon States Parties to adopt the necessary measures to ensure that Schedule 3 chemicals transferred by them to States not Party are used only for purposes not prohibited by the Convention.<sup>87</sup> Since the Second Review Conference, just over 11,000 tonnes of Schedule 3 chemicals have been exported to States not Party. This is a reduction of about one-third compared with the previous five-year period.

#### Aggregate national data

- 3.199 Data monitoring is the only means available to the Secretariat to verify chemical activities for purposes not prohibited under the Convention in those States Parties that have no inspectable facilities, and their AND forms a key element of this. Currently only 80 States Parties have inspectable facilities, but typically over 120 States Parties are involved in the trade in scheduled chemicals each year, and not all of them make AND declarations. AND declarations are also the Secretariat's only source of information in relation to transfers of scheduled chemicals to States not Party.
- 3.200 The Second Review Conference requested that the Secretariat continue working with the States Parties concerned on analysing persisting discrepancies between exporting and importing States Parties.<sup>88</sup>
- (a) In 2009 the Conference adopted a decision<sup>89</sup> that set out voluntary guidelines for the declaration of import and export data for Schedule 2 and Schedule 3 chemicals, with a view to enhancing accurate reporting of AND. As requested in the decision, the Secretariat has reported to the Council on the progress achieved through its implementation. Of the 52 States Parties that responded to the survey,<sup>90</sup> 44 (85%) have fully implemented this decision and a further three (6%) have partially implemented it.
- (b) In terms of numbers of discrepancies, little impact can be seen. Approximately a third of all transfers declared (including those below the declaration threshold) show a discrepancy—a figure that has not changed significantly since the Second Review Conference.

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85 Carbonyl dichloride (Phosgene) (3A01).

86 Hydrogen cyanide (3A03) and phosphorus trichloride (3B06).

87 Paragraph 9.70 of RC-2/4.

88 Paragraph 9.71 of RC-2/4.

89 C-13/DEC.4, dated 3 December 2008.

90 S/900/2011, dated 16 February 2011; EC-67/S/1, dated 16 January 2012.

- (c) The weight of scheduled chemicals involved in these discrepancies, as a percentage of the worldwide trade, has improved slightly, with a reduction from 60% in 2007 to 51% in 2010<sup>91</sup>. However, this still means that more than half the trade in scheduled chemicals in 2010, amounting to over 160,000 tonnes, is involved in discrepancies, the bulk of which remain unresolved.

#### Assistance to States Parties

- 3.201 The Secretariat has continued its efforts to cooperate with States Parties in ensuring that declarations submitted in accordance with the Convention are complete and accurate. It has also provided appropriate assistance to States Parties upon request.
- 3.202 EDNA forms an integral part of the overall VIS system and enables States Parties to submit annual declarations in electronic form. In fact, the number of States Parties submitting electronic declarations is increasing, rising from 7 in 2008 to 39 in 2012, and the vast majority of Article VI facilities are now declared electronically.<sup>92</sup> The Secretariat is actively supporting and encouraging more National Authorities to make use of electronic declarations, with a view to facilitating the transition towards a more efficient declaration-management system. These developments have led to improvements in the efficiency and timeliness of the declaration process.
- 3.203 In November 2008, the Secretariat released a major revision of the *Declarations Handbook* to bring it up to date with the Council and Conference decisions taken since the previous version was released in 2002 and to improve the guidance for States Parties, particularly under Article VI. This update includes new standard forms for the submission of notifications of Schedule 2 and Schedule 3 plant closures, as requested by the Second Review Conference.
- 3.204 The Second Review Conference encouraged the Secretariat to continue to develop and update existing databases on declarable chemicals in order to provide practical assistance in the identification of declarable activities.<sup>93</sup> An updated version of the *Handbook on Chemicals* was released in 2009, and an online database containing information on over 29,000 scheduled chemicals was also developed and became available in the same year. E-learning tools for training National Authorities in the use of EDNA are in preparation.
- 3.205 In order to support their key role in the control of the trade in scheduled chemicals, the Secretariat has provided assistance to customs officers.<sup>94</sup> Firstly, a new simplified recommendation from the World Customs Organization (WCO) on the identification of key scheduled chemicals in the Harmonized System was developed in cooperation with

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91 Further details are provided in EC-67/S/1.

92 For the ADPA 2011 declaration round, 51% of the declarations were received fully or partially in electronic format. This figure excludes nil declarations.

93 Paragraph 9.61 of RC-2/4.

94 Paragraph 92 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

the WCO.<sup>95</sup> This was approved in 2009. Further work has led to a proposal for a full amendment to the Harmonized System to allocate individual codes to key scheduled chemicals. Secondly, the Secretariat is working with the WCO and the United Nations Environment Programme (UNEP) under the Green Customs Initiative to develop e-learning modules for customs officers. The content has been completed and is anticipated to go online early in 2013.<sup>96</sup> Thirdly, training programmes for customs officers have been developed, and currently, between six and eight courses per year are delivered on a regional or subregional basis.

### Analysis

- 3.206 In general, the Article VI declaration process is working reasonably well, and significant advances have been made. However, as highlighted above, concerns remain regarding the timeliness, accuracy, and completeness of declarations, which has a negative impact on the implementation of the verification regime.
- 3.207 As at 29 February 2012, only 23 out of 188 (12%) States Parties had informed the Secretariat that they had implemented the decision on guidelines for low-concentration limits for Schedule 2A and Schedule 2A\* chemicals.<sup>97</sup>
- 3.208 Analysis of AND trends provides important indicators of potential additional declarable activities in a State Party. A pilot project carried out since the Second Review Conference has resulted in the declaration of an additional 11 Schedule 2 facilities. As a result, this analysis will be incorporated into normal data-monitoring and -analysis activities. However, the discrepancies between transfers declared by States Parties are still of such magnitude that effective data monitoring is difficult for the Secretariat to achieve. The Secretariat believes that this issue should receive further attention as a matter of some priority.<sup>98</sup>
- 3.209 Undeclared activities covered by the Convention are an issue of major concern and undermine the effectiveness of the verification regime. The reporting of such information should be seen as key to improving effectiveness.
- 3.210 Since the Second Review Conference, it has become clear that the current software applications for document and information management in respect of verification cannot meet the increasing and changing demands placed upon them. The Secretariat has continued to review requirements and recommend enhancements, including a study of organisation-wide requirements for a document-management system. A business case has been developed specifically for the requirements of the Secure Archive, as this is the area most pressingly affected by the limitations of the current systems.

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95 The Harmonized System is an internationally standardised system, developed and maintained by the WCO. It contains names and numbers for classifying traded products and is used by virtually all customs services to classify traded goods, including chemicals.

96 Paragraph 96 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

97 C-14/DEC.4; see also S/948/2011, dated 6 July 2011; and paragraphs 8.54 to 8.57 of EC-69/HP/DG.1, dated 1 May 2012 (2011 Verification Implementation Report).

98 Paragraph 93 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

- 3.211 In future, consideration should be given to developments in information technology and the impact that improvements in document and information management could have on the efficiency and flexibility of the Secretariat as a whole.

Future considerations

- 3.212 As resources permit, the Secretariat will continue conducting bilateral meetings with representatives of States Parties on issues of the timeliness of submissions of accurate and complete declarations at appropriate regional meetings and workshops.
- 3.213 The Secretariat will also continue to provide advice and assistance to States Parties on request. In addition, work will continue on the development of tools and aids to support States Parties, including continued developments in EDNA, the *Declarations Handbook*, and other tools, as well as the development of e-learning modules.
- 3.214 The decision<sup>99</sup> on guidelines for low-concentration limits of Schedule 2A and Schedule 2A\* chemicals stipulates that the Third Review Conference is to review progress in carrying out this decision, with a view to ensuring its effective implementation. States Parties are encouraged to submit information on this issue.
- 3.215 The Secretariat is also working on a secure transmission mechanism for the on-line submission of electronic declarations. Logistical problems are often cited when declarations are late, and it is expected that such a system will bring further improvements to the timeliness of declaration submissions. If proven successful, the same mechanism could be used in the future for secure exchange of other types of confidential data in digital format between States Parties and the Secretariat.
- 3.216 Work will be undertaken to ensure that the data contained in declarations is monitored and used effectively to further the aims of the Convention, as well as to continue to develop the analytical capability of the VIS in support of verification. This will include further development of the recently commenced data-quality initiative.

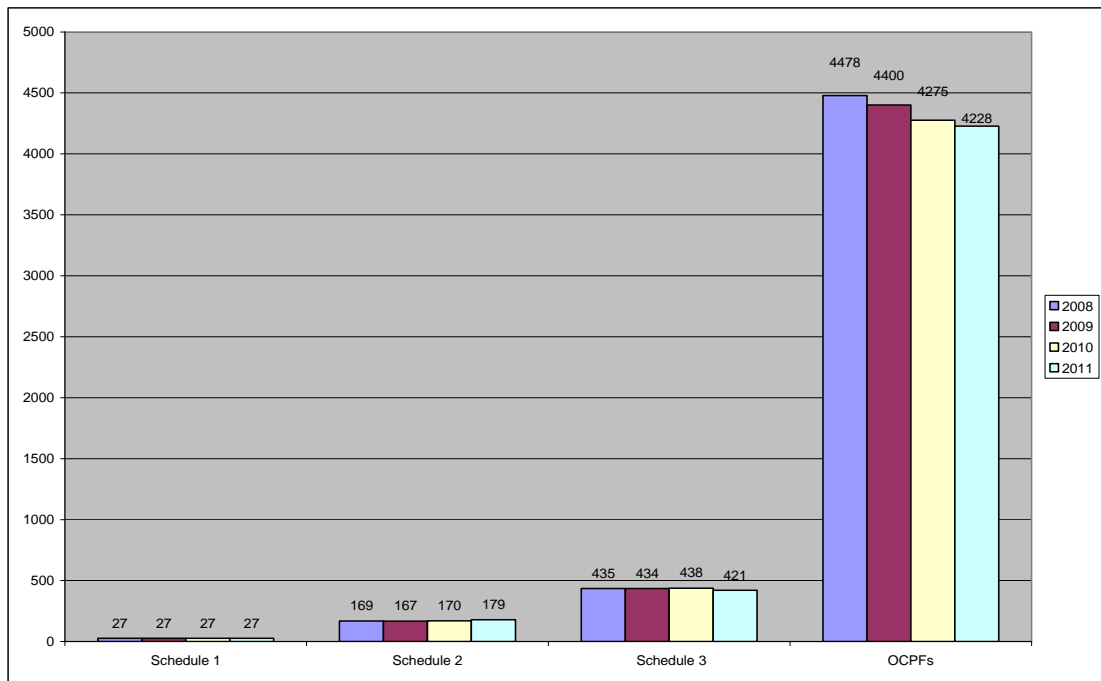
**Article VI inspections**

- 3.217 Each State Party is obliged to declare its toxic chemicals and their precursors (as listed in Schedules 1, 2, and 3), facilities related to such chemicals, and OCPFs and to subject these to on-site verification in accordance with the provisions of the Convention. The Secretariat selects facilities for inspection (those above the verification threshold) as per the relevant provisions of the Convention.

Inspectable facilities

- 3.218 In the period since the Second Review Conference, the numbers of inspectable Schedule 1 facilities and Schedule 2 plant sites have remained relatively stable, while those of inspectable Schedule 3 plants sites and OCPFs have decreased slightly.

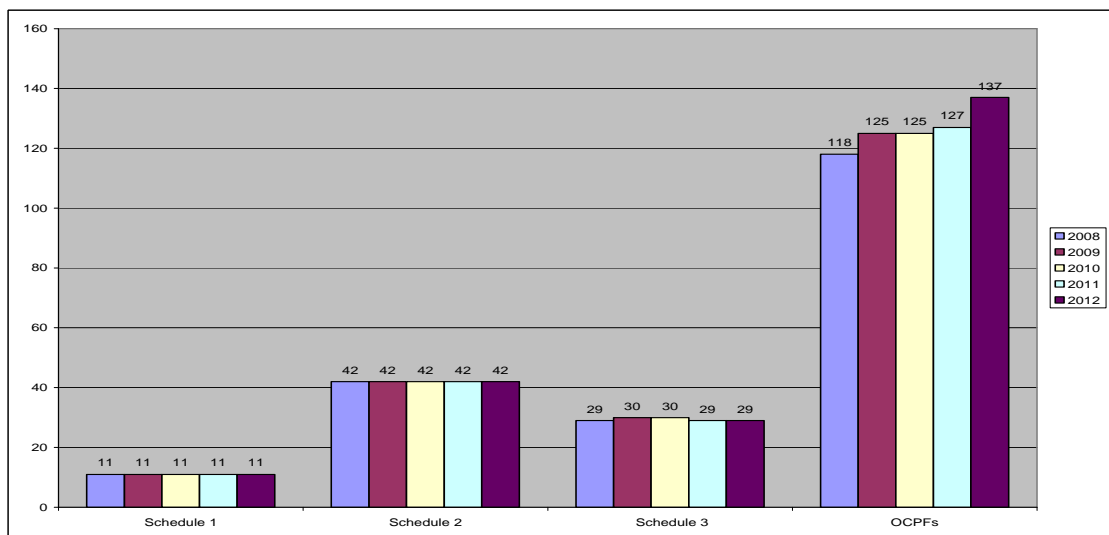
**CHART 4: NUMBER OF INSPECTABLE FACILITIES – 2008 TO 2011**



Number of inspections

3.219 The total number of inspections has gradually increased in the last five years. Among the four categories of Article VI inspections, the number of Schedule 1, 2, and 3 inspections is almost the same, while the number of OCPF inspections has increased.

**CHART 5: NUMBER OF INSPECTIONS – 2008 TO 2012**



3.220 In October 2011, the Council adopted a decision on the issue of policy guidelines for determining the number of Article VI inspections.<sup>100</sup> The Council decided that these guidelines should be taken into account in a balanced manner, recognising that the



number of Article VI inspections would continue to be determined pursuant to both the requirements of, and the limits set by, the Convention. The Conference at its Sixteenth Session, welcoming the Council's decision, decided that the number of Article VI inspections should be 219 for 2012, 229 for 2013, and 241 for 2014.

#### Schedule 1 chemicals and related facilities

- 3.221 There are currently 27 declared and inspectable Schedule 1 facilities in 22 States Parties that are subject to systematic verification, including: eight SSSFs; 17 "other Schedule 1 facilities" producing for protective purposes (OFPPs); and two "other Schedule 1 facilities for research, medical, or pharmaceutical purposes".
- 3.222 Of the 233 Schedule 1 inspections conducted since the entry into force of the Convention, the 47 (11 per year) that have taken place since the Second Review Conference (in the period between 19 April 2008 and 30 June 2012) have reported no "uncertainties" as specified in the Verification Annex. Seven inspections have recorded issues requiring further attention from the inspected State Party and the Secretariat during this time.
- 3.223 Although the Convention mentions verification through on-site inspection and monitoring with on-site instruments, the Secretariat has never used on-site monitoring instruments because of the nature of the facilities and the activities carried out during Schedule 1 inspections.
- 3.224 At its Sixty-Seventh Session, the Council concurred with the facilitator's recommendation regarding the issue of studying the need for a recommendation regarding "the future treatment of salts of Schedule 1 chemicals that are not explicitly mentioned in the Schedule 1 list". It was concluded that there was no agreement to pursue any action to add new salts to the Schedules or to treat the unscheduled salts of scheduled chemicals in the same way as their free bases. The Council also decided that, in the event that new information meriting future review becomes available, it may consider returning, on a case-by-case basis, to the issue of salts of scheduled chemicals.<sup>101</sup>
- 3.225 Guidelines on the number, intensity, duration, timing, and mode of inspections for Schedule 1 facilities are required under paragraphs 23 and 30 of Part VI of the Verification Annex, but in the absence of a decision to that effect, the Secretariat has a working practice in place that it intends to continue.<sup>102</sup> A draft decision is currently being discussed in the Industry Cluster.

#### Schedule 2 chemicals and related facilities

- 3.226 The number of inspectable Schedule 2 plant sites has not changed significantly. There were 165 in 22 States Parties in December 2007 and 179 in 23 States Parties in December 2011. Only six States Parties declared 10 or more inspectable plant sites; these States Parties declared about 70% of all Schedule 2 inspectable plant sites.

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<sup>101</sup> Paragraph 4.4 of EC-67/3, dated 27 March 2012.

<sup>102</sup> Non-paper by the Secretariat, "Risk Assessment and Frequency of Inspections at Schedule 1 Facilities", dated 20 May 2011.

- 3.227 Among a total of 175 Schedule 2 inspections, conducted from 19 April 2008 until 30 June 2012, no “uncertainties” as specified in the Verification Annex have been reported. Thirty-two inspections have recorded issues requiring further attention from the inspected State Party and the Secretariat.
- 3.228 From 2006, S&A as an additional verification tool, was introduced in eight to nine Schedule 2 inspections each year. In all, sampling and analysis was conducted at 50 plant sites in 22 different States Parties up to 30 June 2012. Through these inspections, the Secretariat has gained valuable experience in effectively conducting S&A under a broad range of conditions.
- 3.229 Since the Second Review Conference, a number of outstanding issues have been resolved by the States Parties or have been considered as not requiring any further action, such as: modalities for Schedule 2 facility agreements; access to records in Schedule 2 initial inspections; and risk assessment and frequency of Schedule 2 inspections.

#### Schedule 3 chemicals and related facilities

- 3.230 From the first inspection in 1998 until 30 June 2012, the OPCW has conducted 356 inspections at Schedule 3 facilities, including 127 from the time of the Second Review Conference to 30 June 2012. No “uncertainties” as specified in the Verification Annex have been reported. Seven inspections have recorded issues requiring further attention from the inspected State Party and the Secretariat. In addition, discrepancies between declared and verified information have been identified in a significant number of inspections. These discrepancies were in relation to the name, address, owner/operator of the plant site, number of plants, the product-group codes describing the main activities of the plant site, the product-group codes describing the purpose of production, and the range of production.
- 3.231 These inspections covered approximately 60% of all declared Schedule 3 facilities. The number of inspectable Schedule 3 plant sites in 2012 is 413, of which over 200 are in one State Party. All the Schedule 3 facilities that are subject to inspection have been inspected in all but one State Party.<sup>103</sup>
- 3.232 Analysis of the inspection results indicates that Schedule 3 plant sites usually lack flexibility in terms of their ability to be converted for the production of other scheduled chemicals, lowering the potential risk for Schedule 3 plant sites in general.<sup>104</sup>
- 3.233 The Secretariat has selected Schedule 3 plant sites for inspection pursuant to the provisions of the Convention as well as the decision of the Council.<sup>105</sup> This methodology has achieved a wide geographical distribution of inspections so as to cover all States Parties declaring at least one Schedule 3 plant site.<sup>106</sup>

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103 S/843/2010, dated 7 May 2010.

104 Paragraphs 9.54 to 9.56 of RC-2/4.

105 EC-XVII/DEC.7, dated 1 December 1999.

106 S/772/2009, dated 17 June 2009.

3.234 Subsequent Schedule 3 inspections of plant sites that had already been inspected were initiated in 2004. The rate of subsequent inspections has been raised to help reduce the number of initial inspections. The rate was 5% until 2008, 10% in 2009, 20% in 2010, 25% in 2011, and 30% in 2012. As a result, the number of subsequent Schedule 3 inspections was nine in 2012.

Other chemical production facilities

3.235 Up to 30 June 2012, the OPCW has conducted a total of 1,092 OCPF inspections, covering less than 20% of approximately 4,200 inspectable OCPFs; 535 of these inspections were conducted between the time of the Second Review Conference and 30 June 2012. Of these 535 plant sites, 25 were found not to be inspectable for various reasons. No “uncertainties” as specified in the Verification Annex have been reported. Three of these inspections recorded issues requiring further attention from the inspected State Party and the Secretariat.

3.236 Pursuant to the provisions of the Convention, the Secretariat randomly selects OCPFs for inspection, taking into account an equitable geographical distribution and emphasising facilities relevant to the object and purpose of the Convention. For this purpose and to avoid inspecting plant sites not subject to inspection, it is vital for accurate declarations with sufficient information to be submitted in a timely manner.<sup>107</sup>

3.237 The Second Review Conference reiterated the request made by the Council for early resumption of consultations on the methodology of selecting OCPF sites with a view to reaching a decision by States Parties in accordance with the Convention.<sup>108</sup> Pending agreement among States Parties, the Secretariat has used a methodology to select OCPFs for the inspections conducted between 2008 and 2011 that was an initiative of the Director-General, based on consultations in the Industry Cluster that had taken place before 2007.<sup>109</sup>

3.238 Based on consultations in 2010 and 2011, the co-facilitators submitted a report on the site-selection methodology for OCPFs to the Council<sup>110</sup> and recommended that the Director-General modify the interim OCPF site-selection methodology to better target OCPF inspections, without the need for States Parties to provide additional information in declarations. The Council noted the report and reaffirmed that the Secretariat will report annually to States Parties on the performance of the interim OCPF site-selection methodology. It also requested the Director-General to further consult with States Parties on the performance of the methodology.<sup>111</sup>

3.239 In response to this recommendation, the Director-General took the initiative to further improve the methodology on a definitive site-selection process, pending agreement among States Parties and in accordance with the requirements of the Convention. The

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107 Paragraphs 9.44 and 9.45 of RC-2/4.

108 Paragraph 9.64 of RC-2/4.

109 S/641/2007, dated 25 May 2007; Corr.1, dated 4 June 2007.

110 EC-65/WP.1, dated 10 June 2011.

111 Paragraph 6.32 of EC-65/4, dated 15 July 2011.

revised methodology<sup>112</sup> has been used to select OCPF plant sites for inspection since January 2012.

### Analysis

- 3.240 In general, Article VI inspections, having been conducted in more than 1,000 industrial facilities in 80 States Parties since entry into force of the Convention, have contributed to ensuring that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred, or used for purposes not prohibited under the Convention, and to building confidence among States Parties.
- 3.241 In the last several years, there has been a reduction in the number of States Parties still having Schedule 3 plant sites eligible for initial inspection (a plant site not previously inspected). Unless new inspectable Schedule 3 plant sites are declared (and have not yet been inspected) by 2013, there will likely be only one remaining State Party with Schedule 3 plant sites available for initial inspection. The current level of initial Schedule 3 inspections (20 per year) cannot be continued, since if the one remaining State Party receives 20 Schedule 3 inspections each year, the number of OCPF inspections in that State Party will be reduced to zero.<sup>113</sup>
- 3.242 The OCPF regime covers facilities with a variety of characteristics and activities. Previous inspections showed that some OCPFs are relatively dedicated, equipped with conventional technology, and not suitable to produce any other chemicals than those for which they were originally designed. Others are relatively flexible, equipped with the latest technology, and suitable for producing wider ranges of hazardous chemicals. The capabilities of some OCPFs exceed the capabilities of facilities related to scheduled chemicals.
- 3.243 The revised OPCW site-selection methodology has been in effect since January 2012. It is designed to select more OCPFs of relatively high relevance to the object and purpose of the Convention and fewer OCPFs of relatively low relevance, compared to the previous methodology, through the use of multiple selection pools. The performance of the revised methodology will be reported to the Council in early 2013.

### Future considerations

- 3.244 The Director-General has asked the SAB to consider situations in which a Schedule 1 chemical is produced as an unavoidable by-product in an industrial process.<sup>114</sup>
- 3.245 Additional issues related to verification that would benefit from further discussion among States Parties are the following:
- (a) How should Schedule 1 chemicals be tracked after being transferred from a chemical weapons facility to a consumption facility?

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112 S/962/2011, dated 8 September 2011.

113 Paragraph 16 of Part VIII and paragraph 13 of Part IX of the Verification Annex.

114 Annex 6 of SAB-18/1, page 41.

- (b) How can the maximum limit of one tonne per year be verified for any State Party when consumption-only facilities remain outside the scope of verification?

3.246 The Council decided in its policy guidelines<sup>115</sup> that the number of initial Schedule 3 inspections should be reduced in a balanced manner, while increasing the number of subsequent inspections, so as to maintain the total number of Schedule 3 inspections at a relatively stable level. However, a further increase in the number of subsequent Schedule 3 inspections beyond the 2012 level would lead to shorter intervals between subsequent inspections at the same plant site. In particular, States Parties having only one inspectable Schedule 3 plant site could be subjected to an especially short interval between inspections (that is, more frequent than Schedule 2 inspections). To deal comprehensively with this issue, a reduction in the total number of Schedule 3 inspections could be considered in combination with an increase in the rate of subsequent inspections.

3.247 The revised OPCW site-selection methodology remains an interim measure and needs to be assessed on the experience gained since its introduction.<sup>116</sup> A definitive OCPF site-selection mechanism can be established only when a decision is taken on the weighting factor, as mentioned in subparagraph 11(c) of Part IX of the Verification Annex, based on “proposals by States Parties”. Paragraph 25 of Part IX of the Verification Annex requires that the Conference decide on which basis proposals by States Parties should be taken into account as a weighting factor in the selection process.

3.248 Five years after the effective date of the decision entitled “Nature of Continued Verification Measures at Converted Facilities Ten Years after the Director-General’s Certification of their Conversion”,<sup>117</sup> adopted by the Council in 2012, converted CWPFs that produce Schedule 3 or discrete organic chemicals shall follow the provisions under Article VI—subject to the condition that, for an additional three years, the selection algorithm shall be modified to double the probability of selection.

### **Conclusion**

3.249 Article VI declarations and inspections complement the broader obligations of States Parties under the Convention and play an important role in strengthening confidence among States Parties in complying with Article VI. They also help increase awareness—among both National Authorities and the chemical industry—of the Convention and the risks associated with toxic chemicals, acting as a deterrent against the re-emergence of chemical weapons and the misuse of toxic chemicals. States Parties and the Secretariat need to work together to continue to improve all aspects of the Article VI verification regime.

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115 EC-66/DEC.10.

116 Paragraphs 53 and 54 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

117 EC-67/DEC.7.

## NATIONAL IMPLEMENTATION MEASURES

### Introduction

3.250 The provisions of Article VII contain general obligations for the national implementation of the Convention. In order to ensure the proper functioning of all of the Convention's mechanisms (specifically in the context of preventing the re-emergence of chemical weapons), it is essential that all States Parties establish and enforce the administrative and legislative measures required by the Convention. These measures not only give legal basis to the prohibitions of the Convention at the national level but also help to build confidence among States Parties.

### Progress in the implementation of Article VII obligations

3.251 In the period since the Second Review Conference, progress in the status of the establishment or designation of National Authorities and the adoption of legislative and administrative measures by States Parties has been steady. Ten additional States Parties have established or designated their National Authority, leaving only two States Parties that have not fulfilled this requirement and 15 States Parties that have made their first submissions under paragraph 5 of Article VII (as at 30 June 2012). Only six additional States Parties have notified the Secretariat of the adoption of legislation that is considered as covering all key areas. Four others are known to have adopted such legislation but have yet to formally inform the Secretariat.

**TABLE 4: STATUS OF IMPLEMENTATION OF ARTICLE VII OBLIGATIONS**

Obligations	As at 21 November 2007 (182 States Parties)	As at 30 June 2012 (188 States Parties)
National Authority designated or established	176 (96%)	186 (99%)
Article VII(5) submission received	125 (68%)	140 (74%)
Legislation covers all key areas	81 (44%)	87 (46%)
Text of adopted measures provided	110 (60%)	122 (65%)
Confirmation regarding Article XI(2)(e) review	59 (32%)	65 (35%)

3.252 In addition, since the Second Review Conference, seven additional States Parties have been working on a draft pending governmental approval, five have draft legislation before parliament, four have implementing legislation in place (but which does not cover all key areas), and finally, four States Parties have informed the Secretariat of the adoption of implementing legislation but are awaiting its publication to make a submission under paragraph 5 of Article VII.

### Strengthening Article VII obligations

3.253 Based on the progress made since the adoption of the plan of action on implementation of Article VII obligations,<sup>118</sup> the Second Review Conference, having expressed concerns about the status of implementation of Article VII obligations,

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118 C-8/DEC.16, dated 23 October 2003.

highlighted the need for a comprehensive approach to the enactment of implementing legislation.<sup>119</sup> In that context, the Second Review Conference requested the Secretariat, as well as States Parties, to provide assistance where needed.<sup>120</sup>

### **Implementation-support programmes**

- 3.254 Following the recommendations of the Second Review Conference, the Secretariat continued developing its implementation-support programmes.
- 3.255 **Bilateral TAVs:** Bilateral TAVs are an important element of the Secretariat's programme delivery and are undertaken by the Secretariat upon the specific written request of a State Party. Such bilateral visits facilitate focussed assistance to the requesting State Party by addressing specifically identified needs (legislative/parliamentary, declaration/customs, or operational) and seeking to engage the broadest possible group of stakeholders in the State Party being visited. Since the Second Review Conference, the Secretariat has undertaken 56 TAVs covering States Parties in all five regional groups. It is worth noting that since the Second Review Conference, 26 States Parties have informed the Secretariat of the adoption of national implementing legislation.
- 3.256 **Subregional thematic meetings/workshops:** Since 2008, the Secretariat has been organising a series of theme-based subregional meetings and workshops, such as legal workshops, inspection-escort training, Article VI declarations, and customs training on the transfers regime and industry issues. Through such workshops, the legislative drafters, National Authority personnel, and other specialist stakeholders are provided with an opportunity to consult with experts from the Secretariat on the specific aspects being covered by the theme of the workshop. Since the Second Review Conference, 31 thematic/technical workshops have been presented for States Parties.
- 3.257 **Regional and subregional meetings of National Authorities:** The Secretariat has organised, on a regular basis, regional and subregional meetings for National Authorities in Africa, Asia, Eastern Europe, and GRULAC. Regional meetings have offered valuable opportunities for the Secretariat to interact with National Authority representatives on practical implementation-related matters and for National Authorities to consult and share experiences among themselves and to identify region-specific training and support needs. The Secretariat has also used regional meetings as a venue for bilateral consultations with National Authority representatives, to offer assistance and receive feedback on the progress achieved by States Parties in fulfilling their Article VII and other obligations. This affords National Authority representatives the opportunity to meet bilaterally (routinely between 30 and 40 separate consultations) with Secretariat specialists in all these fields. Since the Second Review Conference, 24 regional meetings of National Authorities have been held.
- 3.258 **Annual meeting of National Authorities:** Each year, the Secretariat organises an annual meeting of National Authorities at the OPCW. With the aim of attracting broader participation, as well as promoting consultations of National Authority

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119 Paragraph 9.75 of RC-2/4.

120 Paragraph 9.74 of RC-2/4.

representatives with each other and the Secretariat, the annual meeting is held immediately prior to the annual session of the Conference. Over the years, the Secretariat has developed the programmatic aspects of the annual meeting of National Authorities from an information session to a more interactive workshop approach. This has proven useful in resolving outstanding issues and in determining the nature and scope of the assistance to be provided during the following year. Since the Second Review Conference, five annual meetings have been attended by more than 1,100 National Authority personnel and delegates from the Permanent Representations.

- 3.259 Basic and advanced training courses for personnel from National Authorities: The frequent turnover of staff in National Authorities increases the challenges that States Parties face in implementing the Convention. In order to mitigate the effects of this frequent turnover and in an effort to ensure a consistent level of expertise, the Secretariat organises basic training courses for National Authority personnel on an annual basis. Advanced courses are offered as and when there is sufficient critical mass among National Authorities to warrant such a course. Since the Second Review Conference, 26 basic and advanced courses have been held for National Authority representatives from all five regional groups.
- 3.260 In addition to the implementation-support programmes listed above, the Secretariat reviews, upon request, drafts of implementing measures and provides its comments on them. The assistance is available for each of the common steps of implementation (guidance for policy choices, comments on draft implementing legislation, guidance in developing regulations, and comments on regulations). Accordingly, the Secretariat has provided 195 comments on implementing legislation/regulations to States Parties since the Second Review Conference.

### **Reporting mechanism**

- 3.261 In accordance with the relevant decisions of the Conference, the Secretariat has submitted reports to the policy-making organs. The decision adopted in 2009<sup>121</sup> had a fundamental impact on the reporting mechanism by requesting that the Secretariat submit two concurrent reports to the policy-making organs, reflecting progress according to a new set of criteria. These new criteria have since been referred to as “legislation covering all key areas”.

### **Analysis**

- 3.262 The Secretariat is of the view that, in spite of robust support from the Secretariat and States Parties, the progress made by States Parties in implementing their Article VII obligations has been slow. The reasons are as follows:
- (a) Complexity of obligations: The complexity of all the key areas to be covered (as reflected in the two concurrent reports issued by the Secretariat since 2009) might be seen by some States Parties as an obstacle to the adoption of implementing legislation.

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121 C-14/DEC.12, dated 4 December 2009.



- (b) Situational disparity: Most of the remaining States Parties that have not yet adopted implementing legislation are those without any declarable facilities or activities. In addition, some States Parties might not consider all obligations under the Convention (destruction regime, declaration or verification regime) as relevant for them.
- (c) Ambiguity of obligation: It seems to be difficult to understand the definition of what constitutes “the necessary measures” to be taken by a State Party “to implement its obligations under this Convention” in accordance with Article VII.

3.263 It is, therefore, apparent that a results-oriented, incremental, or tailor-made approach is necessary in order to respond more effectively to the continuing challenges and dynamic process of achieving full and effective national implementation.<sup>122</sup>

### **Future considerations**

- 3.264 Starting with national implementing legislation, there is a need to focus on more tangible and measurable indicators, tailored to the requirements of those States Parties in need of assistance instead of simply following the concept of “legislation covering all key areas”. This, in turn, would serve to better inform States Parties (and their National Authorities) of their specific and detailed requirements in terms of industry engagement and monitoring, data collection (production, trade, and transfer), declarations, and industry verification.<sup>123</sup>
- 3.265 In that context, the Secretariat intends to evaluate whether, based on the provisions of the Convention, initial requirements that could be more readily adopted at the legislative level could be agreed as a common legislative base, which would then be supplemented by the necessary regulatory measures that would subsequently be adopted utilising a tailor-made approach.
- 3.266 To achieve the objectives set forth by the Convention, all States Parties must comply with the initial requirements. Further measures need only to be implemented on the basis of each State Party’s profile in regard to the development of its chemical industry. National enforcement would therefore depend on the extent of each State Party’s requirements as they relate to each of the areas set forth by the Convention.
- 3.267 Initial requirements: Keeping in mind the objectives of the Convention, the initial requirements for all States Parties could be defined as being the actions needed to be taken by a non-possessor State Party that has no declarable chemical production facility on its territory. Therefore, the initial requirements would be defined as shown in the following table.

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<sup>122</sup> Paragraphs 42 and 44 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011) and paragraph 19 of the Informal Summary of Discussions at the Ambassadors’ Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011.

<sup>123</sup> Paragraph 40 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

**TABLE 5: INITIAL REQUIREMENTS**

<b>State X</b>			
<b>Initial requirements under Article VII (Legislative coverage)</b>			
<b>Chemical weapons-related</b>			
Definitions <sup>124</sup>			
Prohibitions <sup>125</sup>			
Penalties <sup>126</sup>			
Extraterritoriality <sup>127</sup>			
<b>Toxic chemicals-related</b>			
Definitions <sup>128</sup>			
Extraterritoriality			
Legal basis for regulations <sup>129</sup>			
	Schedule 1	Schedule 2	Schedule 3
Prohibitions <sup>130</sup>			
Penalties <sup>131</sup>			
Reporting on transfers <sup>132</sup>			
<b>Other initial requirements under the Convention (not covered by national implementing legislation)</b>			
Designation/establishment of the National Authority <sup>133</sup>			
Submission of initial declaration <sup>134</sup>			
Confirmation regarding Article XI(2)(e) review			
Year(s) of Article X(4) submissions			

3.268 Additional compulsory requirements: Keeping in mind that the destruction requirement is not covered by national legislation, the additional compulsory requirements under Article VII could be set up as shown in the following table.

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124 “Chemical Weapons” (Article II, paragraph 1) and “Riot Control Agent” (Article II, paragraph 7).  
125 Article I, subparagraphs 1(a) to (d) and Article I, paragraph 5.  
126 Article VII, subparagraph 1(a) including penal sanctions for legal entities.  
127 Article VII, subparagraph 1(c).  
128 “Toxic Chemical” (Article II, paragraph 2), “Precursor” (Article II, paragraph 3), and “Purposes not prohibited under this Convention” (Article II, paragraph 9).  
129 Legal basis allowing further additional measures to be adopted at the governmental level.  
130 Article VI and Verification Annex Parts VI, VII, and VIII; Verification Annex Part VIII for requirement of an end-user certificate.  
131 Article VII, subparagraph 1(a) including penal sanctions for legal entities.  
132 Paragraphs 5 and 5bis. of Part VI of the Verification Annex for prior reporting on transfers of Schedule 1 chemicals and paragraph 1 of Parts VII and VIII of the Verification Annex for Schedule 2 and 3 chemicals.  
133 Article VII, paragraph 4.  
134 Article VI, paragraph 7.

**TABLE 6: ADDITIONAL COMPULSORY REQUIREMENTS**

<b>State X</b>			
<b>Additional requirements for States Parties that have declarable chemical facilities (Legislative coverage)</b>			
<b>Control regime (including penalties)</b>			
	<b>Schedule 1</b>	<b>Schedule 2</b>	<b>Schedule 3</b>
Licensing of Schedule 1 chemical production facilities <sup>135</sup>			
Reporting on production <sup>136</sup> (including reporting on processing and consumption for Schedule 2)			
Declaration regime for OCPFs <sup>137</sup>			
<b>Verification regime (including penalties)</b>			
Access to facilities and other inspection powers <sup>138</sup>			
On-site support from operators and staff <sup>139</sup>			
<b>Confidentiality regime (including penalties)</b>			
Provisions ensuring the protection of confidential information <sup>140</sup>			

3.269 A number of National Authorities have been collaborating on practical implementation-related activities. In this context, the Secretariat is currently piloting a mentoring programme for National Authorities, where States Parties that have a relatively new National Authority can benefit from the guidance and support of larger and fully functional National Authorities.<sup>141</sup> The Secretariat has also initiated an internship programme under which legal drafters can spend two weeks at the OPCW Headquarters to develop or finalise their legislation.

### Conclusion

3.270 As the core focus of the OPCW evolves to more closely address the issue of the non-re-emergence of chemical weapons, it becomes even more essential that all 188 States Parties play the fullest possible role in the effective implementation of the Convention. Experience suggests that the OPCW will need to adjust its approach to assistance from a comprehensive, one-size-fits-all approach to a more results-oriented, incremental, and tailor-made one. Concerted efforts will continue to be required from the States Parties concerned, from the Secretariat, and from the States Parties in a position to provide assistance.<sup>142</sup>

<sup>135</sup> Verification Annex Part VI (A) and (C).

<sup>136</sup> For Schedule 1 chemicals: Verification Annex Part VI (D). For Schedule 2 chemicals: Verification Annex Part VII, paragraph 5; C-V/DEC.19, dated 19 May 2000; C-7/DEC.14, dated 10 October 2002. For Schedule 3 chemicals: Verification Annex Part VIII, paragraph 5, C-V/DEC.19; C-7/DEC.14.

<sup>137</sup> Verification Annex Part IX (A).

<sup>138</sup> Article VI, paragraph 9; Article IX, subparagraph 11(b); Verification Annex Part II, paragraphs 45 to 48.

<sup>139</sup> Verification Annex Part II (E).

<sup>140</sup> Article VII, paragraph 6; Confidentiality Annex, paragraph 4.

<sup>141</sup> Paragraph 104 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

<sup>142</sup> Paragraph 42 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011); paragraph 17 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011.

## **CONSULTATIONS, COOPERATION, AND FACT-FINDING**

### **Bilateral consultations**

- 3.271 Article IX provides for consultations among States Parties to clarify and resolve concerns about compliance. Bilateral consultations and exchanges of information between interested States Parties have continued to take place during the past four years without formal requests for intervention from the Council.

### **Clarification through the Council**

- 3.272 Since the Second Review Conference (and since entry into force of the Convention), no State Party has had recourse to the clarification mechanisms under the purview of the Council, as provided for in paragraphs 3 to 7 of Article IX.

## **CHALLENGE INSPECTIONS AND INVESTIGATIONS IN CASES OF ALLEGED USE OF CHEMICAL WEAPONS**

### **Introduction**

- 3.273 Challenge inspections and investigations of alleged use are key mechanisms to address situations in which the OPCW is called upon to act at short notice.
- 3.274 While a challenge inspection or an investigation of alleged use are triggered through different provisions of the Convention and would be conducted differently (although it should be recalled that an investigation of alleged use conducted in accordance with Part XI of the Verification Annex can be triggered pursuant to both Article IX and Article X), both types of missions have several commonalities. In light of those commonalities and because both of these missions are non-routine operations, challenge inspections and investigations of alleged use are addressed jointly in the following paragraphs.
- 3.275 The Second Review Conference requested that the Secretariat maintain a high standard of readiness to conduct a challenge inspection or an investigation of alleged use through, among other things, the use of table-top exercises and mock inspections. The Secretariat was also requested to keep the Council informed about its readiness and to report any relevant problems that might arise.<sup>143</sup>
- 3.276 The Second Review Conference also “stressed the importance of investigations of alleged use or threat of use of chemical weapons involving States Parties. For such situations, the OPCW must have the capacity, and be ready at all times to investigate the need for follow-on action by the OPCW, as well as to facilitate the delivery of assistance”.<sup>144</sup>

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143 Paragraph 9.90 of RC-2/4.

144 Paragraph 9.105 of RC-2/4.

3.277 Since the Second Review Conference, the Secretariat has submitted to the Council several Notes on its readiness to conduct a challenge inspection or an investigation of alleged use.<sup>145</sup>

### **Main developments**

3.278 No request for a challenge inspection or for an investigation of alleged use has been received by the Secretariat since entry into force of the Convention. Since the Second Review Conference, a number of actions have been taken by the Secretariat to maintain and enhance its readiness to conduct a challenge inspection or an investigation of alleged use.

### Exercises

3.279 One Headquarters and two large-scale field exercises have been carried out since the Second Review Conference. With regard to challenge inspections, Secretariat staff members (both Headquarters staff and inspectors) have also participated in national exercises organised by some States Parties. All of these exercises have provided invaluable opportunities to further enhance the Secretariat's preparedness. The table below indicates the types of exercises the Secretariat has organised or participated in.

**TABLE 7: EXERCISES CONDUCTED SINCE THE SECOND REVIEW CONFERENCE**

<b>Type of Exercise</b>	<b>Date and Location</b>
Participation in a small-scale national field exercise	June 2008, United Kingdom of Great Britain and Northern Ireland
Participation in a small-scale national field exercise	June 2009, United States of America
Headquarters exercise	September 2009, OPCW Headquarters
ASSISTEX 3 (including an element of an investigation of alleged use)	October 2010, Tunisia
Headquarters and field exercise	October-November 2011, Thailand

3.280 The 2011 challenge inspection exercise was the first to fully implement all aspects of the process, including the Mission Support Group at OPCW Headquarters. The Secretariat will evaluate the exercise on an investigation of alleged use, to be held in Serbia in October 2012.

3.281 Evaluations of the exercises organised by the Secretariat were carried out, and were particularly rigorous, in 2011, when a fully independent evaluation was conducted for the first time.<sup>146</sup> The exercises particularly demonstrated the Secretariat's strong expertise in carrying out activities that are undertaken on a regular basis.

<sup>145</sup> EC-54/DG.9, dated 25 September 2008; EC-58/DG.8, dated 28 September 2009; EC-62/DG.8, dated 22 September 2010, which, for the first time, included a report on the Secretariat's readiness to conduct an investigation of alleged use; EC-66/DG.10, dated 8 September 2011; and EC/70/DG.12, dated 12 September 2012.

<sup>146</sup> S/973/2011, dated 28 November 2011.

- 3.282 The evaluations also identified areas for further improvement, particularly communications, information handling, command and control, organisation and management of a large field team, and inquisitiveness.
- 3.283 On the basis of these areas for improvement, the Secretariat is also implementing the lessons that have been identified, with a particular focus on operational readiness, including further enhancement of operational procedures.

#### Training of inspectors

- 3.284 During the period under review, the Secretariat conducted a range of annual training activities, including small-scale field training, table-top exercises, and classroom sessions, some with input from States Parties. Furthermore, inspectors have received specialised training on specific needs and requirements related to challenge inspections and investigations of alleged use, and training sessions for inspectors have been held on command and control, perimeter securing and exit monitoring, managed access, evidence collection, and investigative techniques.

#### Experts' meeting

- 3.285 In July 2012, the Secretariat organised a workshop on lessons learned in the exercises on challenge inspections and investigations of alleged use. The workshop brought together experts involved in previous exercises organised by the Secretariat and by States Parties, as well as experts from other relevant international organisations. The outcome of this workshop is covered in the following paragraphs below.

### **Analysis**

#### Analysis of past exercises

- 3.286 Various types of exercises have proved to be excellent tools for testing the Secretariat's preparedness to conduct a challenge inspection or an investigation of alleged use, and for further improving its capabilities. Exercises and training should continue to be carried out, taking into account the lessons learned from previous experiences. In the context of its efforts in this area, the Secretariat fully appreciates the support of States Parties in providing opportunities for exercises and training and further encourages such cooperation.
- 3.287 Resource limitations permitting, future exercises should be conducted on a wide geographical basis and in cooperation with a variety of national and (in regard to exercises on the investigation of alleged use) relevant international actors, and should take into account the full range of possible parameters. Regional exercises could also provide a good opportunity to ensure broader geographical coverage. In addition, exercises should focus not only on activities in the field, but should also test procedures at OPCW Headquarters and look at the role of the Council, as well as coordination with States Parties and, where applicable, other international organisations.

- 3.288 Future exercises on an investigation of alleged use should also feature a broad range of scenarios, as an investigation can be conducted pursuant to either Article IX or Article X, or at the request of the United Nations Secretary-General.

#### The role of States Parties

- 3.289 With a view to ensuring the viability of the mechanisms provided under Articles IX and X of the Convention, it is crucial that States Parties also take action, both individually and collectively, to be prepared to receive a challenge inspection or an investigation of alleged use. This would cover their required internal procedures and ensure that the Secretariat can operate effectively and at short notice in their territories, or in any place under their jurisdiction or control.
- 3.290 Each State Party should ensure that all relevant agencies have a good understanding of the Convention's provisions and operational procedures, as well as making the necessary internal arrangements with a view to being prepared to receive a challenge inspection or an investigation of alleged use.
- 3.291 For example, it is crucial that all States Parties provide the Secretariat with relevant operational information, such as radio frequencies that could be used during inspections or investigations, notifications of points of entry, and standing diplomatic clearance numbers that might be needed for over-flight and landing clearance if the inspection team were to make use of a non-scheduled chartered aircraft. Absence of such information could adversely affect the Secretariat's ability to carry out operations under Articles IX and X. At the same time, States Parties should ensure that multiple-entry visas that are valid for at least two years are provided to OPCW inspectors. This provision is particularly important in the context of the ability of the OPCW to respond promptly to requests for a challenge inspection or for an investigation of alleged use.
- 3.292 Past exercises have shown that States Parties also benefit from these activities. Participation in these exercises enhances national preparedness to receive and effectively conduct a challenge inspection or an investigation of alleged use. Thus, when conducting activities related to enhancing its readiness, the Secretariat has also increasingly conducted outreach to States Parties, through papers, briefings, videos, reports on the exercises, and summaries of lessons identified. Outreach was especially prominent in the 2011 exercise, which also included daily blogging and short videos, as well as briefings for the States Parties before, during, and after the exercise. The Secretariat's workshops on lessons learned, such as the one held in July 2012, also support the efforts of States Parties.

#### **Future considerations**

- 3.293 Specific actions are required for the implementation of paragraph 27 of Part XI of the Verification Annex, which deals with cases of alleged use in States not Party or in territories not under the control of a State Party. In such situations, the OPCW is required to cooperate closely with the United Nations Secretary-General and, if requested, to put its resources at the disposal of the United Nations

Secretary-General.<sup>147</sup> Informal discussions have taken place with the United Nations Office of Disarmament Affairs, with a view to agreeing on such practical modalities.<sup>148</sup>

- 3.294 The reduction in the number of inspectors could mean a larger role for qualified experts in the context of investigations of alleged use pursuant to paragraph 7 of Part XI of the Verification Annex, or different working practices and recruitment policies within the Secretariat. At the same time, the turnover of inspectors requires that during training, exercises, and regular inspections, the team consists of a mix of both experienced and recently hired staff members, thus facilitating knowledge transfer and the maintenance of crucial expertise. The engagement of qualified former staff members in training activities for inspectors is also a possibility.

### **Conclusion**

- 3.295 The Secretariat will continue to maintain a high level of readiness to conduct a challenge inspection or an investigation of alleged use. In this context, it is essential that the Secretariat maintain the resources, technical competence, operational readiness, and professional skills needed to implement these types of operations if and when the need arises.<sup>149</sup>
- 3.296 At the same time, optimum readiness in these areas is contingent on the support by States Parties (such as the organisation of or participation in exercises, the provision of specialised training, nomination of qualified experts to augment the team with expertise not available within the Secretariat, or putting in place facilities for analysis of biomedical samples) and on States Parties taking action on the issues described above, including their own internal preparedness to receive a challenge inspection or an investigation of alleged use.
- 3.297 The Secretariat will assist States Parties in their efforts to enhance their preparedness and the preparedness of the Organisation as a whole in case of a request for a challenge inspection or an investigation of alleged use.<sup>150</sup>

## **ASSISTANCE AND PROTECTION AGAINST CHEMICAL WEAPONS**

### **Introduction**

- 3.298 Assistance and protection against the use or the threat of use of chemical weapons continues to be a key objective of the Convention.

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<sup>147</sup> Paragraph 69 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

<sup>148</sup> After the cut-off date (30 June 2012), the Supplementary Arrangement Concerning the Implementation of Article II (2)(c) of the Relationship Agreement between the United Nations and the Organisation for the Prohibition of Chemical Weapons was concluded (paragraph 8 of EC-70/DG.18, dated 25 September 2012).

<sup>149</sup> Paragraphs 65 and 89 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011) and page 4 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future Priorities of the OPCW, held in The Hague on 24 May 2012.

<sup>150</sup> Paragraph 66 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).



- 3.299 Through its provisions, Article X makes a significant contribution to countering the threats associated with the possible use of chemical weapons or the misuse of toxic chemicals. It does this by providing expert advice on establishing or further developing States Parties' emergency-response capacity for this kind of event and by maintaining a state of readiness to provide assistance in case of a request from a State Party that has been attacked or threatened by chemical weapons. Consequently, assistance and protection, as envisioned by Article X, has growing significance in the current context of a changing security environment.
- 3.300 The Second Review Conference re-emphasised the continuing relevance and importance of the provisions of Article X and welcomed the activities of the OPCW in relation to assistance and protection against chemical weapons.<sup>151</sup> The Second Review Conference also expressed appreciation for the Secretariat's efforts in providing expert advice to States Parties that wish to establish or further develop their emergency-response capacity.<sup>152</sup>
- 3.301 Since the Second Review Conference, the Secretariat has continued to assist States Parties in the development and improvement of their protective capacities against chemical weapons, as well as in maintaining their state of readiness to respond to a request for assistance in the case of use or the threat of use of chemical weapons, in accordance with the provisions of Article X. These activities have been reported through the Director-General's opening statements at sessions of the Council and the Conference and are detailed in a regular report.<sup>153</sup>

### **Status of the implementation of Article X**

#### Information on national protective programmes (paragraph 4)

- 3.302 Between the entry into force of the Convention and 30 June 2012, 146 States Parties had submitted information on their national programmes for protective purposes in accordance with paragraph 4 of Article X at least once. This represents 77% of the States Parties.

#### Provision of assistance by States Parties (paragraph 7)

- 3.303 The Second Review Conference urged all States Parties that have yet to make offers of assistance to the OPCW to do so as required by paragraph 7 of Article X.<sup>154</sup> Between entry into force and 30 June 2012, 78 States Parties had met this obligation.
- (a) Forty-five States Parties have made contributions to the voluntary fund for assistance required by subparagraph 7(a). As at 30 June 2012, the fund amounted to EUR 1,471,857. Forty-four States Parties had fulfilled their obligations under subparagraph 7(c).

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151 Paragraph 9.91 of RC-2/4.

152 Paragraph 9.93 of RC-2/4.

153 EC-54/DG.10, dated 25 September 2008; EC-55/DG.5, dated 26 January 2009; EC-59/DG.12, dated 9 February 2010; EC-64/DG.3, dated 28 March 2011; EC-67/DG.6, dated 20 January 2012; Corr.1, dated 15 February 2012.

154 Paragraph 9.102 of RC-2/4.

- (b) A new agreement was concluded between the OPCW and Peru, concerning the procurement, upon demand, of assistance in accordance with subparagraph 7(b) of Article X and subparagraph 34(b) of Article VIII.<sup>155</sup> To date, only two States Parties have concluded such agreements with the Organisation.

Protection data bank (paragraph 5)

- 3.304 In accordance with the decision adopted by the Conference at its First Session,<sup>156</sup> the Secretariat established the data bank on protection, as required under paragraph 5 of Article X. The data bank is available for the use of National Authorities and Permanent Representatives to the OPCW through the OPCW extranet, with password-protected access. Its structure has been maintained and is regularly updated with new information from States Parties. Following the recommendation of the Second Review Conference,<sup>157</sup> the Secretariat has been reporting to the Council on the content of the databank.<sup>158</sup>

Capacity building and advice to States Parties (paragraph 5)

- 3.305 At the request of the States Parties and within the available resources, the Secretariat, with the support of a number of States Parties, has been providing expert advice and assistance to States Parties in identifying how best to implement their programmes for the development and improvement of a protective capacity against chemical weapons. In this regard, the Secretariat has taken a tailor-made approach to the assessment of the current and future needs of States Parties at the national or regional level, based on the analysis of information provided by the States Parties.
- 3.306 Pursuant to a recommendation by the Second Review Conference,<sup>159</sup> the Secretariat has continued to conduct long-term capacity-building activities at the regional and subregional level. Training courses on emergency response have taken place in several regions and sub-regions in collaboration with States Parties with a view to making better use of regional and subregional capacity and expertise, as well as facilitating regional coordination. These capacity-building courses have included table-top exercises and practical training exercises in the field, involving an emergency scenario under the supervision of officials from the Secretariat.
- 3.307 With the aim of optimising resources and meeting the needs of the States Parties, the Secretariat has provided training through the integration of various elements in the national or subregional system and has assisted States Parties in building an integrated national or subregional emergency first-response team (composed of army, police, fire-fighting, emergency medical, and civil-defence personnel) to act as a team of future master instructors.

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155 EC-66/DEC.7, dated 5 October 2011.

156 C-1/DEC.53, dated 16 May 1997.

157 Paragraph 9.98 of RC-2/4.

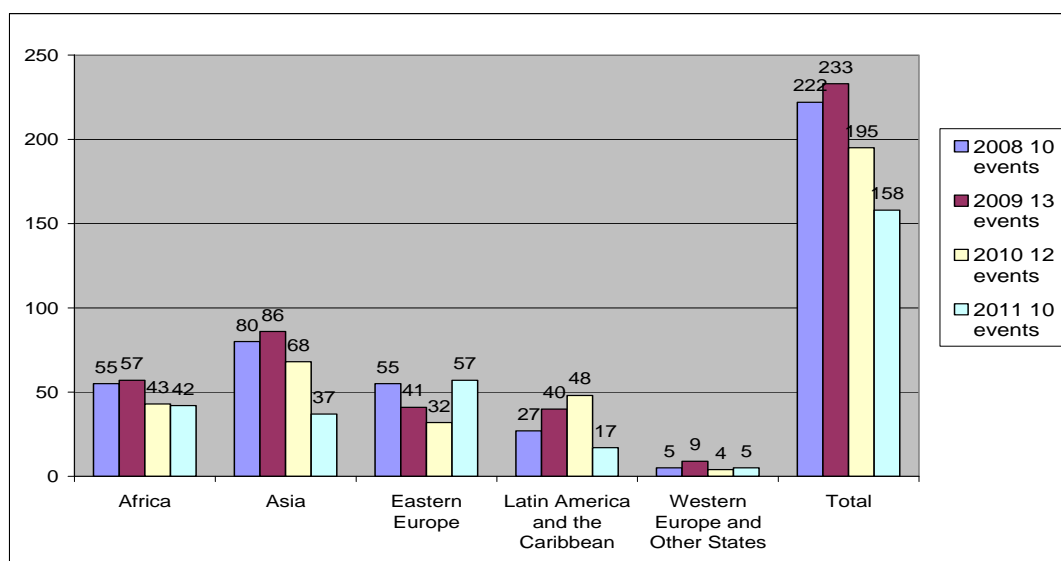
158 EC-57/S/3, dated 18 June 2009; EC-61/S/4, dated 2 June 2010; EC-65/S/4, dated 16 June 2011; EC-69/S/2, dated 5 June 2012.

159 Paragraphs 9.93 and 9.103 of RC-2/4.

3.308 In this context, a regional concept of capacity building has been developed, consisting of the creation of regional assistance-and-protection centres, which would support States Parties in the further development of regional capabilities, with a focus on the “train-the-trainer” approach.

3.309 During the period since the Second Review Conference, international training courses have been held in different States Parties. These training courses allow participants to familiarise themselves with different types of equipment and procedures and to address issues of cooperation and coordination.

**CHART 6: NUMBER OF PARTICIPANTS IN TRAINING COURSES**



OPCW capacity to mobilise the international response mechanism

3.310 The OPCW must be ready to mobilise the international response that would be required in a situation where a State Party invokes its right to request and receive assistance and protection in the event of the use or threat of use of chemical weapons.

3.311 The Secretariat has continued to organise annual workshops for the coordination of assistance under Article X, with discussions focussed on such aspects as delivery-response capacities, capacity building, and networking at international, regional, and subregional levels, among other things. These workshops have significantly contributed to the streamlining of activities conducted and designed by the Secretariat, as well as to discussions on the way forward. These workshops have also proven to be an effective tool for enhancing the implementation of Article X and for assessing the effectiveness of the relevant OPCW programmes.

3.312 The Protection Network, a group of experts created in 1999 to support the implementation of Article X, has continued to meet regularly since 2008. The Secretariat has taken the recommendations emanating from discussions at this important forum into account in the design and implementation of assistance-and-protection activities and in its interactions with States Parties and other stakeholders.

3.313 Informal consultations have served as an important tool for discussing various issues related to Article X. Through the facilitation process, States Parties seek and achieve consensus on important subjects such as the preparedness of the OPCW to deliver assistance, the concept of regional assistance and protection,<sup>160</sup> the mandates and policies of international organisations vis-à-vis victims of chemical weapons, and the establishment of an International Support Network for Victims of Chemical Weapons.<sup>161</sup>

OPCW capacity to manage coordination and delivery

3.314 The Secretariat continues to maintain its ability to manage international response by organising training in cooperation with States Parties and relevant international organisations.

3.315 The third OPCW exercise on delivery of assistance (ASSISTEX 3), held in Tunisia from 11 to 15 October 2010, enabled the Secretariat to test the capacity of the OPCW to conduct an investigation of alleged use and to coordinate and deliver assistance in case of the use or threat of use of chemical weapons.

3.316 The Second Review Conference requested that the Secretariat review its current lists of experts and keep them up to date.<sup>162</sup> The Secretariat has maintained an updated pool of selected qualified experts in toxicology, in the disposal of unexploded ordnance and improvised explosive devices, and in disaster management, who are ready to support the Secretariat team in the event of a request for assistance under Article X. The contracts of the qualified experts were extended to August 2013.

3.317 In-house training sessions (basic, advanced, and team leaders) have been conducted for the members of the Secretariat's Assistance Coordination and Assessment Team (ACAT), with a view to maintaining ACAT's readiness to provide assistance in the event of a request from a State Party. The training courses covered the role of ACAT members, the planning of resources, procedures involved during operations, on-site coordination with other international organisations and national agencies, and other practical information related to field missions.

3.318 The Second Review Conference recognised the need for close cooperation with other relevant international organisations and agencies,<sup>163</sup> and the Secretariat has maintained formal communication with international organisations such as the Euro-Atlantic Disaster Response Coordination Centre of the North Atlantic Treaty Organization, the Implementation Support Unit of the Biological Weapons Convention, the United Nations Interregional Crime and Justice Research Institute, the United Nations Office for the Coordination of Humanitarian Affairs, the World Health Organization, the International Committee of the Red Cross, and other agencies that would potentially be involved in an emergency response.

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160 Paragraph 6.26 of EC-65/4; S/984/2012, dated 7 February 2012.

161 C-16/DEC.13, dated 2 December 2011.

162 Paragraph 9.99 of RC-2/4.

163 Paragraph 9.94 of RC-2/4.

### Evaluation of the effectiveness of Article X programmes

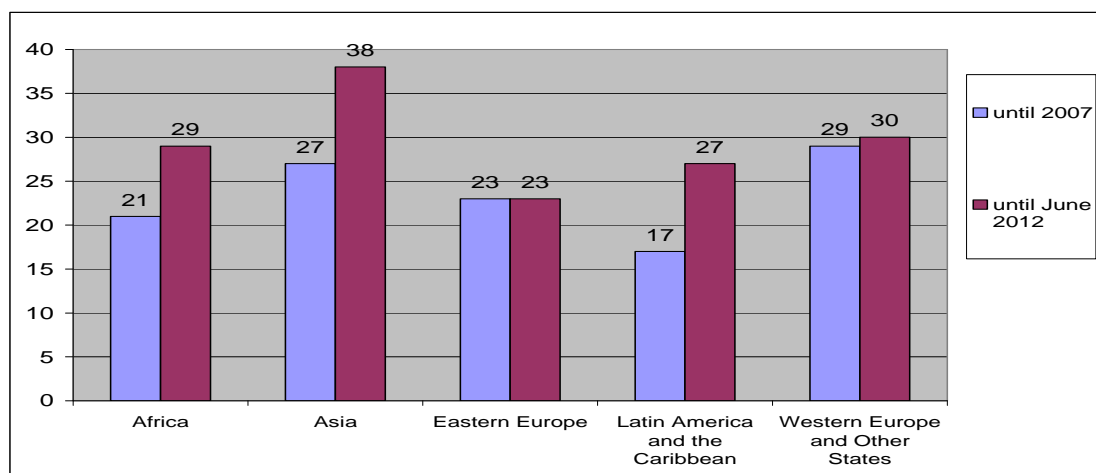
3.319 Following the request by the Second Review Conference,<sup>164</sup> the Secretariat assessed the impact and evaluated the programmes of the capacity-building projects for assistance and protection against chemical weapons.<sup>165</sup>

3.320 A highly relevant input to the process of programme evaluation has been the feedback from such sources as representatives of National Authorities, the Permanent Representatives to the OPCW, other relevant agencies of States Parties involved in emergency-response activities, as well as participants in workshops, seminars, and consultations. The participants have highlighted requirements and achievements in their national emergency-response programmes, as well as lessons learned from the training projects.

### Analysis

3.321 In paragraphs 4 and 7, Article X establishes two main obligations for States Parties. The increasing number of paragraph 4 declarations is related to regional awareness workshops and regional capacity-building programmes. Nevertheless, small States Parties with a small or non-existent chemical industry and without a national programme need constant work from the Secretariat in order to meet their annual obligations. Capacity-building projects also provide assistance under paragraph 7. An example of this is a State Party that, after a long capacity-building project, signed a bilateral agreement on the type and scope of assistance it could offer (including its trained team) under subparagraph 7(b) of Article X.

**CHART 7: NUMBER OF STATES PARTIES THAT HAVE SUBMITTED INFORMATION UNDER PARAGRAPH 4**



3.322 While national capacity-building projects have been developed for countries that host large events or international summits, evaluating the impact of these projects remains

<sup>164</sup> Paragraph 9.93 of RC-2/4.

<sup>165</sup> EC-55/S/2, dated 28 January 2009; Corr.1, dated 6 March 2009; Corr.2, dated 16 April 2009; paragraph 5.9 of EC-56/4, dated 24 April 2009; paragraphs 2.44 to 2.53 of EC-59/DG.12; paragraphs 2.38 to 2.45 of EC-64/DG.3; paragraphs 2.31 to 2.45 of EC-67/DG.6.

a challenge. The number of personnel trained by the pool of OPCW-trained instructors is crucial, along with the improvement in the procedures for responding to a chemical emergency.

- 3.323 The regional approach should be associated with regional or subregional organisations with which the OPCW can cooperate on the development of projects. Establishing the assistance-and-protection centres as regional resources for training experts who can be available to respond within the region in case of a chemical emergency still requires further development and interest from States Parties.
- 3.324 The international training courses allow participants to improve their knowledge of different procedures that can be used in their own countries to develop or enhance their national capacities to respond to a chemical weapons incident.
- 3.325 Another challenge is the Secretariat's need for relevant information about a State Party in terms of its response status in regard to a chemical emergency—information that is not reflected in the country's paragraph 4 declarations. This knowledge would increase the efficiency of the capacity-building projects.
- 3.326 There has been a visible shift of attention to protection and assistance, along with a shift in resource allocation, by States Parties, from preparedness for a large chemical attack by a State to smaller-scale attacks using of toxic chemicals that have been privately produced or stolen by non-State actors. Projects on chemical safety and raising awareness about security, with a strong focus on emergency response, would support the implementation of Article X as well as the national capacity to face threats of this kind.

### **Future considerations**

- 3.327 In order to improve the implementation of paragraphs 4 and 7 of Article X, the Secretariat continues to remind States Parties of their obligations, both collectively and individually.
- 3.328 In a time of emergency, the transport of personnel and equipment that have been offered in assistance under subparagraph 7(c) of Article X could be voluntarily provided by States Parties, with the support of the OPCW and other agencies. The replenishment of the Voluntary Fund for Assistance is one of several useful options.
- 3.329 The Secretariat will continue to play a key role in supporting States Parties in developing and/or improving their protective capabilities as well as in coordinating and delivering assistance. However, taking into account the resources available, a more efficient and effective way should be explored:
- (a) Consideration could be given to the standardisation of various training curricula and the creation of a sustainable system of evaluation of effectiveness for training centres and participants in cooperating donor and recipient States Parties.
  - (b) The development of an e-learning tool, freely accessible and available in the official languages of the OPCW, could provide participants with basic

theoretical knowledge. It should be considered as a supplementary component and should not replace hands-on training and exercises.

- (c) Cooperation with relevant international organisations and national agencies helps avoid the duplication of activities, particularly in an operational setting.

3.330 OPCW assistance-and-protection activities should reflect the shift of attention and resource allocation from preparedness for a large chemical attack by a State to smaller scale attacks using toxic chemicals and thus take into account the elements of chemical safety and security.<sup>166</sup>

- (a) Training programmes offered by the Secretariat alone or jointly with other States Parties should be systematically reviewed and, if necessary, updated to cover these new threats, with an additional focus on widely used toxic chemicals, which would be the most likely to be used in an improvised chemical attack and might not even be listed in the schedules of chemicals.
- (b) Several activities could be enhanced or developed by the Secretariat in order to create awareness and improve international, regional, or national preparedness to respond to chemical weapons and to fully implement Article X in terms of chemical safety and security.
- (c) The Secretariat will strengthen contacts and exchanges with relevant international, regional, and subregional organisations in the field of counter-terrorism.<sup>167</sup> As underlined by the Second Review Conference,<sup>168</sup> matters related to the implementation of Article X will continue to be an important element of those discussions.

## Conclusion

3.331 As one of the core objectives of the Convention, assistance and protection constitutes a key element in the balance that is to be achieved in the activities of the Secretariat in the near future and needs to be preserved and enhanced in a manner consistent with the object and purpose of the Convention. Enhanced capacity in the area of assistance and protection will remain an important safeguard in relation to the possible use of toxic chemicals against States Parties, whether by States or non-State actors, as it is a key component of the Convention's regime.

3.332 Since any response to a chemical incident needs to be quick, the development of a local response capacity is essential. The OPCW programme for assistance and protection should reflect these needs adequately through effective capacity-building measures (such as national and regional training courses or projects, the provision of expert advice to States Parties that wish to improve their protective capacity, and the

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166 Page 4 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future Priorities of the OPCW, held in The Hague on 24 May 2012.

167 Paragraph 83 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

168 Paragraph 9.92 of RC-2/4.

establishment of regional assistance-and protection centres).<sup>169</sup> States Parties could also make additional logistical and financial contributions to this field.

- 3.333 At the same time, the OPCW must continue to improve its own state of readiness to respond to requests for assistance in a swift and effective manner. More field or table-top exercises on the Secretariat's internal procedures, coordination with States Parties or other agencies and organisations that have mandates to respond to chemical emergencies, and the conduct of joint exercises will continue to be important.<sup>170</sup> The lessons learned during these exercises will also help the OPCW to improve its response system, to modify operational procedures, to upgrade resources and facilities, and to correct communication problems.
- 3.334 Facing new challenges, the OPCW will continue to serve as a forum for governments, industry, and relevant national and international stakeholders to promote efforts regarding issues of chemical safety and security,<sup>171</sup> and in this framework, the development and implementation of preventive approaches and integrated response training as a part of Article X capacity-building programmes is envisaged as a potentially substantial contribution of the OPCW's endeavours in this area.

## **ECONOMIC AND TECHNOLOGICAL DEVELOPMENT**

### **Introduction**

- 3.335 While the Convention seeks to ban chemical weapons, in Article XI, it also provides for international cooperation among States Parties in the pursuit of chemistry for peaceful purposes.
- 3.336 The provisions of the Convention have to be effectively and stringently implemented to ensure that a global ban on chemical weapons is achieved. In this context, support programmes, funded by the States Parties, enhance the OPCW's ability to hinder prohibited activity and to extend the benefits of the peaceful uses of chemistry (including capacity building and the exchange of scientific and technical information) to all.
- 3.337 Since the Convention's entry into force, the programmes offered by the Secretariat in the field of international cooperation have continuously expanded. Since the Second Review Conference, even under the zero-growth regular budget, the number and quality of the programmes for international cooperation have increased. An increase in the number and scope of international-cooperation activities has also occurred, made possible by voluntary contributions, as well as continuous reprioritisation. New programmes (such as programmes related to chemical safety/industry outreach) have been introduced and existing programmes have been expanded (the addition of courses in analytical-skills development in different official languages, for example).

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169 Paragraphs 86 and 87 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011); paragraph 30 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011.

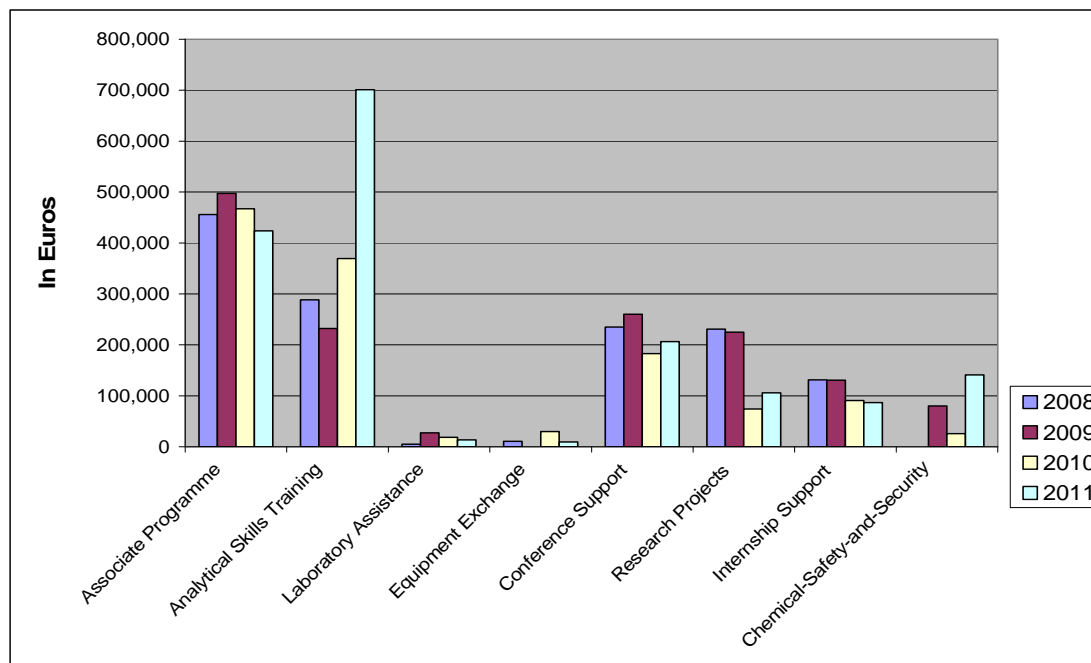
170 Paragraph 88 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

171 C-16/DEC.10.



In this way, the Secretariat has responded to rising expectations and the growing demand for the services it offers to States Parties.

**CHART 8: INTERNATIONAL-COOPERATION PROGRAMME EXPENDITURES BY YEAR 2008 – 2011**



3.338 From the entry into force of the Convention on 29 April 1997 to the end of 2011, the programmes on international cooperation have had 3,794 beneficiaries, including 265 Associate Programme participants, 315 analytical chemists, 292 Industry-Outreach Programme participants, 92 laboratories, 1,966 Conference-Support Programme participants, 239 conferences, 73 transfers of used and functional equipment, 437 research projects, and 115 interns.<sup>172</sup> By region, these beneficiaries include Africa (1,259), Asia (1,046), Latin America and the Caribbean (547), Eastern Europe (546), and Western Europe and Other States (396).

3.339 Following the recommendations of the Second Review Conference,<sup>173</sup> the Secretariat has continued to improve and promote programmes for international cooperation:

- (a) The effectiveness of these programmes is evaluated with a view to ensuring that they are responsive to the needs of beneficiary States Parties, in order to optimise the use and effectiveness of resources.
- (b) Several programmes have benefitted from the continuous support and cooperation of various partners and coordination with other relevant international and regional organisations.

<sup>172</sup> EC-55/DG.13, dated 5 February 2009; EC-59/DG.13, dated 11 February 2010; Corr.1, dated 18 February 2010; EC-64/DG.6, dated 11 April 2011; EC-67/DG.3, dated 6 January 2012.

<sup>173</sup> Paragraph 9.116 of RC-2/4.

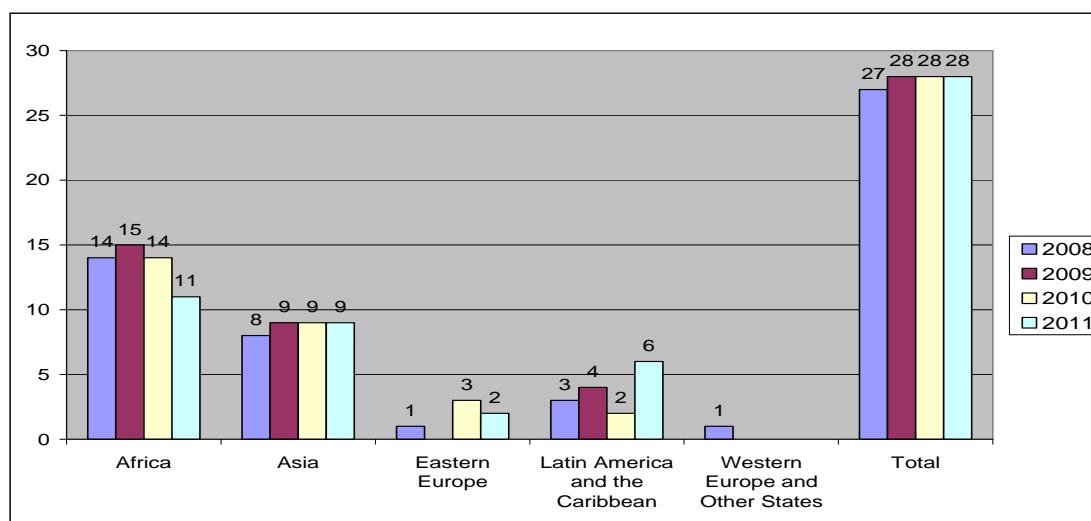
- (c) In order to consolidate a wider geographical distribution among participating States Parties, the Secretariat has made every possible effort to ensure the widest dissemination of invitation Notes.

### **Integrated chemical management focus area**

#### Associate Programme

- 3.340 The Associate Programme is the flagship activity of the Organisation in the field of international cooperation. It consists of a nine to 10-week curriculum (induction segment, university segment, specialised visit, industrial attachment, and research projects) based on an integrated instruction approach that combines theoretical and practical training. Established in 2000, this programme aims at facilitating industry-related national implementation of the Convention by enhancing national capacities through the training of chemistry and chemical-engineering professionals from industry, universities, and government.
- 3.341 The programme was launched on a pilot basis with 12 participants. Its capacity was doubled to 24 participants in 2003 and expanded to 28 participants in 2008. By the end of the 2011, 12 editions had been organised, accommodating 265 participants from 96 States Parties. In responding to further demand from States Parties, the intake has been increased to 32 participants in 2012 and 34 participants in 2013.

**CHART 9: ASSOCIATE PROGRAMME**



- 3.342 Among the programme's main achievements is the large cohort of Associates who are now actively involved in implementing the Convention in their home countries and who also effectively support cooperation between their National Authorities and the Secretariat. Associates have published 130 research papers on Convention-related topics during their training. The fact that many of the participants come from academia has greatly accelerated the transfer of acquired knowledge through teaching to a wider audience. The academic network is therefore an important network for promoting the objectives of the Convention. Moreover, 14 Associates have been recruited by the Secretariat as OPCW inspectors, five of whom were later promoted to team leaders.

- 3.343 The continuation of the highly successful Associate Programme has been made possible through the extended support of chemical companies in 19 States Parties in Europe and Asia, as well as the generous and sustained voluntary contributions of a number of industrialised States Parties.
- 3.344 The Secretariat is of the view that the Associate Programme could be further improved and promoted through the following:
- (a) enhancing the visibility of the Associate Programme in order to ensure wider and more balanced participation by including the States Parties that have not yet been represented in the programme;
  - (b) exploring the possibility of increasing the number of participants per edition by revising the structure of the course through reassignment of the human and financial resources; and
  - (c) establishing an alumni association for the Associate Programme in accordance with the recommendation of the decision on Article XI.<sup>174</sup>

### **Enhancing laboratory capabilities focus area**

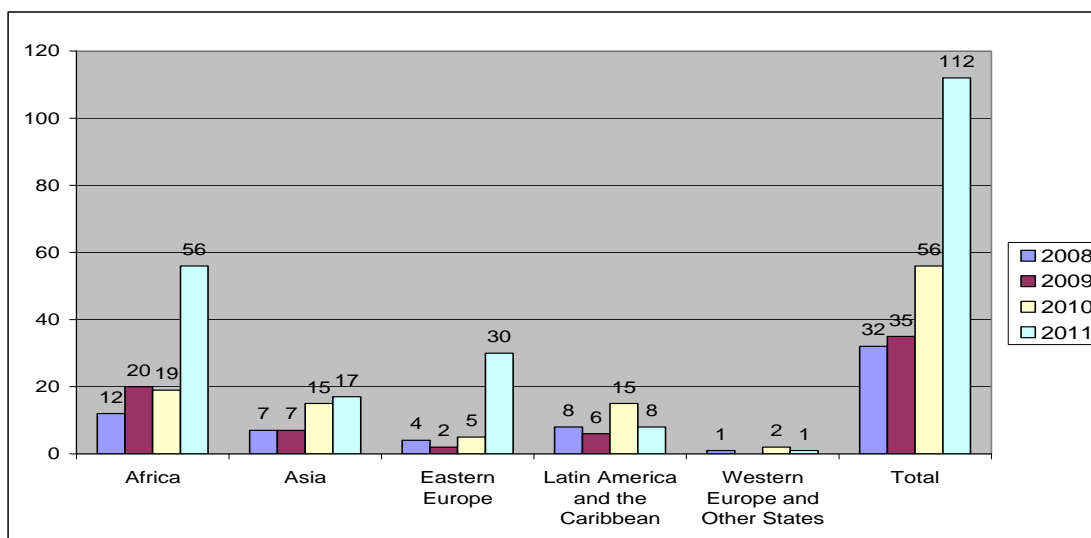
#### Analytical-skills-development courses

- 3.345 The analytical-skills-development courses provide qualified analytical chemists from States Parties whose economies are developing or in transition with critical experience and practical knowledge in the analysis of chemicals related to the national implementation of the Convention. By building individual skills, these courses also render assistance to laboratories that may wish to seek an OPCW designation for off-site analysis of authentic samples.
- 3.346 Between 2008 and 2011, several different types of courses on modern analytical methods were delivered. Altogether, 235 analytical chemists, in 20 courses, obtained updated knowledge and upgraded skills in the analysis of chemicals related to the Convention. As per usual practice, at the end of the course, participants completed a written test and provided feedback on the contents, organisation, and overall performance of the programme through questionnaires and evaluation meetings. All the participants successfully completed the training programme.
- 3.347 The course programme is highly appreciated by the States Parties. From the initial single course, it has been modified to include several different versions and different analytical methods that target participants' needs. Reflecting the increase in the courses, there has been a dramatic increase in the programme uptake, as shown in the Chart 10. The programme is also offered in several official languages (French, Spanish, and Russian) in cooperation with institutions that have such capabilities in States Parties. Special training with a regional focus on Africa has also been introduced.

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174 C-16/DEC.10.

**CHART 10: ANALYTICAL-SKILLS-DEVELOPMENT COURSES**

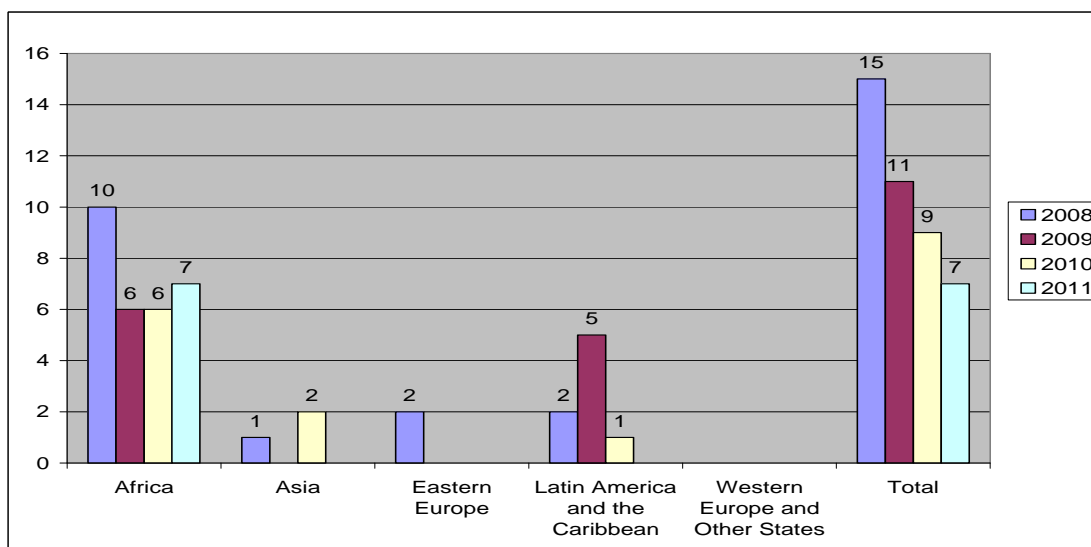


3.348 The main challenge for the future will be to maintain the quality of training with the current levels of participants while tailoring the programme to the needs of groups of analytical chemists with different levels of skills and competencies. Depending upon the availability of resources, both financial and human, the main challenge for the future will be to diversify the curriculum and the language of instruction, when possible, to meet the needs of States Parties.

Laboratory-Assistance Programme

3.349 The Laboratory-Assistance Programme offers analytical and testing laboratories in developing countries and in countries with economies in transition an opportunity to improve their technical competence. It also promotes economic and technological development.

**CHART 11: LABORATORY-ASSISTANCE PROGRAMME**

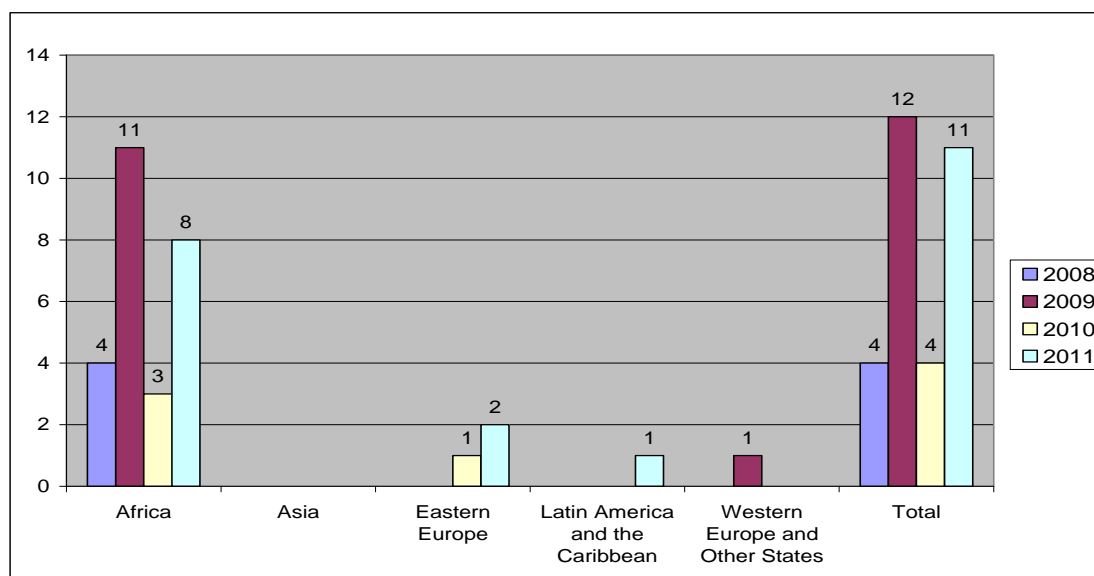


3.350 The OCPW Programme to Strengthen Cooperation with Africa on the Chemical Weapons Convention (hereinafter “the Africa Programme”) has been incorporated into the Laboratory-Assistance Programme. A pilot workshop for the Africa region for senior laboratory managers, supported by the Government of Norway, was organised to take stock of the achievements of the programme and to discuss the way forward. Among other things, this workshop provided recommendations on the roadmap for improving analytical, testing, research, and university laboratories and elaborated on the concept of regional resource partners. Although this pilot is under the Africa Programme, it can be used for other geographic regions, based on specific needs and their relevance to the Convention.

Equipment-Exchange Programme

3.351 The Equipment-Exchange Programme aims to support the transfers of used, but still functional, equipment from institutions in one State Party to institutions in another. The Secretariat maintains a database of interested donors and recipients of equipment, but potential transfers can also be directly negotiated bi-laterally between States Parties.

**CHART 12: EQUIPMENT-EXCHANGE PROGRAMME**



3.352 Throughout the years of implementation, the programme has proven to be helpful in equipping institutions and laboratories (mainly from States Parties with developing and transitional economies) with necessary instruments. Such transfers have contributed not only to upgrading the functioning of these institutions, but also to the quality of their delivery. Evaluation, on a case-by-case basis, is done by following up with the beneficiaries. This often involves the relevant National Authorities, or other national or regional bodies.

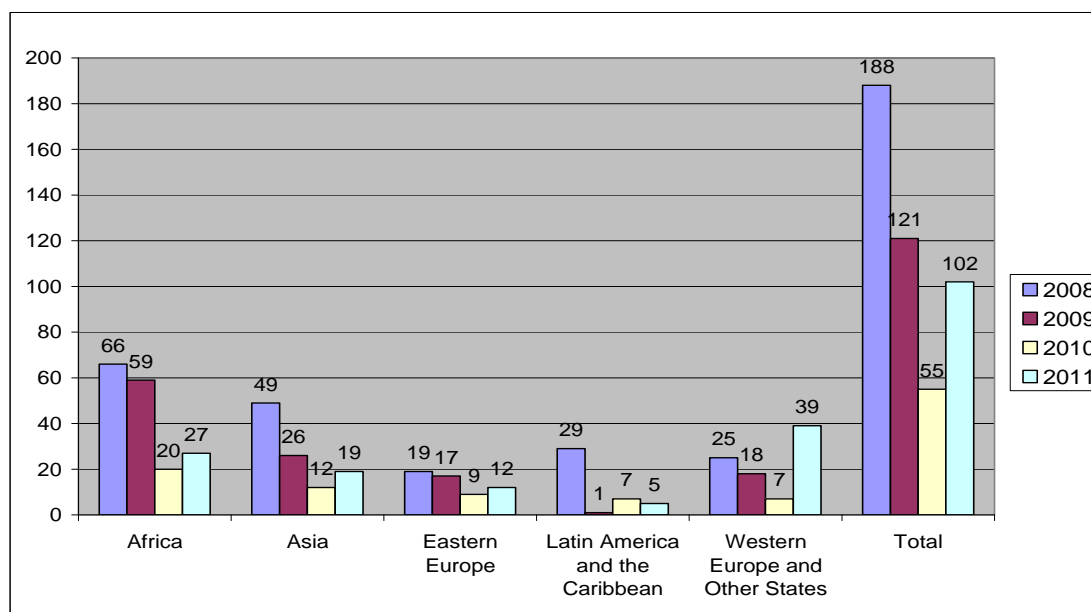
3.353 Given the increasing number of requests, the Secretariat intends to be more selective in identifying institutions where the greatest impact would be expected from the transfers. The Secretariat will also intensify its efforts to encourage developed States Parties to provide more donations under this programme.

## Chemical-knowledge promotion and exchange

### Conference-Support Programme

- 3.354 Established in 1997, the Conference-Support Programme assists institutions, or recognised scientific organisations, from States Parties whose economies are developing or in transition in sending their experts to relevant conferences, seminars, or workshops. It also assists in covering administrative costs, such as the costs of publishing conference proceedings or of translating proceedings into one of the official languages of the OPCW.
- 3.355 This programme has been instrumental in facilitating the organisation of events with themes that are related to the implementation of the Convention and, more generally, to the use of chemistry for peaceful purposes. It provides an opportunity for the exchange of knowledge in the field of chemistry and promotes networking among chemists and scientists from both developed and developing countries. Feedback from the organisers indicates that the support provided by the OPCW to these events raises the profile of the conferences, increases appreciation of the Convention, and contributes substantially to their success.

**CHART 13: CONFERENCE-SUPPORT PROGRAMME**

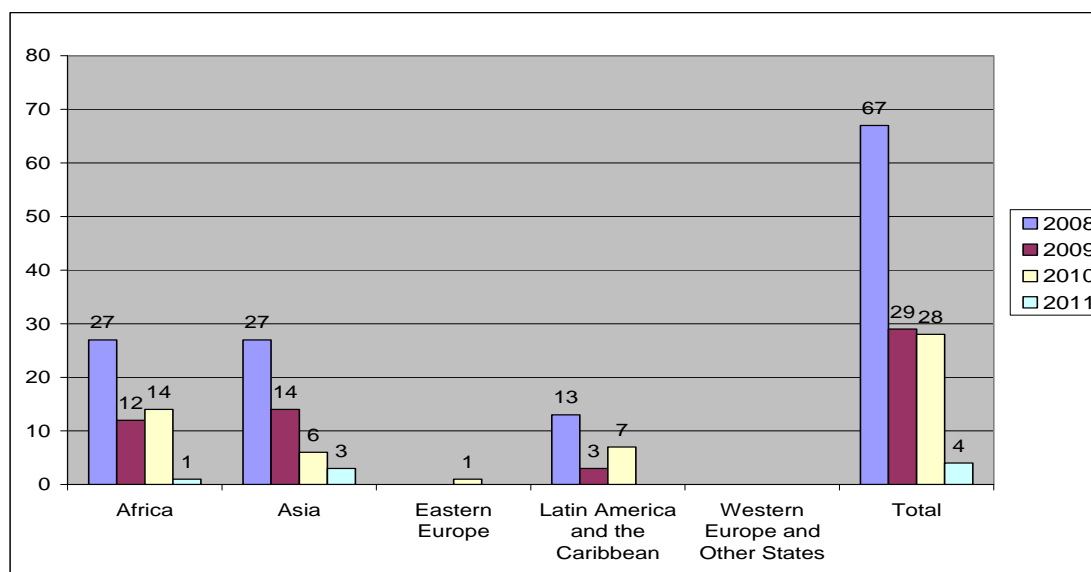


- 3.356 In response to the increasing number of requests, the Secretariat intends to keep providing the necessary support to the relevant events and participants, which also promotes the universality of the Convention and the work of the OPCW. In future, the Secretariat will continue to be more selective in terms of the themes of the events so that its contribution will be more focussed on areas directly linked to the objectives of the Convention.

Programme for Support of Research Projects

3.357 The Programme for Support of Research Projects provides funding for a limited number of research projects in proposals submitted by developing countries and countries with economies in transition. The areas of research should focus on the development and promotion of scientific and technical knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical, or other peaceful purposes. Funding is administered either directly or through co-financing.

**CHART 14: PROGRAMME FOR SUPPORT OF RESEARCH PROJECTS**



3.358 Upon completion of a project, the recipient submits a detailed financial statement and a final scientific report, outlining the results achieved and indicating how the research has contributed to the development goals of the States Parties in question. Much of this research has culminated in papers published in peer-reviewed journals.

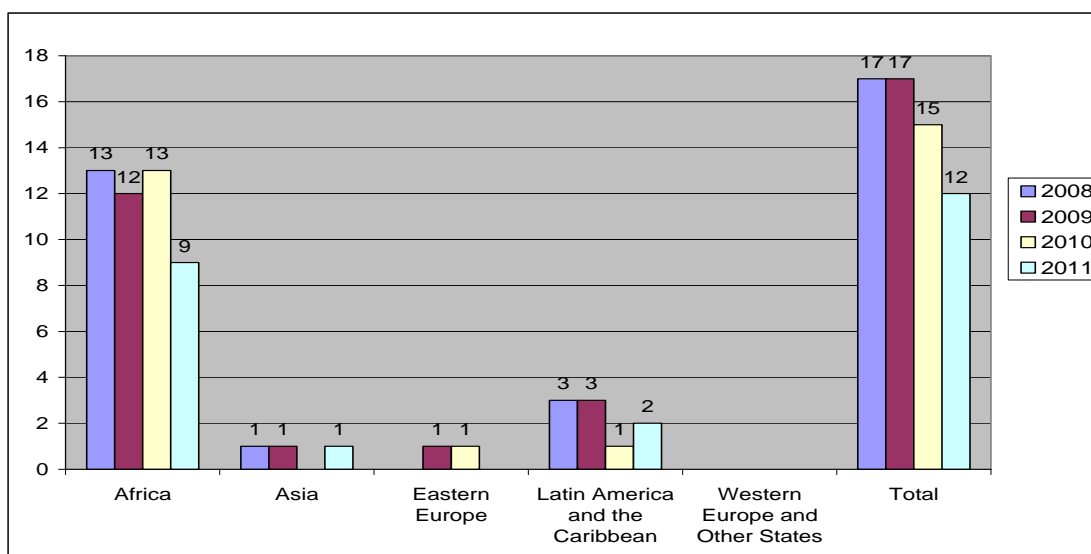
3.359 In the coming years, research topics focussing on new methods for detecting chemical warfare agents will be encouraged. This shift is reflected in the revision of the Note by the Secretariat on this subject.<sup>175</sup>

Internship-Support Programme

3.360 This programme enables young scientists and engineers who are working in research institutions, in publicly funded laboratories, or in recognised universities in developing countries to work for a limited period of time (usually three months) in a more advanced laboratory or facility.

175 S/228/2000/Rev.1, dated 14 March 2011.

**CHART 15: INTERNSHIP-SUPPORT PROGRAMME**



3.361 As is evident from the apparent skew in the statistics provided, the Africa Programme has been incorporated into all programmes, particularly the Internship-Support Programme. In addition, States Parties (China, the Netherlands, and the Republic of Korea) have offered voluntary contributions to support the Internship-Support Programme under the Africa Programme.

3.362 Upon completing an internship, a detailed report is submitted to the Secretariat on the results achieved, the benefits derived from the intern's professional perspective, and the benefits that would accrue to his/her institution and the country. The turnaround time taken to produce journal articles (published mostly in highly rated journals) is generally about two years after the research has been completed. Hosting laboratories are increasingly requesting funds to sustain the interns' research, which is something that the Secretariat should consider in future.

3.363 To benefit developing countries and without precluding the possibility of funding for internships in allied fields of chemistry (and also recognising the convergence of chemistry and biology), the areas of study for the internships that are eligible for grants from the Secretariat should encompass areas that promote scientific and technical knowledge in the field of chemistry for economic and technological development in the chemical industries of States Parties.

### **Industry outreach**

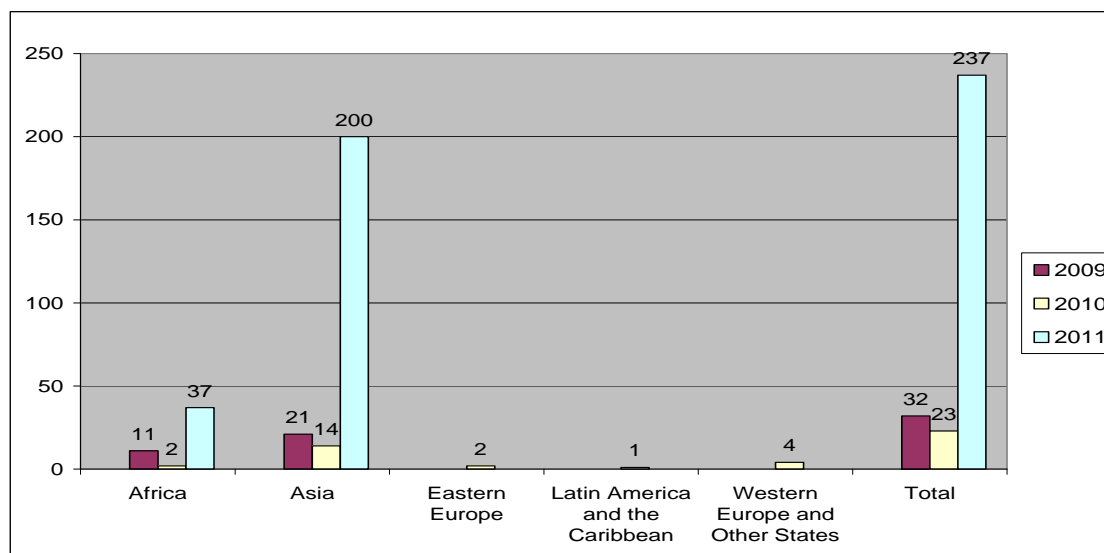
#### Chemical-safety-and-security management

3.364 Chemical-safety-and-security management is an important activity related to the implementation of Article XI of the Convention. The development of this capacity-building and technical-assistance programme in the management of chemical safety and security was demand-driven and tailor-made to meet the specific needs of States Parties.



3.365 The overall objective of the programme is to sensitise States Parties to new approaches in relation to the management of chemical safety and security by promoting and disseminating standardised and best practices, with a specific focus on assisting small and medium-sized enterprises. Although the programme has only been in existence for three years, it has had high interest from States Parties and has received strong support through voluntary contributions as well.

**CHART 16: CHEMICAL-SAFETY-AND-SECURITY MANAGEMENT**



3.366 A remarkable increase in participants and the number of applications received for each of the events has clearly demonstrated rising interest in the subject matter from States Parties. The feedback gathered from the seminars has proved highly positive and constructive, with consistent requests for further seminars to be organised. This trend should be maintained.

3.367 States Parties have not only supported the programme as a regular activity but actively seek to promote and broaden these activities through substantive contributions. This is reflected in the numerous voluntary and in-kind contributions from the States Parties, including India, Japan, Malaysia, Qatar, and the United States of America, and from the EU.

3.368 Following the success of the pilot phase, the programme has officially been recognised and future activities have been mandated under the international-cooperation programmes by the decision on Article XI adopted at the Conference at its Sixteenth Session.<sup>176</sup>

3.369 The chemical-safety-and-security management programme is now well established and well known among the States Parties. The Secretariat has identified a pool of highly qualified experts in a range of subjects and has developed good working relations with relevant institutions. The proposed strategy is to expand this activity in order to implement the decision on Article XI. The main challenges for the future of this programme are twofold:

<sup>176</sup> C-16/DEC.10.

- (a) to assess specific needs in the field of chemical safety and security in order to ensure that relevant requirements are consistently fulfilled (the Secretariat will support this work, upon request, in partnership with experts from the States Parties, international organisations, and industry); and
- (b) to substantiate implementation of the programme with adequate resources, both human and financial (to this end, the Secretariat will continue to attract voluntary contributions from the States Parties, and build upon the network of regional and national partners and centres, which will allow the resources and support received from the States Parties to be maximised).

### **Evaluation of the international-cooperation programmes**

- 3.370 As a standard practice, the international-cooperation activities have evaluation mechanisms incorporated into each programme. Due to the widely varying nature of the programmes, the methods of evaluation and collection of feedback also differ. Although the methods vary, the general analysis of the courses shows a consistently positive response from participants and recipient institutes.
- 3.371 Written exams, questionnaires, and feedback and evaluation meetings are used to evaluate the Associate Programme and the various courses under the analytical-skills-development programme. Final reports and other published materials are the basis for evaluating the research projects and internships. The Conference-Support Programme is unique, as it entails essentially no direct contact with the sponsored parties; therefore, the evaluation is tied directly to the funding.

### **Towards full implementation of Article XI**

#### Article XI workshop

- 3.372 In light of the rapid advancement of science and technology, and profound changes in the size and shape of the world's chemical industry, the Secretariat organised an Article XI workshop in 2010, upon the request of the Council. It aimed to take stock of current trends and to exchange ideas among States Parties and relevant stakeholders, including academia, chemical-industry associations, non-governmental organisations, and regional and international institutions, which could assist, as appropriate, the policy-making organs of the OPCW in exploring, identifying, and developing concrete measures on the full implementation of Article XI of the Convention. The workshop was attended by 150 participants from 64 States Parties from various geographical regions.
- 3.373 Having recognised that, to move forward effectively, some of the activities should be expanded and some of them modified, and in some cases, the focus should be renewed, the workshop participants recommended that: greater emphasis should be placed on regional needs and subregional programmatic synergies; networking and partnering should be promoted with international technical societies, service providers, academia, chemical industry associations, and other relevant stakeholders; and close cooperation should be continued with the States Parties to further identify concrete measures for full implementation of Article XI.

Components of an agreed framework for the full implementation of Article XI

- 3.374 Following the highly acclaimed Article XI workshop, and as a result of numerous informal consultations, a decision on the components of an agreed framework for the full implementation of Article XI was adopted by the Conference at its Sixteenth Session.<sup>177</sup> This decision marks a key point in the ongoing implementation of Article XI and provides a clear framework for the future activities of the Secretariat in the following areas:
- (a) national capacity building for research, development, storage, production, and safe use of chemicals for purposes not prohibited under the Convention;
  - (b) promoting networking and exchanges among scientific communities, academic institutions, chemical-industry associations, non-governmental organisations, and regional and international institutions;
  - (c) enhancing the effectiveness of the OPCW's current international-cooperation programmes; and
  - (d) following up on measures by States Parties and the OPCW to facilitate States Parties' participation in the fullest possible exchange of chemicals, equipment, and scientific and technical information relating to the development and application of chemistry, in accordance with the provisions of the Convention.

**Analysis**

- 3.375 Throughout the reporting period, the international-cooperation portfolio continued to evolve to meet the specific needs of various stakeholders. Diversification of international-cooperation activities, as well as an increase in the number and scope of projects, was demand driven. A good illustration of this approach is the introduction of the new chemical-safety-and-security management programme in 2009. In other cases (the Associate Programme and the analytical-skills-development courses), the content and organisation of the courses have been continuously revised and improved, based on the feedback. The Secretariat has been consistently carrying out exercises to refocus and to optimise resources in order to maintain the effectiveness and efficiency of the programmes.
- 3.376 By now almost all international-cooperation activities have a strong reputation among stakeholders and have become popular among the States Parties. During the period under review, the Secretariat has continued to face the dilemma of meeting the increasing demand and growing expectations from States Parties with a zero-growth regular budget. This challenge is being addressed in two ways. Firstly, in order to expand the base of co-implementing institutions and to ease the burden of delivering everything from Headquarters, the Secretariat has come up with the idea of regional resource partners, which is currently at the pilot stage.<sup>178</sup> Secondly, the Secretariat

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<sup>177</sup> C-16/DEC.10.

<sup>178</sup> Paragraphs 99, 105, and 106 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011); paragraph 34 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011; page 2 of the Informal Summary of

has successfully continued to attract voluntary and in-kind contributions to its major programmes. The fact that more and more States Parties are coming forward with additional financial and in-kind support reconfirms the utility and value of the international-cooperation activities for the States Parties.

### **Future considerations**

- 3.377 As specified earlier, the decision on the components of an agreed framework for the full implementation of Article XI<sup>179</sup> laid down guidelines for a future strategy for Article XI implementation and provided a set of new priorities in addition to endorsing current activities aimed at promoting the peaceful uses of chemistry.
- 3.378 In the coming years, the strategy for implementing this decision and taking the concrete measures described in it will be largely driven by the availability of financial and human resources. The extent to which the decision will be implemented is dependent upon the support from States Parties.<sup>180</sup>
- 3.379 The proposal to form regional resource partners to directly provide capacity building and support based on regional needs has been put forward by the Secretariat. By working in cooperation with regional networks, the Secretariat would be able to maximise the impact of its limited budget and human resources while being better able to cater to specific regional and national requirements. This follows the principle of “globalising the local and localising the global”.
- 3.380 As the focus of the OPCW’s activities gradually evolves to more closely address the issues around the prevention of the re-emergence of chemical weapons, chemical safety and chemical security are expected to become an essential area of OPCW activity. This is fully in line with the decision on Article XI taken by the Conference and will be implemented by the Secretariat in the coming years.
- 3.381 The Secretariat will further develop its ability to evaluate its own programmes in order to enhance its efficiency and to refine its future activities accordingly. Furthermore, the Secretariat will continue to develop relations with relevant international organisations in regard to planning and formulating projects for the promotion of the peaceful uses of chemistry.

### **Conclusion**

- 3.382 The main objective of Article XI is to enhance the economic and technological development of the States Parties through international cooperation. To this end, the Secretariat has offered a variety of activities aimed at developing national capacities and enhancing the exchange of scientific and technical knowledge.<sup>181</sup> By accomplishing these objectives, the international-cooperation programmes not only

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Discussions at the Ambassadors’ Retreat on Future Priorities of the OPCW, held in The Hague on 24 May 2012.

179 C-16/DEC.10.

180 Paragraph 98 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

181 Paragraph 31 of the Informal Summary of Discussions at the Ambassadors’ Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011.

promote the peaceful use of chemistry in the areas not prohibited by the Convention, but they also contribute to building the national skills and knowledge needed to effectively implement the Convention at the national level and ensure the prevention of the re-emergence of chemical weapons or the misuse of toxic chemicals. In other words, the objectives of the international-cooperation programmes are indispensable for accomplishing one of the overall goals of the Convention.

## **ARTICLES XII TO XV AND FINAL CLAUSES**

- 3.383 The implementation of Articles XII to XV and the final clauses of the Convention have not given rise to any issues of significance in the period since the Second Review Conference. Although considered in a few instances, Article XII has never formally been applied to any specific case. In the view of the Secretariat, these provisions remain valid and continue to allow for effective implementation of the Convention.

## **THE PROTECTION OF CONFIDENTIAL INFORMATION**

### **Introduction**

- 3.384 The protection of confidential information pertains to the verification of both civil and military activities and facilities. The Director-General is assigned the primary responsibility for ensuring the protection of confidential information and maintains a stringent regime governing the handling of confidential information by the Secretariat, while each State Party is also required to treat the information and data that it receives from the Organisation as confidential and afford it special handling.

### **Developments**

#### Strengthening the confidentiality regime

- 3.385 The importance of the role of the Director-General in ensuring the application of a stringent confidentiality regime was reiterated by the Second Review Conference.<sup>182</sup> In the area of confidentiality, the Secretariat has focussed its efforts on enhancing its expertise in the areas of security-risk management and corporate governance. In addition, it has also continued to develop a systematic approach to providing advice on operational security and confidentiality on inspection missions. The training and awareness programmes on security and confidentiality have been partially incorporated into the Learning Management System (LMS).

#### Information-technology security

- 3.386 The Secretariat operates two distinct networks for information technology (IT): the Security-Critical Network (SCN) for storing and processing OPCW confidential information and the Security Non-Critical Network (SNCN) for processing only unclassified information. In this regard, several IT security efforts have been made:

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182 Paragraph 9.121 of RC-2/4.

- (a) In order to provide assurance to States Parties of the stringent application of the confidentiality regime within the SCN, the Security Audit Team (SAT) and its successor, the Security Audit and Assessment Team (SAAT), have undertaken reviews at least once (and often twice) in each year since the Second Review Conference. The reports of the SAT/SAAT have been submitted to the Council.
- (b) In order to strengthen the confidentiality regime, since 2009 there has been a realignment of IT security efforts. To implement this, a separation between the personnel having access to classified information and the ones monitoring this access has been extended.
- (c) The Secretariat has also enhanced its monitoring capabilities on both the SCN and the SNCN by using specific monitoring tools.

#### States Parties providing details of their handling of OPCW confidential information

3.387 Each State Party is required to provide details on the handling of information provided by the Organisation upon request (paragraph 4 of the Confidentiality Annex). The Second Review Conference urged all States Parties to provide this information expeditiously.<sup>183</sup> The Secretariat maintained its annual requests by sending a note verbale to all States Parties. At the end of the first half of 2012, a total of 105 States Parties had provided such information. This is an increase of 17 since the Second Review Conference; however, 83 States Parties still have to provide this information to the Secretariat. The Secretariat remains ready to assist States Parties in this regard.

#### Long-term handling of confidential information

3.388 The Second Review Conference noted that no agreement had yet been reached on the issue of developing and implementing guidelines regarding the long-term handling of confidential information and recommended that the Secretariat submit a report to the Council proposing solutions before the Third Review Conference.<sup>184</sup> Subsequently, the Note<sup>185</sup> by the Secretariat on this subject was noted by the Council in May 2010 and work is ongoing.

#### Incidents involving confidentiality

3.389 On average, around 60 incidents per year involving confidentiality have been reported since the Second Review Conference. About 40% of the incidents were security related, with 60% related to the handling of confidential information. Almost all confidentiality-related incidents resulted from States Parties delivering confidential material by non-secure means to the Secretariat in a manner that was not consistent with the OPCW confidentiality policy.

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183 Paragraph 9.123 of RC-2/4.

184 Paragraph 9.125 of RC-2/4.

185 EC-61/S/3.

## **Analysis**

- 3.390 Due to the increase in the Secretariat's IT monitoring capabilities and the fact that confidential information is increasingly being handled electronically, the Secretariat has been able to reduce the number of incidents, although States Parties need to be made aware of the correct ways of making authorised transfers of classified information.
- 3.391 The increased importance of the security-awareness programme also seems to have had a positive effect on the confidentiality regime.
- 3.392 The amount of classified information being stored by the Secretariat remains a point of concern because the process of re- and declassifying information by States Parties is not being applied. A stricter application of the rules on how to deliver classified information from the States Parties to the Secretariat will decrease the number of reported incidents involving confidentiality.

## **Future considerations**

- 3.393 The Secretariat is developing an Organisation-wide approach to risk management (of which the security component is an important part), while providing better assurance to States Parties and other stakeholders that the stringent confidentiality regime will be maintained.
- 3.394 The Secretariat will continue to decrease the physical handling of classified information as much as possible, and to explore the use of IT applications for increased monitoring capability. The security-awareness programme will be expanded and intensified, aided by the recent implementation of the Secretariat's Learning Management System.

## **Conclusion**

- 3.395 Since the Second Review Conference, the Secretariat has developed within the confidentiality regime a more risk-management-based role. For the future, the Secretariat will continue to improve its monitoring regime of confidentiality-related issues, while maintaining the implementation of the confidentiality regime at the same high level. Training and awareness will be the supporting foundations of the confidentiality regime.
- 3.396 In addition, the Secretariat is evaluating and assessing the possibilities for handling the exchange of classified information between the Secretariat and the States Parties electronically and will, internally, strive towards a paperless work environment. Meanwhile, the long-term handling of classified information in combination with de- and reclassification is an issue requiring a definitive solution.

## **THE GENERAL FUNCTIONING OF THE ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS**

### **Policy-making organs**

#### Introduction

- 3.397 The Second Review Conference reaffirmed that the work of the policy-making organs (the Conference and the Council) is important for the OPCW's effective functioning, which contributes directly to the aims of the Convention.<sup>186</sup> Both the Conference and the Council continue to play their roles in accordance with Article VIII of the Convention and have maintained a sustainable pattern of work.

#### Conference

- 3.398 The Conference, the principal organ of the OPCW, held four sessions during the period under review (one at the end of each year), with average participation of 127 States Parties. This is slightly higher than the average participation of 120 during the five-year period prior to the Second Review Conference. The Conference has taken 42 decisions since the Second Review Conference.

#### Council

- 3.399 The Council, the executive organ of the OPCW, met for 17 sessions and convened four meetings during the period under review. Except for the year 2008, when the Council met three times, it held four sessions annually. Instead of convening three sessions prior to the Conference and one after, as it had done until 2007, the Council has since 2008 held all four sessions prior to the Conference. Such scheduling has enabled the Council to develop an effective pattern of work and provided ample time for intersessional work.
- 3.400 Since the Second Review Conference, the number of States Parties participating in the work of the Council has increased. Each session of the Council enjoyed high attendance and attracted an average of 37 States Parties attending as observers, compared to 27, as reported in RC-2/S/1\*, dated 31 March 2008. During the period under review, the Council took 96 decisions.
- 3.401 In addition to its formal sittings, the Council actively carries out its intersessional work. The Chairperson of the Council holds several informal consultations. The Chairperson and the Vice-Chairpersons of the Council are also deeply engaged with the work of the facilitators. Facilitations on certain outstanding issues as well as routine items are led by facilitators and held regularly.
- 3.402 In 2010 and 2011, a comprehensive review of the outstanding issues on the agenda of the Council was carried out under the auspices of the Vice-Chairpersons of the Council, as coordinators for the clusters of issues.<sup>187</sup> As a result, the issues on the

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<sup>186</sup> Paragraph 9.126 of RC-2/4.

<sup>187</sup> The outcome of the review is contained in the report of the Chairperson of the Council on the status of outstanding issues on the agenda of the Council (EC-64/2/Rev.1, dated 27 April 2011).



agenda of the Council have been classified into two categories: “issues under regular consideration by the Council” and “outstanding issues”. This allows the Council to have a more focussed agenda, and some of the outstanding issues have been successfully resolved. The current status of facilitations is updated in an information paper entitled “Issues Under Regular Consultation and Outstanding Issues on the Agenda of the Executive Council” issued by the Secretariat after each session of the Council.

- 3.403 Although the Council has developed a more effective pattern of work since the Second Review Conference, its members recognise the need to review the work method of the Council in order to make it more efficient. Consequently, informal consultations on issues related to improving the methodology of the Council’s work were initiated in March 2012. The frequency and length of the sessions, the structure of the sessions, and the effective use of informal consultations are some of the elements that might be considered.

#### Decision-making

- 3.404 A “consensus culture” has been established and maintained in both of the policy-making organs. The Second Review Conference reaffirmed that decision-making by consensus in the policy-making organs plays an important role in achieving common goals and in ensuring strong support for and preserving the integrity of decisions.<sup>188</sup> Since the Second Review Conference, virtually all decisions have been adopted by consensus. However, one decision has been taken by vote at a session of both the Council and the Conference.<sup>189</sup> After exhausting measures to achieve consensus on the issue concerned, the Council and the Conference took a vote instead of prolonging negotiations indefinitely. After the vote, States Parties reaffirmed their commitment to the principle of decision-making by consensus, which has contributed to the successful operation of the Convention.

#### Documentation

- 3.405 The Second Review Conference reaffirmed the importance of continued efforts by the Secretariat to provide documents for the policy-making organs in a timely fashion.<sup>190</sup> In this regard, the Secretariat introduced an internal document forecast system in order to ensure that documents are issued to States Parties in accordance with the deadlines for the circulation of official-series documents.<sup>191</sup>
- 3.406 The Secretariat has noticed an upward trend in the length of official-series documents, which has increased the financial as well as the human resource burden of producing them. Meanwhile, the Secretariat strives to maintain the high quality of translation and interpretation services for the Conference and the Council.

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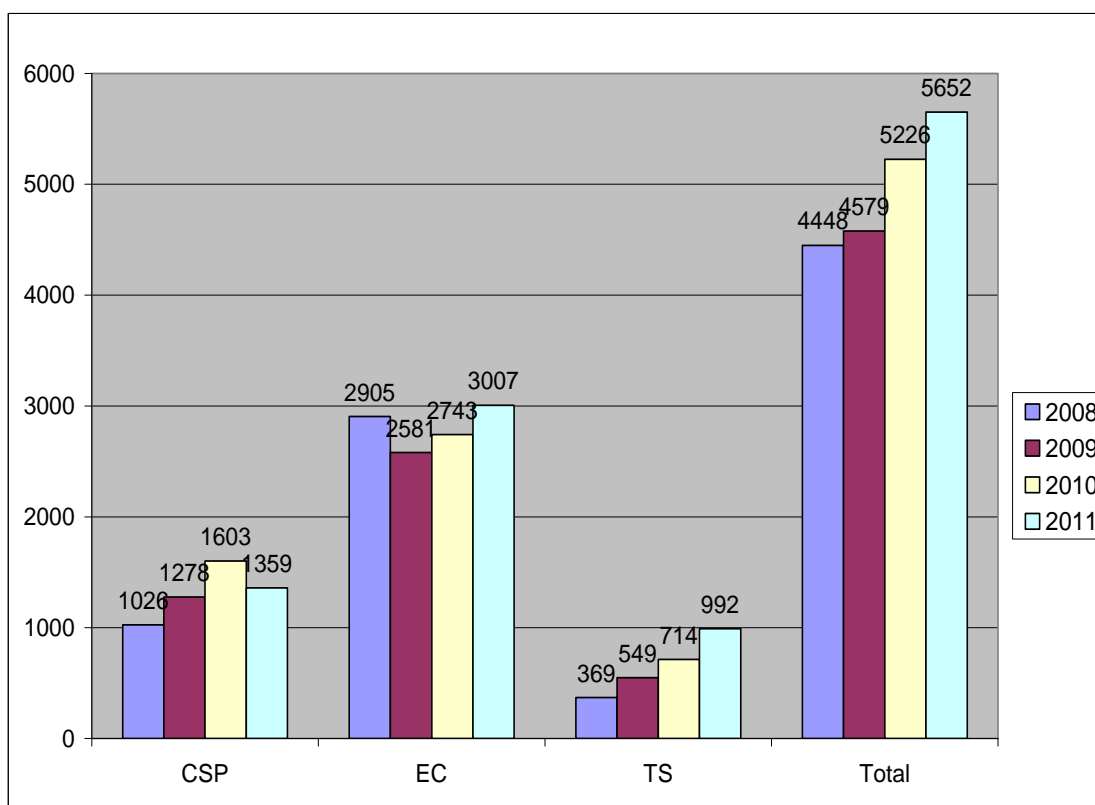
188 Paragraph 9.127 of RC-2/4.

189 EC-M-31/DEC.3, dated 24 November 2011; C-16/DEC.11.

190 Paragraph 9.127 of RC-2/4.

191 EC-49/DG.5, dated 3 May 2007.

**CHART 17: NUMBER OF PAGES OF OFFICIAL-SERIES DOCUMENTS**



3.407 The OPCW external server has been promoted as a secure and efficient way for States Parties to receive the official-series documents, in all languages, as soon as they are available.<sup>192</sup> Since 2010, the members of the Council have received official-series documents digitally via the external server (an initiative of the Secretariat to reduce the weekly mailings of paper copies, which has resulted in annual savings of approximately EUR 32,000).

#### Analysis

3.408 Both the Conference and the Council have been engaged in issues related to the implementation of the Convention as well as the activities of the OPCW.

3.409 Since the Second Review Conference, participation in sessions of both the Conference and the Council has increased, indicating that a larger number of States Parties show more interest in the work of the policy-making organs and participate more actively in both formal sessions and informal consultations. This is a positive sign for the Organisation, as greater involvement of States Parties in the policy-making process enhances the sense of ownership among them and makes the Organisation stronger. It is crucial for the policy-making organs to maintain a pattern of work conducive to their operation.

3.410 As can be seen in Chart 17, there has been a steady increase in the total number of pages of official-series documents. The reasons for the increase are the following:

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192 <https://external.opcw.org>. A username and password are required for access.

The number of States Parties that have issued their national statements as official-series documents during the general debates of the Conference and the Council has risen from 13 in 2008, to 43 in 2009, and to 63 in 2010, then decreased slightly to 60 in 2011. This attests to the greater interest of the States Parties in the work of the two policy-making organs. Secondly, more OPCW events, such as workshops, seminars, and training courses have resulted in a steady increase in the total number of pages of the Notes issued by the Secretariat.

#### Future considerations

- 3.411 Informal consultations on issues related to improving the methodology of the Council's work have started. Such consultations will provide States Parties with opportunities to thoroughly review current work methods and to present proposals and suggestions for further improvement.<sup>193</sup>
- 3.412 The Secretariat has continued to make efforts to provide documents in a timely and efficient manner. To date, 120 States Parties have access to the external server, and it is the intention of the Secretariat to reach out to the remaining States Parties to promote this service in the hope of reducing all paper-copy distribution of official-series documents, thus making further financial savings as well as supporting the OPCW's green initiative. The Secretariat will also look into options for environmentally friendly tools that will offer the States Parties easy access to documentation and information. Recently, the availability of official-series documents on the OPCW website was revised,<sup>194</sup> making it possible to increase the number of documents available on the OPCW website (www.opcw.org).

#### Conclusion

- 3.413 The policy-making organs continue to play key roles in meeting the objects enshrined in the Convention and ensuring the effective functioning of the Organisation. The Secretariat continues to assist both the Conference and the Council in the performance of their functions.

#### **Subsidiary bodies**

##### Scientific Advisory Board

- 3.414 The SAB has continued to enable the Director-General, in the performance of his functions, to render specialised advice to the Conference, the Council, and States Parties in areas of science and technology relevant to the Convention. The work of the SAB is described in detail in the reports of each of its sessions, which are available, along with the response from the Director-General, on the OPCW website.<sup>195</sup>

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<sup>193</sup> Paragraph 14 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011.

<sup>194</sup> EC-XVII/DG.1/Rev.2, dated 20 April 2012.

<sup>195</sup> SAB-12/1, dated 26 November 2008; SAB-13/1, dated 1 April 2009; SAB-14/1, dated 11 November 2009; SAB-15/1, dated 14 April 2010; SAB-16/1, dated 6 April 2011; SAB-17/1; and SAB-18/1.

- 3.415 Since the Second Review Conference, the SAB has convened nine meetings. As at September 2012, the SAB had three currently active temporary working groups on: sampling and analysis (which has held seven meetings), convergence of chemistry and biology (which has held two meetings), and education and outreach (which has held one meeting).
- 3.416 Beyond its annual meetings, the activities of the SAB, such as the temporary working groups, have been supported by the trust fund for the Scientific Advisory Board. Since its establishment in 2006, 13 States Parties (Chile, Czech Republic, Iraq, Japan, Nigeria, Qatar, Saint Lucia, Saudi Arabia, Spain, Switzerland, Turkey, the United Kingdom of Great Britain and Northern Ireland, and the United States of America) have contributed to the trust fund. In addition, the EU has supported the meetings of the SAB and its temporary working groups through Council decisions adopted in 2009 and 2012.
- 3.417 As requested by the Second Review Conference,<sup>196</sup> the Director-General issued a Note on enhancing interactions between the SAB and the policy-making organs.<sup>197</sup> The Note set out a number of possible options, and the Council invited States Parties to submit their own views, but no responses were received from States Parties. The Secretariat has acted upon a number of proposals in the Note, including arranging for the Chairperson of the SAB to brief States Parties in the margins of sessions of the Council and the Conference and further developing the pages dedicated to the SAB on the OPCW website.

#### Commission for the Settlement of Disputes Related to Confidentiality

- 3.418 The Second Review Conference reaffirmed the importance of the Commission for the Settlement of Disputes Related to Confidentiality (hereinafter “the Confidentiality Commission”) in settling any dispute related to breaches or alleged breaches of confidentiality involving States Parties or a State Party and the OPCW.<sup>198</sup> The Confidentiality Commission has held regular annual meetings; however, due to non-attendance, the Confidentiality Commission was unable to constitute a quorum<sup>199</sup> at two meetings in the last three years. This is a regrettable situation and has had an adverse affect on the functioning of the Confidentiality Commission and the appointment of its officers. Options to overcome this problem have been identified by the Confidentiality Commission.<sup>200</sup>

#### Advisory Body on Administrative and Financial Matters

- 3.419 The Advisory Body on Administrative and Financial Matters (ABAF), established by the Council at its Second Session,<sup>201</sup> has continued to provide valuable advice on financial and other administrative matters.

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196 Paragraph 9.134 of RC-2/4.

197 EC-58/DG.1, dated 22 July 2009.

198 Paragraph 9.122 of RC-2/4.

199 Rule 6 of the Operating Procedures of the Confidentiality Commission (C-III/DEC.10/Rev.1, dated 2 December 2004).

200 Paragraph 9.1 of CC-14/1, dated 25 May 2012.

201 EC-II/DEC.1, dated 30 June 1997.

## Effective functioning of the Secretariat

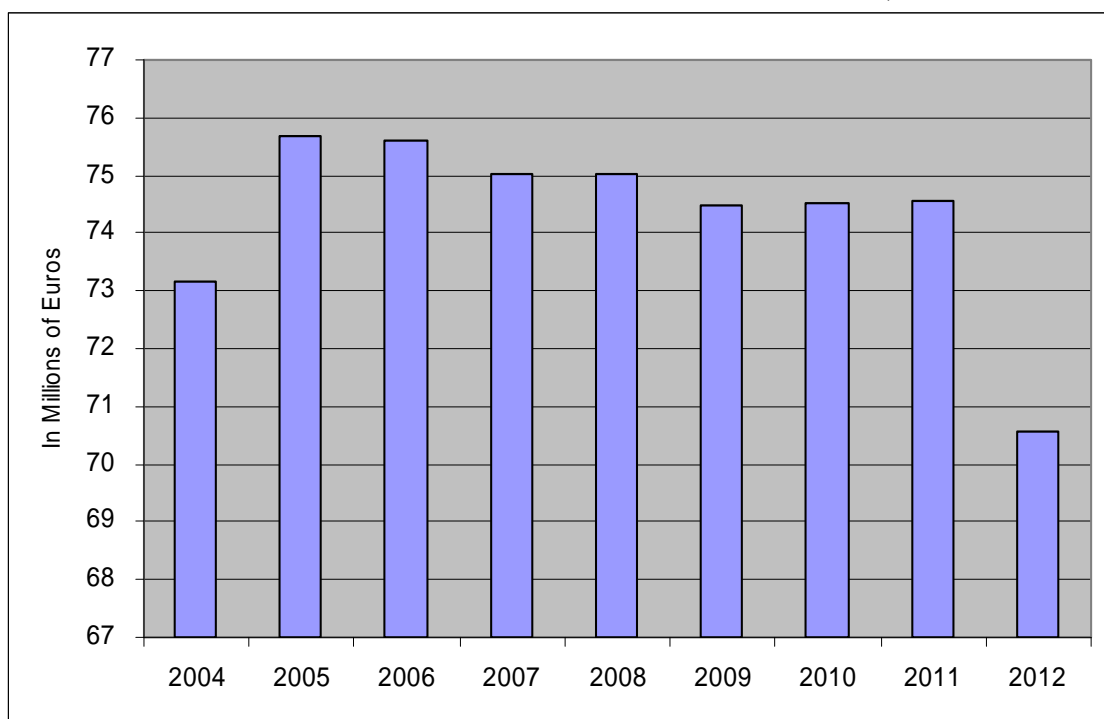
### Introduction

3.420 The Secretariat is fully committed to carrying out the functions entrusted to it in Article VIII of the Convention. Effective functioning of the Secretariat has been ensured in various ways, in accordance with the relevant rules and regulations.

### Budget resources

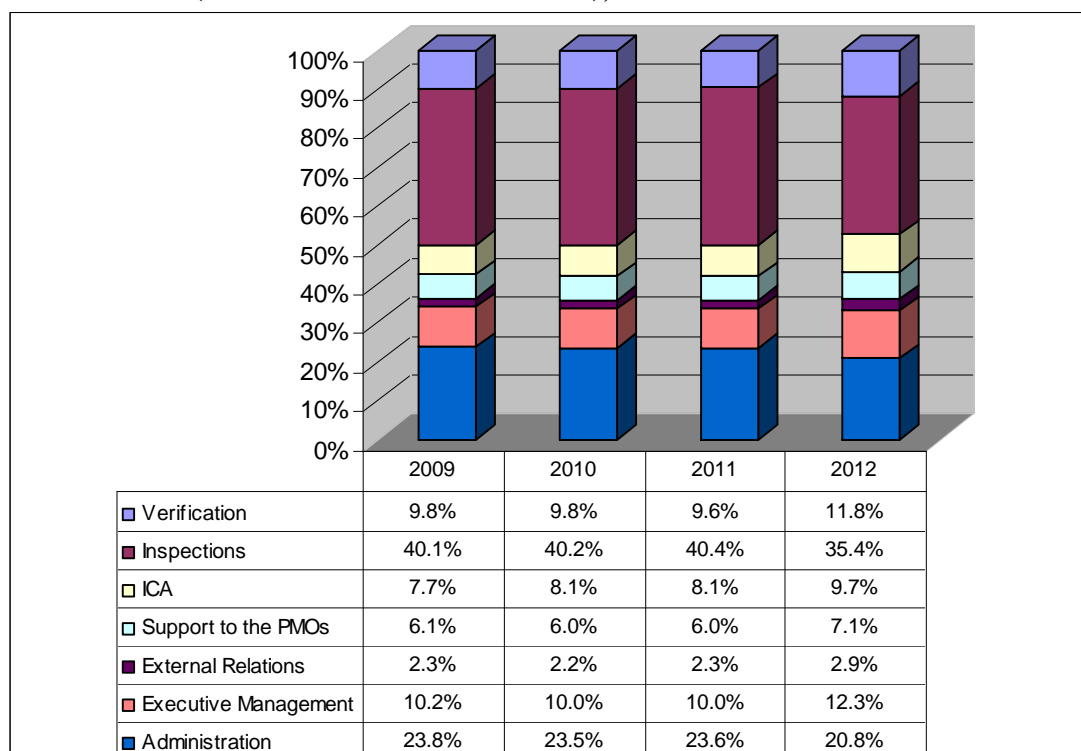
3.421 The annual Programme and Budget of the OPCW is adopted by the Conference at its regular session. Chart 18 highlights OPCW budget levels since 2004.

**CHART 18: REGULAR BUDGET LEVELS FOR THE OPCW, 2004-2012**



3.422 Expenditure across the Secretariat is divided among seven programmes. Chart 19 illustrates the division of the budget over the last four years.

**CHART 19: REGULAR BUDGET LEVELS, BY PROGRAMME (PROPORTION OF TOTAL), 2009-2012**



## Management

### *Developments*

- 3.423 Since 2005, the annual Programme and Budget has incorporated elements of results-based budgeting (RBB). The Second Review Conference called on the Secretariat to continue to pursue RBB vigorously, with a view to completing its introduction as quickly as possible.<sup>202</sup>
- 3.424 Since 2010, the Secretariat has embarked on implementing results-based management (RBM) in its management processes and practices in order to better ensure that its work contributes to the achievement of clearly defined results and the core objectives of the Organisation.
- 3.425 The initial phase of the implementation of RBM consisted of two segments, the first of which was to develop an understanding of RBM principles among programme managers. In February and March 2011, a series of workshops was conducted for 83 key senior and mid-level managers. The second segment involved coaching for programme managers to improve their results statements and key performance indicators and to set baselines and targets, so as to be able to measure progress. Over 80 programme managers and their staff benefited from the coaching exercises.
- 3.426 RBM is a long-term initiative that will have an impact not only on every staff member in the Organisation, but also on the Organisation's governing environment.

202 Paragraph 9.143 of RC-2/4.

Therefore, members of the ABAF were provided with an introduction to RBM in 2011. An RBM briefing was also provided for all delegations during the Sixty-Fifth Session of the Council, in July 2011.

- 3.427 In regard to procedures and processes, there are a number of improvements that have been implemented over the past four years. Among them were an improved Programme and Budget document, the introduction of more accurate costing mechanisms, the merging of the responsibilities of the heads of programmes and certifying officers, and the introduction of sub-programmes in the annual Programme and Budget document.
- 3.428 Since the Second Review Conference, in order to enhance the efficiency and economy of OPCW operations and to improve the management of the OPCW's resources, the following have continued to be conducted: internal audit, confidentiality audit, evaluation, investigation, and advisory services. Efforts have also continued to develop and maintain a quality management system (QMS) that is in line with the applicable standards of the International Standardization Organization. In this regard, it is firmly believed that the accreditation of the QMS by an internationally recognised body strengthens the efforts of the Secretariat to build confidence among the States Parties and to gain international recognition.

#### *Analysis*

- 3.429 The implementation of RBM has enhanced the focus of programme managers and management on outputs and outcomes, rather than on activities. Such a shift provides a higher level of assurance that the ultimate objectives are reached.

#### *Future considerations*

- 3.430 Further to the capacity already built on RBM, the Secretariat is developing a programme monitoring and reporting system (PMRS), which will draw on consistent and reliable data from various databases and other sources in the Secretariat to better track programme implementation and overall organisational performance. It will also incorporate a risk-assessment tool.
- 3.431 The focus for the period covered by the Medium-Term Plan for the Period from 2013 to 2015<sup>203</sup> is twofold: firstly, the Secretariat will seek to strengthen the principles of RBM through the continuous and harmonised utilisation of the PMRS, and secondly, the system will be further enhanced through the addition of other functionalities that will contribute to improved effectiveness and efficiency in programme delivery.

#### Finance

##### *Developments*

- 3.432 The collection of assessed contributions has been stable at around 96%; 100% has never been achieved. The Second Review Conference urged all States Parties to

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203 EC-70/S/1, C-17/S/1, dated 28 June 2012 and Corr.1, dated 19 July 2012.

regularise their payments without delay.<sup>204</sup> In order to address outstanding assessed contributions, the Director-General has continued whenever possible to remind States Parties in arrears to use the multi-year payment option. As a result of these efforts, Georgia and Uzbekistan have signed and implemented a multi-year payment plan.

- 3.433 Voluntary contributions have grown from EUR 549,938 in 2008 to EUR 1,824,645 in 2011, of which a total of EUR 103,162 was contributed by six States Parties between 2008 and 2011 for the SAB trust fund. Following the recommendation of the Second Review Conference,<sup>205</sup> the Secretariat submitted to the Council at its Fifty-Fourth Session a Note on guidelines for voluntary contributions and trust funds,<sup>206</sup> which was noted by the Council in October 2008. As regular budgets have remained flat for several years, extraordinary budgetary resources are becoming a more important source of funding to the Secretariat, and the administrative directive on trust funds and voluntary contributions was revised in 2012 in order to streamline the administrative and financial management of voluntary contributions.
- 3.434 The Secretariat has successfully implemented the International Public Sector Accounting Standards (IPSAS) as its accounting principles since 1 January 2011, and the first IPSAS-compliant Financial Statements (of 31 December 2011) received an unqualified opinion from the external auditor.

#### *Analysis*

- 3.435 IPSAS are universally accepted and enhance the quality and credibility of an organisation's financial statements. The previous accounting standards, the United Nations System Accounting Standards (UNSAS), were developed by the United Nations in the 1990s and were sometimes biased toward the unique nature of the United Nations. The most significant impact of IPSAS on the OPCW financial statements is that the Organisation reports an accumulated deficit of EUR 6.1 million as at 31 December 2011. This is mainly due to the inclusion of the liabilities for employee benefits that are required by IPSAS when a staff member has provided services in exchange for employee benefits to be paid in the future. Because the IPSAS-compliant Financial Statements reflect items such as employee benefits, which are not funded by current budgets, States Parties are able to assess the long-term ability of the Organisation to achieve its objectives and honour its commitments.
- 3.436 The global financial and banking crisis has affected the economies of the States Parties and, as a result, some have been delaying payment or have not made full payment of their assessed contributions on time.

#### *Future considerations*

- 3.437 Going forward, finance-related processes will be continually streamlined in order to enhance the overall efficiency of service delivery as well as to enable the Organisation to derive the maximum benefit from the improved financial information that results from IPSAS compliance. A major risk for the Organisation is to keep

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204 Paragraph 9.144 of RC-2/4.

205 Paragraph 9.142 of RC-2/4.

206 EC-54/DG.4, dated 21 August 2008.



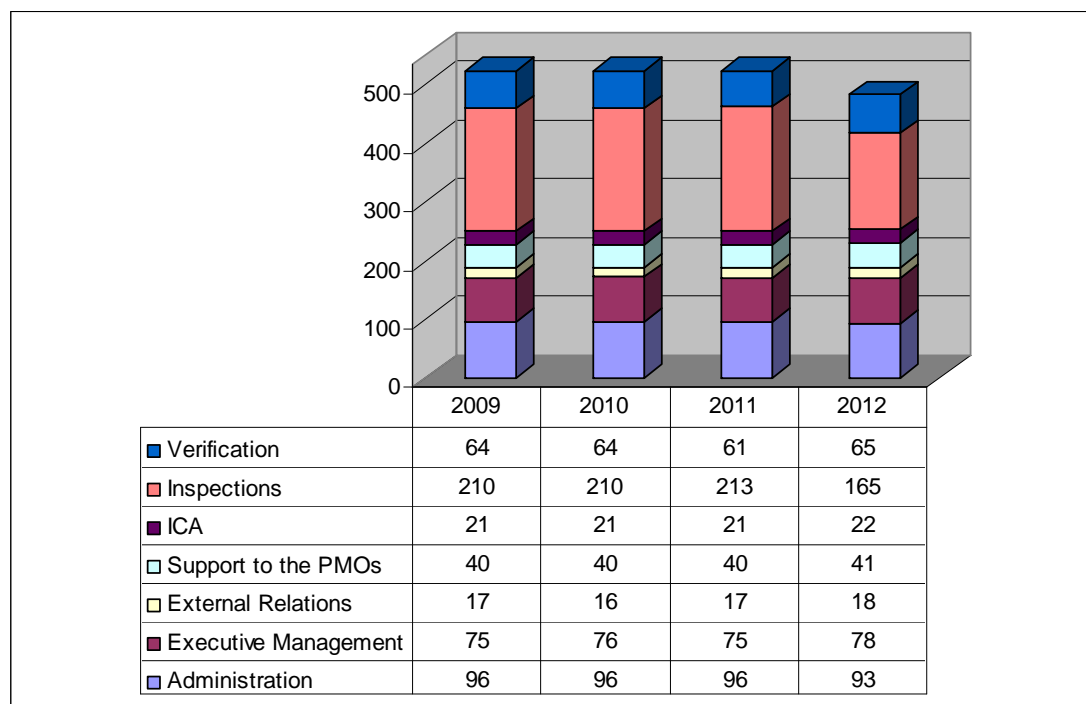
producing IPSAS-compliant Financial Statements, because the current IT system does not fully support recording of the accrual-based accounting transactions, meaning that significant manual interventions and calculations are required to produce the statements. The uncertainty in the global economy is another risk, because the ability of the Organisation to implement its programmes fully depends on the financial contributions from States Parties.

## Human Resources

### *Recruitment*

3.438 Since the Second Review Conference, the number of fixed-term posts has remained stable at 523 through 2011, witnessing a decrease of 41 for 2012. Chart 20 provides an overview of staffing levels in terms of fixed-term budgeted posts over the period 2009 to 2012.

**CHART 20: STAFFING LEVELS (BUDGETED POSTS) BY DIVISION, 2009 – 2012**



### *Implementation of tenure policy*

3.439 The OPCW is a non-career organisation, with most professional-grade staff having a maximum tenure of seven years. Approximately 30 to 40 professional-grade staff members subject to tenure are separated from the OPCW each year as a result of the tenure policy. Table 8 provides an historical overview of the turnover of staff subject to tenure from 2008 to 2011.

**TABLE 8: HISTORICAL OVERVIEW: TURNOVER OF STAFF SUBJECT TO TENURE, 2008 THROUGH 2011**

<b>Separation Year</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Total number of separated staff under tenure policy	50	58	48	56	<b>212</b>
<b>Number of separated staff who did not have their contracts renewed because of the tenure policy</b>	34	32	30	37	<b>133</b>
Number of staff who separated as a result of natural attrition*	16	26	18	19	<b>79</b>

\* *Natural attrition* refers to staff separating due to a redefinition of post, reaching retirement age, transfer to a special-services agreement as a CWDF inspector, resigning, or experiencing a disability.

3.440 At its Sixteenth Session, the Conference adopted a decision to authorise the Director-General to grant contract extensions or renewals beyond the seven-year length of service up to 29 April 2016 in support of the operational requirements of the verification and inspection of destruction-related activities,<sup>207</sup> although no staff member who receives an exceptional extension in service pursuant to this decision may remain on staff for a total length of service in excess of 10 years.

3.441 In keeping with the desire of States Parties to restrict to a bare minimum the number of contract extensions or renewals beyond seven years, the Director-General has exercised the exceptional authority granted to him in a very limited number of instances, where there has been an operational need.

*Initiatives to optimise the use of human resources*

3.442 The Secretariat has continued to make efforts to optimise the use of human resources. Some initiatives that have already been put in place include: needs-based recruitment, paperless processing of staff benefits through an e-Benefits automated solution, an electronic leave-management system, a programme for the taking on board and induction of new staff, a new on-line performance-management system, and proactive support to staff leaving the OPCW to prepare them for the next phase of their careers.

*Analysis*

3.443 The integrated functioning of recruitment activities, the tenure policy, and efforts to optimise the use of human resources at the OPCW have contributed to predictable, smooth, and cost-effective operations in the area of human resources and related areas across the Organisation. The outcomes realised in these areas contribute to the OPCW's change-management agenda and will provide for a seamless continuation of operational requirements in the future.

*Future considerations*

3.444 In terms of future initiatives involving human capital, the focus continues to move towards maximising the use of the Secretariat's human resources through a

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<sup>207</sup> C-16/DEC.9, dated 30 November 2011.

human-resources strategy that both better supports the priorities of the Secretariat and, in keeping with global trends in human-resources management, emphasises a leaner and more cost-effective way of managing human capital. As agreed with States Parties, the strategy focuses on planning processes, recruitment, performance management, and the revision of interim staff rules and directives related to personnel administration. In the coming years, the Secretariat will need to adjust staffing levels to reflect the evolving requirements mandated by the States Parties and, where needed, implement a restructuring plan as a result of international developments.

### Goods and services

#### *Developments*

- 3.445 Procurement services: A new waiver category (referring to the familiarisation process) has been introduced. As a further efficiency measure, the Secretariat commenced combining separate purchase orders under long-term agreements in 2009, a practice that allows for the commissioning of services and/or goods over a period of three to five years. Thirty multiple-year agreements were concluded in 2009, and this number has increased to more than 100 since then.
- 3.446 Infrastructure and support services: A risk analysis was conducted in 2010 to identify the insurance requirements for the Secretariat. The Secretariat conducts bidding for the renewal of infrastructure services and enters into agreements related to the provision of maintenance and utilities in OPCW premises, as required under procurement rules.
- 3.447 Management recording of OPCW assets: A centralised asset-management system was launched at the end of 2010 and the relevant administrative directive was revised in the same year. The Secretariat commenced the supervision of inventory management and the central registration of fixed assets in 2012.
- 3.448 Information services: The Second Review Conference requested the Secretariat to continue to seek to apply information technology more efficiently to improve the functioning of the Organisation.<sup>208</sup> Considerable improvements in information technology within the OPCW have been achieved with the development of further modules of the VIS and EDNA. Additional administrative systems in finance, human resources, procurement, inventory management, and e-learning have also been implemented. Finally, security systems have been enhanced and the use of social media has been expanded.

#### *Analysis*

- 3.449 The introduction of a separate waiver category for procurement under the “familiarisation process” ensures greater transparency when justifying exceptions from competitive bidding. With the increase of long-term agreements for the procurement of goods and services, the number of complex tenders per annum has decreased considerably.

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208 Paragraph 9.146 of RC-2/4.

- 3.450 The outcome of the 2010 risk analysis was used to establish insurance coverage that fits the needs of the Secretariat. The bidding conducted for the provision of infrastructure services resulted in a considerable reduction in the costs of such services as maintenance, utilities, cargo, and courier.
- 3.451 The new centralised asset-management system, in combination with the revised administrative instruction, allows for the harmonised management of assets in full compliance with IPSAS. This includes recording, tracking, and reporting.
- 3.452 The implementation of VIS modules and of EDNA has made it possible to move from hand-typed to electronically imported declarations, decreasing the risk of errors, improving the confidentiality of classified information, and providing new reporting and analytical functions. Along with the use of social media, it makes it easier for States Parties to interact with the Secretariat with respect to implementing their obligations under the Convention.
- 3.453 The implementation of new or enhanced information-systems (IS) applications and workflows in the area of administration has reduced paperwork and the manual process of administrative tasks, reducing the risk of errors, streamlining activities, and speeding up processes.
- 3.454 The introduction of additional security and security-monitoring systems has further decreased the risk of security and/or breach-of-confidentiality incidents.

*Future considerations*

- 3.455 The automated procurement system, and the relevant administrative directive and guidelines on procurement are subject to ongoing review and improvements to ensure a procurement process that involves best practices and offers the best value for money. Procurement and other aspects of OPCW operations continue to emphasise “sustainability”, that is, the efficient use of resources, including environmentally friendly programmes, such as recycling.
- 3.456 In the years ahead, in addition to the pro-active maintenance, support, and expansion of the IT infrastructure and IS applications on the SCN and SNCN networks, flagship systems that were implemented in the late 1990s will need to be thoroughly reassessed to determine if they are still capable of meeting organisational requirements cost effectively.
- 3.457 Upon the request of the ABAF and the external auditors, the introduction of a new enterprise-resource planning system will be assessed and a proposed solution will be presented to the States Parties for their consideration. Continuation of process streamlining and provision of systems required to support OPCW activities will remain on the agenda.
- 3.458 On the technology side, the Secretariat will be considering innovation and will stay abreast of emerging technology, taking into consideration operational requirements and the confidentiality regime of the Organisation.

## Conclusion

- 3.459 Administration and management resources will continue to focus on institutionalising smooth, efficient, and client-oriented support to stakeholders in the areas of budget, finance, human resources, procurement and support, and information services in accordance with the regulatory framework.
- 3.460 This will be based on formulating work plans for the Branches, using a performance-based management approach. Monitoring mechanisms will be established to ensure proper stewardship over the resources entrusted to the Secretariat. A working environment will be promoted where creativity and team spirit are promoted, while at the same time providing clear delineations on accountability and responsibility to the respective staff members.

## **Privileges and immunities of the OPCW**

### Introduction

- 3.461 It is essential for both the Organisation and the delegates of States Parties, representatives to the Council, the Director-General, and the Secretariat's staff members to enjoy the privileges and immunities that are necessary for the exercise of their functions in connection with the Organisation, on the territory and in any other place under the jurisdiction or control of a State Party.<sup>209</sup>
- 3.462 The privileges and immunities of the Director-General and the staff members of the Secretariat during verification activities are detailed in Part II of the Verification Annex. However, the Organisation and its Secretariat are engaged in a wide variety of activities that extend beyond verification activities and for which privileges and immunities are not automatically derived under the Convention. These fall into two broad categories: activities undertaken to directly implement the Convention requirements but which do not constitute verification activities<sup>210</sup> and activities necessary for the efficient operation of the Organisation.<sup>211</sup>
- 3.463 In accordance with paragraph 50 of Article VIII, the legal capacity of the Organisation and all other privileges and immunities are to be defined in agreements between the Organisation and States Parties, to be considered and approved by the Conference. The Conference subsequently delegated the authority to consider and approve such agreements to the Council.<sup>212</sup>

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209 Paragraphs 48 and 49 of Article VIII.

210 These include the conduct of OPCW events (such as regional meetings, training courses, and TAVs) outside Headquarters, the transfer of samples taken during inspections for off-site analysis, and the preparation of samples or evaluation of proficiency tests.

211 Typical in this connection are the wide variety of contracts concluded by the Secretariat for the provision of all types of goods or services with commercial suppliers, which range from the procurement of information and communications technology-related goods and services to the acquisition of specialised equipment necessary for the safe and effective conduct of verification activities.

212 C-8/DEC.12, dated 23 October 2003: "Privileges and Immunities Agreements between the Organisation for the Prohibition of Chemical Weapons and States Parties".

Agreements on privileges and immunities

*The experience and practice of the Secretariat relating to such agreements*

- 3.464 The Secretariat negotiates individual agreements on privileges and immunities with each State Party, on behalf of the Organisation, on the understanding that these agreements should be as consistent in content as possible, in accordance with the principle of equality that applies in the context of the implementation of the Convention.
- 3.465 Most States Parties that have concluded an agreement have accepted, in large part, the elements of the model agreement proposed by the Secretariat as the basis of negotiations, which closely follow those applied to the United Nations and other international organisations, and usually modifications are limited to addressing processes of domestic approval.
- 3.466 As at 30 June 2012, in addition to the Headquarters Agreement between the OPCW and the Netherlands, 49 agreements on the privileges and immunities of the OPCW had been approved by the Council, an increase of 16 since the Second Review Conference. The Secretariat observes that in more recent years, steady progress has been made in the implementation of paragraph 50 of Article VIII of the Convention, with six agreements approved in 2011 and five more in the first semester of 2012. The Secretariat, however, notes that, out of the 49 agreements approved by the Council, only 26 have entered into force,<sup>213</sup> thus giving full legal effect to the provisions contained therein. Furthermore, 138 States Parties have yet to conclude an agreement with the OPCW.

*Analysis*

- 3.467 The Secretariat is of the opinion that its efforts to raise the awareness of States Parties on the importance of entering into agreements around privileges and immunities with the OPCW have contributed to steady progress in the implementation of paragraph 50 of Article VIII. Since 2010, the Secretariat has engaged in a series of demarches to reach out to States Parties, through notes verbales, as well as the conduct of bilateral meetings in the margins of Conference and Council sessions, and providing States Parties with information and clarification on their obligations under Article VIII as well as the procedure for concluding such agreements.

*Future considerations*

- 3.468 The Secretariat has found that sustained exchanges with individual States Parties greatly facilitate the conclusion of privileges-and-immunities agreements. Its experience has also been that the committed and sustained engagement of representatives of States Parties (either at Headquarters or in-country) makes a significant impact on progress towards the conclusion of an agreement and securing its entry into force.

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<sup>213</sup> After the cut-off date (30 June 2012), two more agreements on privileges and immunities entered into force.

Headquarters Agreement<sup>214</sup>

*Implementation of the Headquarters Agreement and cooperation with the Host Country*

- 3.469 Good relations between the OPCW and the Host Country are essential for ensuring the effective and efficient operation of the Organisation and for the assured functionality of diplomatic representation accredited to the Organisation, as well as the well-being of OPCW staff members. In the period under review, the OPCW has continued to enjoy amicable cooperation with the Host Country and the relevant local authorities. The Conference and the Host Country have both instituted mechanisms to ensure the operational and subsistence requirements of the OPCW Headquarters in the Netherlands.
- 3.470 Through the Committee on Relations with the Host Country, which was established in accordance with a decision of the Conference,<sup>215</sup> the Conference has regularly addressed issues arising between the Secretariat and Permanent Representatives of the States Parties on the one hand, and the Host Country authorities on the other. Proceedings and results of relevant discussions within the Committee on Relations with the Host Country have been presented regularly to the Council and the Conference. The issues raised have mainly concerned the extension of a memorandum of understanding relating to the continued use of the tax- and duty-free commissary, the application of modified domestic legislation affecting the privileges and immunities of Secretariat personnel and their families, vehicular or traffic-related issues, and so on.
- 3.471 The Host Country authorities have made significant efforts to seek solutions to these issues in light of the implementation of the Headquarters Agreement, or have provided explanations in cases where the Host Country is constrained by its own domestic rules and regulations or by other physical limitations. For the purpose of better supporting the international organisations based in the Netherlands (in The Hague in particular), the Ministry of Foreign Affairs of the Netherlands and the Municipality of The Hague have made various contributions throughout the years, by means of facilitating participation in or coordination of a full range of OPCW activities over the years.

*Analysis*

- 3.472 For the implementation of the Headquarters Agreement, the Committee on Relations with the Host Country has firmly established itself as a useful platform for the exchange of information, discussion of issues, explanation of situations, and transmission of proposals. The Committee has held regular meetings during the review period and has presented its reports to the Council. Through this Committee, the relations between the OPCW and the Host Country and between the Permanent Missions and the Host Country have been improved and regulated, firmly embedding the OPCW Headquarters in the Host Country.

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214 The OPCW Headquarters Agreement was approved by the Conference in its decision C-I/DEC.59, dated 14 May 1997. It was signed on 22 May 1997 and entered into force on 7 June 1997.

215 C-11/DEC.9, dated 7 December 2006.

### *Future considerations*

3.473 The Secretariat has found that sustained exchanges with the Host Country through the Committee on Relations with the Host Country facilitate the implementation of the Headquarters Agreement. The emphasis of the Committee's work (with the assistance of the Secretariat) will be on the relations between the OPCW and the Host Country, whereas the regular meeting with the Dean of International Organisations in the Netherlands will be reinstated by the Ministry of Foreign Affairs to address issues that affect the international organisations headquartered in The Hague. This is expected to supplement the routine bilateral consultations between the Host Country and individual international organisations on specific practical issues.

### Conclusion

3.474 Bearing in mind the requirements in Article VIII and the significant activities of the OPCW that might not be covered by the privileges and immunities directly vested by the Convention, the Secretariat will continue to encourage more States Parties to enter into negotiations for a privileges-and-immunities agreement. The Secretariat will also continue to encourage States Parties to ensure prompt entry into force of the agreements already approved by the Council.

3.475 The Secretariat will continue to pursue sustainable modalities of cooperation with Host Country authorities for the full implementation of the Headquarters Agreement, for safeguarding the operational and subsistence requirements of the OPCW Headquarters in the Netherlands, and for facilitating the functioning of diplomatic representations accredited to the Organisation, under the guidance of the Council and the Conference.

### **Increasing the profile of the Organisation**

#### Introduction

3.476 Since the Second Review Conference (and since July 2010, in particular), at the initiative of the Director-General, the OPCW has expanded public diplomacy activities with a view to increasing the recognition of the OPCW's achievements. This will engender greater confidence in multilateralism and international cooperation and will enhance engagement with key stakeholders to bring about full implementation of the Convention.

#### Developments

3.477 The Council, at its Sixty-Fifth Session, endorsed the OPCW's adoption of the motto "Working Together for a World Free of Chemical Weapons".<sup>216</sup>

3.478 Non-governmental organisations have begun to pay more attention to the activities of the OPCW, with the result that 29 non-governmental organisations covering all five regions registered for the Conference at its Sixteenth Session in 2011.

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216 Paragraph 18 of EC-65/4, dated 15 July 2011.



- 3.479 The Secretariat launched the first OPCW social-media sites on Facebook,<sup>217</sup> Twitter,<sup>218</sup> YouTube,<sup>219</sup> and Flickr in February 2011. Several live webcasts of OPCW events, such as the International Year of Chemistry in September 2011 and the visit to the OPCW by the Turkish President in April 2012, were organised. A suite of audiovisual production and editing facilities entered into service in June 2011. Nearly 40 films for documentary, promotional, and training purposes (including overall coverage of the challenge inspection exercise) are available on the OPCW website.
- 3.480 The OPCW opened its doors to the general public on The Hague International Day, and the number of visitors to OPCW Headquarters increased from 319 in 2008 to 420 in 2011. The OPCW has also organised the annual Summer Programme on Disarmament & Non-Proliferation of Weapons of Mass Destruction in a Changing World in partnership with the T.M.C. Asser Institute since 2010.

#### Analysis

- 3.481 The OPCW has enjoyed steady growth in core social-media platforms and an increase in website traffic. A substantial increase in social-media activities has been observed since the first half of 2011.
- 3.482 It is also encouraging that the general public and non-governmental organisations have drawn more attention to the OPCW and its activities by participating in relevant events.

#### Future considerations

- 3.483 The Secretariat will intensify the use of social media and other web-based tools to interact with States Parties, other stakeholders, and the general public.<sup>220</sup> For this purpose, all available tools, channels, and forums will be utilised for dissemination, outreach, and interaction and to sustain the flow of information with interested parties worldwide.
- 3.484 In order to make the OPCW website friendlier, some improvements have been planned: standardising the layout to a three-column format, reducing the amount of text on pages, redesigning the home page, redesigning the documents section, and creating micro-sites for major events.

#### Conclusion

- 3.485 The OPCW will continue to raise its public profile globally by delivering core messages on its mission, capabilities, and historic achievements. These efforts will build on the OPCW's successful record in eliminating chemical weapons and preventing their re-emergence, and on the entrusted mandate of the States Parties, in line with the goals and objectives defined by the OPCW public diplomacy initiative.

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217 [www.facebook.com/opcwonline](http://www.facebook.com/opcwonline).

218 [www.twitter.com/opcw](http://www.twitter.com/opcw).

219 [www.youtube.com/opcwonline](http://www.youtube.com/opcwonline).

220 Paragraph 120 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

## **THE RELATIONSHIP OF THE OPCW WITH THE CHEMICAL INDUSTRY AND OTHER STAKEHOLDERS**

### **Introduction**

- 3.486 The Second Review Conference affirmed support for continuing interactions between the OPCW and all stakeholders that are interested in achieving full implementation of the Convention. It also encouraged the OPCW to develop such cooperation, with due regard for the role and responsibilities of States Parties and their National Authorities, on the broadest possible geographical basis.<sup>221</sup>
- 3.487 As a key stakeholder of the OPCW, cooperation with the chemical industry has proved to be essential in the full implementation of the Convention's provisions, particularly, for a functional verification regime under Article VI, in terms of both the submission of declarations and on-site inspections.

### **Developments**

#### General activities

- 3.488 The OPCW has continued to strengthen its multi-dimensional engagement with relevant stakeholders by providing a platform for practical engagement in support of universality, comprehensive implementation of the Convention with respect to industry verification, and international cooperation and assistance.
- 3.489 The OPCW's long-term cooperation with stakeholders is reflected in the major joint activities organised by the Secretariat with the stakeholders, such as the Seminar on the OPCW's Contribution to Security and the Non-Proliferation of Chemical Weapons in April 2011 and the OPCW Conference on International Cooperation and Chemical Safety and Security in September 2011.<sup>222</sup>

#### Chemical industry

- 3.490 The relationship between the OPCW and the chemical industry has been evolving over time. The OPCW is not only seen as an auditor and regulator, but also as a potential partner in improving the verification regime to ensure that chemicals are not used for prohibited purposes, as well as contributing to the capacity building of States Parties.
- 3.491 Through its representative associations, over the years the global chemical industry has conveyed its appreciation of the implementation of the Convention not just as an obligation, but also as a benefit to global security.
- 3.492 The high level of support and cooperation from the chemical industry has continued across the globe. Since the Second Review Conference, 884 industry inspections have been conducted in 55 different States Parties under Article VI. In this context,

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<sup>221</sup> Paragraphs 9.77, 9.94, 9.116(h), and 9.136 of RC-2/4.

<sup>222</sup> Paragraph 25 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011.

the OPCW recognises the good cooperation in respect of on-site inspections, not only from National Authorities but also from the industry.

- 3.493 Many decisions relating to industry verification adopted by the policy-making organs are of relevance to the chemical industry. Further, through practice and experience over the years, the OPCW has been able to allay the chemical industry's fears about undue intrusiveness and handling of confidential business information during on-site inspections.
- 3.494 The chemical industry has been an important partner of such OPCW international-cooperation programmes as the Associate Programme and chemical-safety-and-security management programme, which aim to build national capacities for the peaceful use of chemicals.
- 3.495 In partnership with the chemical industry and its national and international associations, the OPCW has also been promoting awareness and the adoption of the principles of the global charter of Responsible Care®, a voluntary initiative of the chemical industry. With the support of the National Authorities of States Parties, the OPCW is well placed to reach out to the chemical industry and promote safety and security in the industry (especially among medium and small enterprises), using the principles and approaches the industry has developed.
- 3.496 The Conference at its Sixteenth Session adopted a decision entitled "Components of an Agreed Framework for the Full Implementation of Article XI",<sup>223</sup> encouraging the OPCW to continue enhancing its interaction and collaboration with the chemical industry, among other things.
- 3.497 Engagement with national, regional, and international chemical associations or organisations has been further strengthened through bilateral visits, seminars, and workshops.

### **Analysis**

- 3.498 Support of the OPCW's activities by relevant stakeholders has enhanced the value of the Convention. It is especially encouraging that the chemical industry has supported the objectives and purposes of the Convention.
- 3.499 While the Convention's industry verification regime is necessary to promote confidence in the effectiveness of the Convention, the OPCW must continue to ensure that the verification mechanism does not in any way impede the commercial progress of the industry. Maintaining the trust built up since the entry into force of the Convention—that the commercially sensitive information provided by industry will be appropriately protected—is of vital importance. In accordance with the Confidentiality Annex, the OPCW has developed and implemented extensive procedures to ensure that commercially sensitive information is effectively protected.
- 3.500 An important challenge in implementing the verification regime is to keep abreast of advances in science and technology. Progress in science and technology has brought

about unprecedented opportunities for economic growth. Yet, if misused, the same knowledge can become a cause of devastation. In this context, studying and monitoring new developments in science and technology by engaging a wider chemical-industry community is an undertaking of great importance.

- 3.501 A related matter concerns propagating ethical norms against the misuse of chemistry. The obligations of the Convention extend through national laws to all citizens of a country, including individual scientists and engineers. There is a need to constantly expose them to the ethical norms and regulatory requirements of the Convention through training and professional engagement. Education and awareness-raising about the norms and principles enshrined in the Convention are therefore becoming increasingly important.

### **Future considerations**

- 3.502 In general, a collaborative framework between the OPCW and relevant stakeholders at a national and international level should be strengthened, with a view to addressing the national implementation of the Convention, including industry verification, as well as building capacity among all States Parties.
- 3.503 The Director-General of the OPCW has proposed to reinvigorate the relationship between the OPCW and the chemical industry. In this context, networks and close contact and dialogue between States Parties (including National Authorities), the Secretariat, and the chemical industry will be further developed in order to discuss issues of common concern, to hear the views of the chemical industry, to identify common ground, and to receive adequate guidance.<sup>224</sup>
- 3.504 This will entail meetings between industry and States Parties, with the Secretariat participating at relevant industry conferences and seminars, industry participating at relevant OPCW events, the Secretariat and industry being present at some of the key events of relevant international mechanisms (e.g., the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), the Strategic Approach to International Chemicals Management (SAICM), etc.),<sup>225</sup> and augmenting industry participation in the temporary working groups of the SAB (as relevant).
- 3.505 The Secretariat will continue to work with the chemical industry to promote awareness about the norms and provisions of the Convention and to provide appropriate training and tools to facilitate compliance by the chemical industry with its obligations. In this regard, setting up a group of experts from the chemical industry to advise on how to better interact with the industry could be an option.<sup>226</sup>

### **Conclusion**

- 3.506 For effective and comprehensive implementation of the Convention, it is vital that multiple stakeholders, including the chemical industry and the scientific community,

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224 Paragraph 20 of the Informal Summary of Discussions at the Ambassadors' Retreat on Future OPCW Priorities, held in Noordwijk on 22 September 2011.

225 Paragraph 41 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

226 Paragraph 45 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

become involved in the promotion of its goals, especially in strengthening national implementation, reducing chemical threats, and raising awareness of chemical safety and security, as well as prevention and preparedness against the misuse of toxic chemicals.<sup>227</sup>

- 3.507 It is also important to further strengthen the close cooperation between the OPCW and the chemical industry. The verification of industry activities under the Convention can only function effectively if the industry proactively adapts itself and remains as a solid partner in securing the objectives of the Convention. This partnership has the potential to transcend the common and legitimate pursuit of business and to realise higher hopes for a peaceful and secure world.

#### **4. CONCLUDING REMARKS BY THE DIRECTOR-GENERAL**

- 4.1 The experience gained in the 15 years of implementation of the Convention demonstrates the maturity of the Organisation that has successfully translated what was at the time an untested international treaty into a workable multilateral regime. States Parties should build on this successful experience which promises to be the strength of the Organisation as it turns to meet the significant challenges that lie ahead. These challenges flow not only from the stringent requirements of the Convention but also from the constantly evolving environment within which the OPCW operates. At this juncture it is clear that we need to adapt to new challenges and realities in the security, scientific, technological and political environment from both short-term and long-term perspectives.

##### **Challenges ahead**

###### Complete elimination of chemical weapons

- 4.2 Needless to say, the complete elimination of chemical weapons at the earliest possible date remains the primary task. Although nearly 75% of the declared stockpiles of chemical weapons have successfully been destroyed, 25% of those weapons remain. Possessor States Parties are required to continue to carry out their destruction activities under the strict monitoring of the Secretariat in accordance with the decision on the final extended deadline of 29 April 2012.<sup>228</sup>
- 4.3 It is also important that OCWs and ACWs be destroyed as soon as possible and in a manner that is safe for workers, the public, and the environment, in accordance with the provisions of the Convention.
- 4.4 In this regard, the OPCW and the Secretariat must retain the competence and resources needed to provide the necessary verification of the destruction of chemical weapons, as well as to render technical advice to States Parties when so requested.

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227 Paragraphs 119 and 120 of the report of the Advisory Panel on Future OPCW Priorities (Annex 2 of S/951/2011).

228 C-16/DEC.11.

Ensuring the prohibition of chemical weapons

- 4.5 In the foreseeable future, as the destruction of chemical weapons nears completion, we will face a critical moment when the OPCW will need to focus increasingly on many other elements of its mandate in addition to the destruction of chemical weapons.
- 4.6 A fundamental challenge will be **to ensure the prohibition of chemical weapons** for all time in a comprehensive manner within the parameters of the Convention. The obligation to prevent the re-emergence of chemical weapons and the obligation to ensure that toxic chemicals are only used for peaceful purposes constitute a continued commitment that has no end point.
- 4.7 The status of implementation of the Convention indicates that there is room for improvement in many areas, such as national implementation, timely submission of full and accurate declarations, the effectiveness and efficiency of verification mechanisms, enhanced capacity to respond to a chemical attack or accident, promotion of peaceful use of chemicals, etc. Mid-term and long-term strategies for the operation of the Convention should be established by taking into account the five elements outlined below.

*Keeping abreast of developments in science and technology*

- 4.8 First and foremost, we need to continue to review the developments in science and technology to ensure that the mechanisms for implementing the provisions of the Convention remain valid and relevant in a time of rapid advances in science and technology.
- 4.9 It was nearly two decades ago that the Convention was negotiated and concluded. During this period, there have been major advances in science and technology. New chemical compounds and production methods are constantly being researched and discovered, affording the global community many benefits but also bringing with them certain risks. There is an increasing overlap between chemistry and biology, the integration of chemical engineering into the life sciences, and their fusion with information technology. We need to understand these changes. It is therefore crucial to take stock of the developments in science and technology that are relevant to the Convention, to keep verification technologies up to date, and to adapt the industry-verification regime accordingly. In this respect, the SAB will continue to play a valuable role.

*More effective and efficient verification mechanism*

- 4.10 Secondly, we need to reaffirm and explore a more effective and efficient verification mechanism within the parameters of the Convention. Given the dual-use nature of toxic chemicals, the well-established verification system should continue to play an important role in preventing the re-emergence of chemical weapons (particularly the use of chemical weapons by non-State actors, including terrorists), as well as the misuse of toxic chemicals by those who deal with them.

- 4.11 Given the large number of industrial facilities that have been declared to the OPCW and the rapid evolution of the global chemical industry, the foremost challenge in this regard will be to ensure the continued refinement and adequacy of the industry verification regime in order to maintain high confidence among States Parties. It will also be necessary to maintain and enhance the knowledge and expertise of the Organisation in the field of verification to match the continuous advancements in science and technology.
- 4.12 Together with industry verification, monitoring of imports and exports of relevant chemicals forms an essential aspect of the Convention's objective of preventing the re-emergence of chemical weapons. The Convention requires States Parties to control all exports and imports of scheduled chemicals and to report the export and import of these chemicals above certain thresholds annually to the OPCW. In certain cases, trade and transfer restrictions on scheduled chemicals are imposed in relation to States that are not party to the Convention. The information received from States Parties enables the OPCW to implement an effective monitoring regime over the global export and import of scheduled chemicals.
- 4.13 This monitoring is an important aspect of the implementation of the Convention. For example, by monitoring the transfer of scheduled chemicals and other data provided by States Parties, the Secretariat has been able to assist them in the identification of previously unrecognised and undeclared activities involving scheduled chemicals. Although simple in its requirements, identifying such chemicals during international trade is a challenge. Most of those involved in the control of international trade are not chemists, and the OPCW needs to continue working closely with the relevant stakeholders to help States Parties to overcome this problem.
- 4.14 On the operational and organisational levels, over the past five years, a major part of the Secretariat's resources has been dedicated to verifying the destruction of chemical weapons. The significant progress already registered in the destruction of chemical weapons means a progressive phasing out of this activity, despite the fact that new discoveries of chemical weapons continue to be made (especially of OCWs and ACWs) and any new States Parties joining the Convention could conceivably possess chemical weapons that would need to be destroyed under systematic verification. This will have an impact on the Secretariat's human-resources requirements and require organisational changes in the Organisation. The task ahead is to ensure that such changes do not have an adverse effect on operational effectiveness or the ability to respond to contingencies. These include the responsibility to conduct challenge inspections as well as investigations of alleged use of chemical weapons when requested to do so.
- 4.15 Meanwhile, the Secretariat has undertaken, and will continue to conduct on a regular basis, the assessment of its verification activities with the aim of improving and optimising them. The cooperation and support of the States Parties remain crucial in improving the effectiveness and efficiency of verification activities, while maintaining the required degree of confidence, credibility, and transparency.

*Perspectives on chemical safety and security*

- 4.16 Thirdly, an important aspect that needs to be considered is that of chemical safety and security. Articles VI, VII, X, and XI of the Convention together provide the rationale for the OPCW to engage in activities around chemical safety and security. The OPCW could play a more active role in this field in a broader context within the parameters of the Convention. For example, border-control and law-enforcement measures need to be applied by States Parties to detect, deter, prevent, and combat the illicit trafficking and brokering of chemical weapons and toxic chemicals. The OPCW could provide an effective forum for discussions among relevant stakeholders on preventive measures against the misuse of toxic chemicals at plant sites. Additional efforts would improve and enhance the overall quality of the implementation and operation of the Convention.
- 4.17 The OPCW's contribution in this area needs to become more focussed and better integrated. There is a multitude of international instruments and lead agencies in chemical safety, and the OPCW can act as an effective complementary partner in some aspects of safety. The OPCW is also well placed to be one of the lead international organisations in chemical security. In this regard, the focus could be on identifying best practices, catalysing international partnerships, and promoting national capabilities by providing advice in cooperation with international players.
- 4.18 In line with the Conference's decision on the components of an agreed framework for the full implementation of Article XI of the Convention,<sup>229</sup> the Secretariat proposes that States Parties be encouraged to carry out needs assessment in the field of chemical safety and security. The Secretariat will offer to support this work, upon request, in partnership with experts from States Parties, international organisations, and the chemical industry and will continue to collate and disseminate information on good practices in chemical safety and security, for the benefit of States Parties. Bearing in mind the need to prevent the re-emergence of chemical weapons and the misuse of toxic chemicals, it is expected that chemical safety and security will be an important area of OPCW activity in the coming years.

*Strengthening national capacity*

- 4.19 Fourthly, we should attach more importance to OPCW activities in international cooperation and assistance, which aim at strengthening national capacities not only to implement the provisions of the Convention but also to prevent, detect, and respond to events involving the deliberate or accidental release of toxic chemicals in the broad context discussed above.
- 4.20 Implementation-support programmes: These programmes have focussed on the personnel of National Authorities and have assisted them in establishing and maintaining their capacity to fulfil their responsibilities for the full and effective implementation of the Convention at the domestic level. It is envisaged in the Convention that administrative and legislative measures will be introduced and implemented by National Authorities. However, in reality, progress in this area has been slow, as pointed out in the background information. Having recognised several



obstacles to full and effective national implementation, the Secretariat is proposing a more tailor-made and incremental approach vis-à-vis individual States Parties, based on needs and capabilities. States Parties could consider the provision of bilateral assistance to other States Parties, with a view to enhancing the national implementation.

- 4.21 Assistance-and-protection activities: These activities have been targeted at those who are involved in emergency responses to chemical-related threats and are aimed at the development and improvement of a national protective capacity. Both chemical safety and security are relevant to these activities because responsive actions are common to both the accidental and deliberate release of toxic chemicals. Because emergency responses need short-notice actions, the Secretariat is exploring mechanisms for regional and subregional cooperation that will contribute to enhancing the national capacity of States Parties far away from OPCW Headquarters.
- 4.22 International-cooperation programmes: These programmes have facilitated chemical experts in laboratories or industry in acquiring practical experience in dealing with toxic chemicals. Since the safe handling of chemicals is the foundation of all peaceful chemical activities, these programmes are essential for preventing the misuse of chemicals and underpin the objectives and purposes of the Convention. In response to increasing demand among States Parties, the Secretariat is organising seminars on chemical-safety-and-security management with the support of States Parties.
- 4.23 The Secretariat continues to provide OPCW international cooperation-and-assistance programmes. These programmes are a useful and indispensable tool to improve the national capacity of each State Party, particularly for helping those who are involved in various peaceful activities in the field of chemicals to gain appropriate knowledge and skills.

*More regular and effective engagement with the widest range of stakeholders*

- 4.24 Last but not least, we need to aim at more regular and effective engagement with the widest range of stakeholders. In order to achieve the objective and purpose of the Convention, the OPCW requires not only the strong commitment of States Parties but also strong cooperation with other international and regional organisations, as well as the full and continuing support of the chemical industry and the general public.
- 4.25 The OPCW is also accountable to worldwide stakeholders for its activities. Public diplomacy is a key tool for celebrating the success of the Convention and augmenting OPCW's visibility and profile. Interactive social-media and e-learning tools will contribute to further outreach and awareness-raising. It will also be necessary to approach younger generations who will take over the monumental task of ensuring the successful operation of the Convention in the future.

### **Future direction of the Organisation**

- 4.26 The Third Review Conference comes at a critical moment. Its outcome will determine the future direction of the Organisation as a whole. We need to adapt to the changing environment and continue to *work together for a world free of chemical weapons*.