



Verification Division
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NOTE BY THE DIRECTOR-GENERAL

SUMMARY OF VERIFICATION ACTIVITIES IN 2012

1. The Second Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (hereinafter “the Second Review Conference”) reaffirmed the importance of factual reporting by the Technical Secretariat (hereinafter “the Secretariat”) on verification results “in the interests of transparency and continued assurance of States Parties’ compliance” (paragraph 9.51 of RC-2/4, dated 18 April 2008). In addition, as stated in paragraphs 3.187 and 3.188 of the Note by the Secretariat issued for the Third Special Session of the Conference of the States Parties to Review of the Operation of the Chemical Weapons Convention (hereinafter “the Third Review Conference”), “Review of the Operation of the Chemical Weapons Convention since the Second Review Conference” (RC-3/S/1, dated 12 March 2013 and Corr.1, dated 20 March 2013), “Recent developments in the Secretariat’s factual reporting on verification have further enhanced transparency and the continued assurance of States Parties’ compliance The Secretariat will continue its efforts to improve the way it reports on verification results”.
2. In light of the above, the Secretariat has prepared the attached OPCW verification summary for 2012, which reflects the verification work undertaken by the Secretariat during that year.
3. The summary provides valuable feedback on the Secretariat’s verification activities, especially to States Parties that are not represented in The Hague. In terms of public outreach, it is consistent with the OPCW’s Media and Public Affairs Policy (C-I/DEC.55, dated 16 May 1997) and presents pertinent information on such work to a wider audience.
4. The summary follows a structure similar to the verification summaries from previous years, and does not contain any protected information.

Annexes:

- Annex 1: OPCW Verification Summary for 2012
Annex 2: List of Designated OPCW Laboratories



Annex 1

OPCW VERIFICATION SUMMARY FOR 2012

1. EXECUTIVE SUMMARY

Overview

- 1.1 As at 31 December 2012, there were 188 States Parties to the Chemical Weapons Convention (hereinafter “the Convention”).
- 1.2 Seven States Parties had not submitted their initial declarations pursuant to the Convention by the end of 2012. The Secretariat was not able to fulfil its verification tasks with regard to these States Parties. Three additional States Parties had submitted incomplete declarations (that is, either their information in regard to Article III or Article VI had not been provided).
- 1.3 There were two signatory States not Party¹ and six non-signatory States,² for which no verification activities could be undertaken.

Verification operation

- 1.4 The Executive Council (hereinafter “the Council”), at its Sixty-Eighth Session, noted the Director-General’s Note on the status of implementation of the final extended deadline of 29 April 2012 (EC-68/DG.7, dated 1 May 2012), which stated that Libya, the Russian Federation, and the United States of America were unable to fully meet the final deadline of 29 April 2012 for the destruction of their chemical weapons stockpiles. After 29 April 2012, the destruction of the remaining declared stockpiles has continued under OPCW verification and enhanced transparency measures, pursuant to decision C-16/DEC.11 (dated 1 December 2011), adopted by the Conference of the States Parties (hereinafter “the Conference”) at its Sixteenth Session.
- 1.5 With regard to the chemical demilitarisation and industry verification programmes, disarmament, and non-proliferation, the Secretariat performed 334 inspections/rotations in 2012, which accounted for 11,660 inspector days at 264 sites in 46 States Parties. This total consisted of 116 inspections or rotations connected to chemical weapons demilitarisation under Articles IV and V, and 219 inspections related to industry verification under Article VI.
- 1.6 The number of inspection days related to chemical weapons was 8,575 (74%) at 48 sites, while 3,085 inspection days (26%) were spent at 219 declared facilities and plant sites pursuant to Article VI.

¹ Israel and Myanmar

² Angola, the Democratic People’s Republic of Korea, Egypt, Somalia, South Sudan, and the Syrian Arab Republic

- 1.7 The Secretariat was able to meet the mandated inspection aims at all inspections carried out in 2012. No inspections registered uncertainties. Issues requiring further attention (IRFAs) were registered in connection with four chemical weapons-related inspections and with 19 Article VI inspections.
- 1.8 No challenge inspections (CIs) or investigations of alleged use (IAUs) were requested in 2012. In September 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). The aim was to ensure the readiness of the Secretariat to respond to a request to put its resources at the disposal of the United Nations Secretary-General in the case of the alleged use of chemical weapons involving a State not Party or in territory not under the control of a State Party.
- 1.9 In 2012, the Secretariat verified the destruction of 4,035.143 metric tonnes (MTs) of chemical weapons at seven chemical weapons destruction facilities (CWDFs): Four in the Russian Federation and three in the United States of America.
- 1.10 No destruction of chemical weapons was undertaken in Libya in 2012. The Secretariat and the Libyan authorities worked very closely to define requirements and complete preparations for the resumption of operations for the destruction of the remaining stockpile of chemical weapons. To this end, a number of bilateral meetings took place throughout 2012, including a visit by the Director-General to Tripoli in May 2012, and a visit to Libya by a team of experts in November 2012.
- 1.11 Under the Global Partnership Program, Canada provided financial support to the Secretariat’s efforts in assisting Libya in fulfilling its obligations under the Convention. Pursuant to a request by Libya, the Secretariat had engaged the United Nations Office for Project Services in the process of procuring chemical weapons protection, decontamination, and monitoring equipment to facilitate the resumption of destruction operations in Libya, using funds made available through the Canadian contribution. Other States Parties, including Germany and the United States of America, had also provided assistance to Libya in fulfilling its obligations under the Convention.
- 1.12 In 2012, Iraq submitted additional information in support of its initial declaration regarding its chemical weapons stockpiles. In cooperation with the Secretariat and a number of States Parties, Iraq continued to work towards completing the assessment of the declared chemical weapons and on a decision on appropriate disposal methods.

Year-end status

- 1.13 The Secretariat verified the following year-end status of destruction of chemical-warfare agents at the end of the reporting period:

- (a) A total of 55,539.932 MTs, or 78%, of the declared chemical weapons stockpiles of 71,196.419 MTs³ had been verified as destroyed.⁴
- (b) A State Party,⁵ Albania, and India had destroyed their entire declared stockpiles of chemical weapons; Iraq, Libya, the Russian Federation, and the United States of America had yet to complete destruction:
 - (i) With regard to Category 1 chemical weapons, Libya had destroyed 51%, the Russian Federation had destroyed 70%, and the United States of America 90%, of their respective declared quantities.
 - (ii) Libya had also destroyed 40% of its Category 2 chemical weapons and needed to destroy 207 Category 3 items declared in 2011.
 - (iii) Discussions were being pursued on the destruction of declared chemical weapons in Iraq.
- (c) By 31 December 2012, the Director-General had certified that, for 11 of the 13 States Parties having declared CWPFs, all declared facilities had either been destroyed or converted. In accordance with the Convention, residual production capacity shall be reduced to zero 10 years after the entry into force (EIF) of the Convention, that is, by 29 April 2007. On 31 December 2012, this requirement had been met with respect to 64 of the 70 declared CWPFs.⁶ The remaining six facilities comprised four CWPFs in Iraq that remained to be verified as destroyed, and one facility each in Iraq and the Russian Federation that remained to be certified as converted. In 2012, the Secretariat carried out 14 inspections at 13 CWPFs in four States Parties, which amounted to 204 inspection days, out of which six inspections were carried out in accordance with a decision entitled “Nature of Continued Verification Measures at Converted Facilities Ten Years After the Director-General’s Certification of Their Conversion” (EC-67/DEC.7, dated 16 February 2012).
- (d) In 2012, the Secretariat conducted 14 inspections at nine chemical weapons storage facilities (CWSFs) in three States Parties, which amounted to 497 inspection days.
- (e) Since the EIF of the Convention, 15 States Parties declared old chemical weapons (OCWs). Of these, 11 States Parties had declared OCWs produced between 1925 and 1946, and eight States Parties had declared pre-1925 OCWs. The Secretariat conducted five OCW inspections in Belgium, Italy, Japan, Germany, and the United Kingdom of Great Britain and Northern

³ Excluding Iraq

⁴ Unless otherwise specified, all destruction figures include quantities withdrawn for purposes not prohibited by the Convention, pursuant to subparagraph 2(d) of Part VI of the Verification Annex to the Convention (hereinafter “the Verification Annex”).

⁵ The State Party in question has requested that its name be regarded as highly protected information. Therefore, for the purpose of this report, it is hereinafter referred to as “A State Party.”

⁶ No deadlines had been established for CWPFs in Iraq.

Ireland in 2012. In many cases, destruction operations have made considerable progress; however recoveries of significant quantities of OCWs continue to be made.

- (f) The destruction of the chemical weapons abandoned by Japan on the territory of China continued, and was based on the destruction plan jointly reported to the Council by China and Japan (EC-67/NAT.11, dated 15 February 2012), pursuant to decision EC-67/DEC.6 (dated 15 February 2012), adopted by the Sixty-Seventh Session of the Council and in accordance with the provisions of the Convention. In 2012, the Secretariat carried out 10 inspections related to chemical weapons abandoned by Japan on the territory of China, including three quarterly inspections to verify ongoing operations at the mobile destruction facility (MDF) at Nanjing, where 35,681 chemical weapons were reported to have been destroyed. Important new recovery, identification, and transfer operations related to Japanese abandoned chemical weapons (JACWs) were reported in 2012.

- 1.14 In terms of Article VI of the Convention, the Secretariat verified declared activities at 219 facilities and plant sites in 39 States Parties. This comprised 11 Schedule 1 facilities (41% of the inspectable facilities); 42 Schedule 2 plant sites (25%); 29 Schedule 3 plant sites (7%); and 137 other chemical production facility (OCPF) plant sites (3%).
- 1.15 Five States Parties reported that they expected to be involved—as importers or exporters—in seven transfers of Schedule 1 chemicals between States Parties in 2012. Declarations received in 2012 indicated exports of 4,700 MTs of Schedule 2 chemicals by 50 States Parties, and exports of 324,500 MTs of Schedule 3 chemicals by 116 States Parties in 2011. There were no reported transfers of Schedule 1 or Schedule 2 chemicals to States not Party in 2011.

Optimising the verification regime

- 1.16 In 2012, the Secretariat continued its efforts to maximise the number of sequential inspections as a way of saving resources. Twelve of the 16 States Parties that had received four or more industry inspections in 2012 had advised the Secretariat that they concurred with the use of sequential inspections on their territories. Two additional States Parties conducted trial sequential inspections. In total, the Secretariat carried out 48 sequential inspections.
- 1.17 Sampling and analysis (S&A) was used during nine Schedule 2 inspections in 2012. Signatures for several additional scheduled chemicals were added to the OPCW Central Analytical Database (OCAD).
- 1.18 Through the Verification Information System (VIS) programme, which comprises several information technology (IT) components and related projects, the Secretariat has over the years increased the use of IT tools for the preparation, submission, and processing of declaration data. These tools aim to introduce efficiencies for both the Secretariat and the States Parties. Following the success of electronic declaration software for National Authorities (EDNA) as a widely used declaration tool, the Secretariat is working on another project for the provision of a secure transmission

mechanism for the submission of Article VI declarations and for the exchange of other related information. The VIS and associated data-analysis tools provide necessary capabilities for the processing and effective monitoring of verification-related information.

1.19 In total, the Secretariat processed 823 incoming documents, declarations, and other verification-related documents, comprising 12,264 pages received from States Parties in 2012.

1.20 The ability of the Secretariat to implement its verification responsibilities effectively and efficiently continues to be adversely affected by outstanding initial declarations, by late or outstanding annual declarations, and by the continued high number of transfer discrepancies. Of particular relevance are cases of States Parties that submit no aggregate national data (AND) declarations, which other States Parties' declarations name as importers of scheduled chemicals.

2. INSPECTIONS

Overview

2.1 As mentioned above, during 2012, the Secretariat conducted 334 inspections/rotations, which accounted for 11,660 inspector days at 264 sites in 46 States Parties. On average, 972 inspector days were undertaken each month (compared with 1,402 in 2011). Table 1 lists the number and types of inspections or rotations completed in 2012 and other summary statistics on inspection activities. Overall, the Secretariat carried out 5,056 inspections/rotations in 84 States Parties between the EIF of the Convention and 31 December 2012.

TABLE 1: INSPECTION ACTIVITIES IN 2012

Type of Facility	No. of Inspectable or Operational Facilities ⁷	No. of Inspections Completed	No. of Facilities or Sites Inspected	No. of Inspector Days
Chemical Weapons-Related Inspections				
CWDF	7	68	8 ⁸	7,202
CWSF	10	14	9	497
CWPF	27	14	13	204
OCW	6	5	5	62
ACW	33	8	8	242
ACWD ⁹	2	3	2	96
DHCW ¹⁰	N/A	3	0	272
Subtotals		115	45	8,575
Article VI (Industry Inspections)				
Schedule 1	28	11	11	193
Schedule 2	169	42	42	903
Schedule 3	412	29	29	357
OCPF	4,289	137	137	1,632
Subtotals	4,898	219	219	3,085
Combined totals		334	264	11,660

Distribution of inspections

2.2 Forty-four States Parties received Article VI inspections in 2012. As can be seen in Table 2, this number was higher than previous years (39 States Parties in 2011). One main reason for this is the three-pool approach of the revised methodology to select other chemical production facilities (OCPFs) for inspection, which was introduced for inspections that were conducted in 2012 (S/962/2011, dated 8 September 2011). Other contributing factors that also might have had an impact were:

- (a) an increase in the number of declared plant sites by some States Parties;
- (b) an increase in the number of budgeted annual OCPF inspections; and
- (c) an increase in the rate of subsequent (repeat) inspections from 5% to 10% in 2012.

⁷ For CWDFs and ACWDs: Operational facilities in 2012; for CWSFs, CWPFs, OCWs, and ACWs: Inspectable in 2012; for Article VI facilities: Inspectable in 2012.

⁸ This includes seven operational CWDFs, where inspections on the destruction of chemical weapons were carried out, and one CWDF under construction at Kizner, where an initial visit was conducted in 2012.

⁹ ACWD = abandoned chemical weapons destruction facility

¹⁰ DHCW = destruction of hazardous chemical weapons

TABLE 2: DISTRIBUTION OF ARTICLE VI INSPECTIONS

	2006	2007	2008	2009	2010	2011	2012
No. of inspections	180	200	200	208	208	208	219
No. of States Parties hosting inspections	54	58	40	38	38	39	44
No. of States Parties accounting for 50% of the inspections	11	13	6	6	6	7	6

2.3 Table 3 shows the regional distribution of industry inspections during the reporting period.

TABLE 3: DISTRIBUTION OF ARTICLE VI INSPECTIONS BY REGION IN 2012

Regional Groups	No. of Industry Inspections	Percentage of Total
African	1	1%
Asian	97	44%
Eastern European	15	7%
Latin America and the Caribbean	11	5%
Western European and Other Countries	95	43%

Challenge inspections and investigations of alleged use

2.4 No CIs were requested in 2012. However, the Secretariat continues to maintain a high standard of readiness to conduct CIs under Article IX of the Convention, if requested by the States Parties to do so.¹¹

2.5 Inspectorate training and other readiness activities in regard to contingency operations in 2012 were conducted in a manner that recognised the many operational commonalities between CIs and IAUs. Consequently, training courses in 2012, which were designed and executed in a manner that focused on the technical skills and knowledge acquired by the Secretariat, are relevant in the event of an Article IX request.

2.6 Two complementary CI-specific field exercises were held in 2012:

- (a) On 1 and 2 May 2012, a perimeter-monitoring and managed-access exercise was held in the Netherlands. Twenty-one inspectors and Headquarters staff participated in a scenario-driven exercise. The objective was to practise what the operational requirements would be for a Secretariat team deployed in the event of a CI. Among the activities practised were 24-hour perimeter monitoring, command and control, radio operations, and managed access negotiations of the appropriate access with a notional State Party.

¹¹

See paragraphs 7.91 and 7.100 of RC-1/5, dated 9 May 2003, and paragraphs 9.90 and 9.105 of RC-2/4, dated 18 April 2008.

- (b) From 1 to 4 October 2012, a CI-related field exercise, “Macavity”, was conducted at a military site in the United Kingdom of Great Britain and Northern Ireland, as part of the voluntary contribution of that Member State to the OPCW. The objective of the exercise was to test and practise the Secretariat command element interface with that of a notional inspected State Party (ISP) and requesting State Party (RSP). Among the activities practised were point-of-entry (POE) procedures, equipment approval, S&A, perimeter negotiations, managed-access negotiations, requesting State observer (RSO) handling, and interviews of site personnel.
- 2.7 The Secretariat received no requests from States Parties for an IAU during the year in review.
- 2.8 The Secretariat held a workshop on lessons learned in exercises on CIs and IAUs, on 5 and 6 July 2012, respectively, in order to enhance the Secretariat’s readiness for CIs or IAUs.
- 2.9 Following on from the “OPCW Exercise on the Delivery of Assistance” (ASSISTEX 3) in Tunisia in 2010, and taking into consideration recommendations from the evaluation of that exercise, inspectors completed several training courses designed to ensure readiness for the conduct of an IAU. These included table-top exercises in team leadership, together with field training and exercises in reconnaissance and sampling, command-and-control operations, decontamination, non-destructive evaluation (NDE), evidence collection and management, investigative interview skills, the conduct of medical investigations, media management, and risk communications. This year saw the inclusion of many staff members from other Divisions and Branches, such as the Human Resources Branch (HRB), the Office of Confidentiality and Security (OCS), the Office of the Legal Adviser (LAO), and the Operations and Planning Branch (OPB) in IAU-related training.
- 2.10 These IAU-related courses were conducted in the Netherlands, Serbia, and the United Kingdom of Great Britain and Northern Ireland.
- 2.11 A major IAU field exercise was conducted in 2012, in cooperation with the Government of Serbia. This marked the first time that live chemical-warfare agents were used during an IAU field exercise. Thirty-six inspectors and Headquarters staff participated in the exercise, supported by numerous staff from OPCW Headquarters.
- 2.12 The event, which took place from 15 to 19 October, was conducted concurrently at two Serbian military sites and at OPCW Headquarters. An independent evaluation team, composed of experts from the Secretariat and from Europol, were embedded with the IAU team; the field exercise resulted in recommendations that will be addressed in 2013.
- 2.13 The field exercise, as well as the training conducted during the lead-up to the exercise in Serbia, formed part of the ongoing efforts of the Secretariat to ensure its preparedness to conduct an IAU pursuant to Article X of the Convention.

Inspector training

- 2.14 Inspectorate training in 2012 focused on maintaining the mandatory qualifications required within the quality system for the conduct of inspection activities, as well as preparing experienced inspectors and inspection team leaders to perform inspection duties for “non-routine” missions and contingency operations, such as CIs and IAUs. There were no new inspector-training groups trained for intake in 2012.
- 2.15 The 2012 Inspectorate Training Programme commenced on 3 January and finished on 19 December 2012. The Inspectorate Division (INS) completed 3,183 equivalent training days within the inspector-training subprogramme. Delivery of training by inspectors required 497 equivalent training days. The programme was comprised of 103 individual courses, with a total of 49 calendar weeks focused on training. The total number of training days represented a reduction of 19% below the planned number (3,943) of inspector days for technical training—a decrease that can be attributed to the cancellation of many courses during the second half of 2012.
- 2.16 Seventy-eight percent of the training held in 2012 was delivered within the territory of the Netherlands, with the remainder conducted in the territories of the Czech Republic, France, Italy, Jordan, Serbia, Slovakia, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.
- 2.17 The following Member States assisted in the delivery of the training programme, either through voluntary contributions or through the provision of technical and/or administrative assistance: The Czech Republic, France, the Netherlands, Serbia, and the United Kingdom of Great Britain and Northern Ireland.

Home-team activities

- 2.18 For the purposes of maintaining and enhancing the different technical skills necessary for successfully performing both routine inspections and contingency operations, inspectors were organised into 11 home teams in 2012. As a result, these home teams finalised a new inspection manual; developed or revised over 50 SOPs and work instructions (WIs) relevant to Articles IV, V, VI, IX, and X and to contingency operations; and put into place various tools related to e-learning material and databases.

3. CHEMICAL WEAPONS

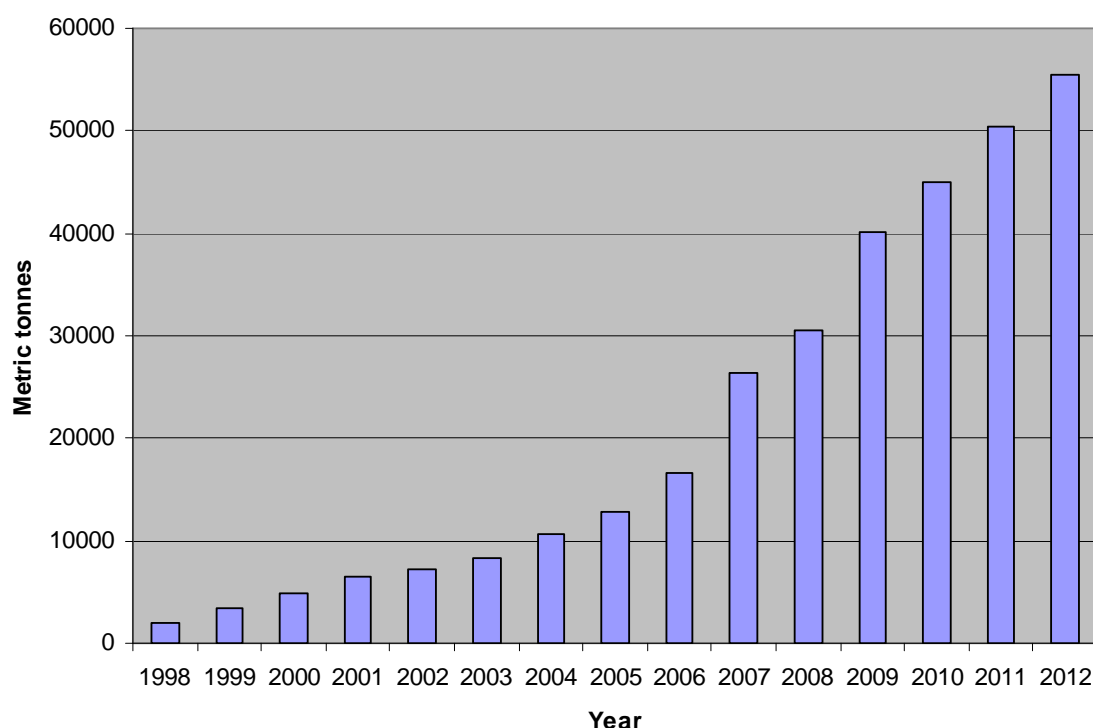
Overview

- 3.1 The Secretariat verifies the destruction of chemical weapons by maintaining a continuous presence at all operating CWDFs, which allows for the monitoring of ongoing declared activities, either by direct physical observation or through the use of on-site instruments, including equipment specifically dedicated for use by inspectors. For the purpose of verification, inspectors are granted access, so that they can monitor process parameters and review relevant documentation. Furthermore, S&A allows the Secretariat to verify the type of chemical-warfare agent being destroyed. By observing the process of destruction and by means of the S&A of generated waste products and, where applicable, the mutilation of drained and decontaminated munitions bodies, the

Secretariat can verify that declared quantities of chemical weapons have been completely destroyed and that no chemical weapons have been diverted. Inspections are also carried out at CWSFs to ensure that no undetected removal of chemical weapons takes place, except in accordance with the Convention. Inspections at CWDFs amounted to 7,202 inspector days during 2012 (12,278 in 2011), while inspection efforts at CWSFs totalled 497 inspector days (620 in 2011).

- 3.2 In 2012, the Secretariat verified the destruction of 4,035.143 MTs of chemical weapons. This was a decrease compared to 2011, when total verified destruction amounted to 6,428.722 MTs. Variations in the overall quantity destroyed on a yearly basis may be triggered by a number of factors, including the number of destruction facilities operating during the year, the destruction technologies in use, the type of chemical weapons subject to destruction during the respective yearly campaigns (whether artillery or aerial munitions, or agent in bulk containers), and the length of planned or unplanned periods of maintenance and servicing.
- 3.3 By the end of the review period, the overall amount of chemical weapons verified as destroyed, including withdrawals of chemical weapons for purposes not prohibited under the Convention, totalled 55,539.932 MTs, or 78%, of the declared chemical weapons (see Figure 1).

FIGURE 1: VERIFIED DESTRUCTION OF CHEMICAL WEAPONS CUMULATIVE FROM 1998 TO 2012



- 3.4 In 2012, seven CWDFs (nine in 2011) were involved in the destruction of Category 1 chemical weapons: Four in the Russian Federation and three in the United States of America (see Table 4). In the Russian Federation, the design and construction of an additional unit at the already operational Leonidovka facility was completed in 2012, and this unit became operational in December 2012. The design and construction of

additional units at the already operational Shchuchye and Maradykovsky facilities continued throughout 2012. The construction of the not-yet-operational Kizner facility was in progress in 2012; in August 2012, the Secretariat conducted an initial visit to Kizner to familiarise itself with this facility. Two CWDFs in United States of America located at Pueblo, Colorado; and Blue Grass, Kentucky; were, as at the end of 2012, in different phases of construction and systemisation.

TABLE 4: CHEMICAL WEAPONS DESTRUCTION FACILITIES IN SERVICE OR UNDER CONSTRUCTION IN 2012

Chemical Weapons Destruction Facilities by State Party
Libya
Ruwagha Chemicals Reloading System and Rabta Toxic Chemical Disposal Facility (RCRS-RTCDF) ¹²
Russian Federation
Maradykovsky CWDF ¹³ Shchuchye CWDF ¹⁴ Pochev CWDF Leonidovka CWDF ¹⁵ Kizner CWDF*
United States of America
Tooele Chemical Agent Disposal Facility (TOCDF) Prototype Detonation Test and Destruction Facility (PDTDF) Recovered Chemical Weapons Destruction Facility (RCWDF) Blue Grass Chemical Agent Destruction Pilot Plant (BGCAPP)* Pueblo Chemical Agent Destruction Pilot Plant (PCAPP)*

* Facility under construction as at the end of 2012

- 3.5 Destruction operations were concluded in 2012 at the TOCDF, in the United States of America. One CWSF was also closed, namely, the Deseret CWSF.
- 3.6 In November 2011 and in February 2012, Libya submitted declarations of previously undeclared chemical weapons. These declarations were verified by the Secretariat during the inspections it conducted at the chemical weapons storage and destruction site in Ruwagha in January and April 2012. During these inspections, inspectors also obtained additional information that was required to plan future verification activities to be conducted by the Secretariat at this site. No destruction operations took place in Libya during the period under review.

¹² No chemical weapons destruction took place in 2012; Libya informed the Secretariat that it serviced and maintained the destruction unit to allow for the re-start of operations.

¹³ The design and construction of the process equipment for a unit dedicated for the destruction of aerial bomb blocks containing organophosphorous agents was underway, as at the end of 2012.

¹⁴ The installation and testing of process-and-control equipment in the second process building was underway, as at the end of 2012.

¹⁵ The design and construction of the additional building for the destruction of aerial bomb blocks continued and was completed as at the end of 2012; the unit became operational in December 2012.

- 3.7 Iraq submitted additional information in support of its initial declaration regarding its chemical weapons stockpiles. The information provided details regarding the condition of the chemical weapons declared, as well as on the explosive, chemical, and physical hazards associated with the two bunkers in which these items are stored. Iraq continued to work closely with the Secretariat and a number of States Parties towards initiating the assessment of the declared chemical weapons, in order to further allow for a decision on appropriate disposal methods.
- 3.8 At the end of the review period, there remained four States Parties with declared chemical weapons that had yet to be completely destroyed—Iraq, Libya, the Russian Federation, and the United States of America.

Progress in meeting destruction obligations

- 3.9 In 2011, the Conference at its Seventeenth Session adopted a decision regarding the final extended deadline of 29 April 2012 (C-16/DEC.11). Pursuant to that decision, Libya, the Russian Federation, and the United States of America in April 2012 submitted detailed plans for the destruction of their respective remaining chemical weapons, which specified the planned completion dates by which the destruction of the remaining chemical weapons was to be completed by each of the States Parties concerned.
- 3.10 As at 31 December 2012, OPCW inspectors had verified the destruction of the following quantities of chemical weapons of the following States Parties that had declared chemical weapons stockpiles: A State Party, Albania, India, Libya, the Russian Federation, and the United States of America:¹⁶
- (a) Category 1 chemical weapons: The Secretariat had verified the destruction of 54,620.001 MTs of this category of chemical weapons (this included 2.913 MTs of Category 1 chemical weapons withdrawn pursuant to Article VI of the Convention and subparagraph 2(d) of Part VI of the Verification Annex). Of this amount, 53,400.039 MTs were unitary chemical weapons (4,035.143 MTs in 2012), including lewisite (L), sarin (GB), sulfur mustard (including H, HT, and HD), tabun (GA), tabun with UCON, soman (GD) and viscous soman), VX, and Vx, and unknown agent, contained in 4,620,991 munitions and containers (432,963 in 2012), as well as in other storage vessels that had a volume of less than 2m³ and in larger volume storage tanks, from which the chemical-warfare agent had been drained. Another 1,219.962 MTs were binary chemical weapons, which included the following: 489.416 MTs of the key binary components DF and QL, as well as 730.546 MTs of another binary component, OPA. Overall, the Secretariat verified the destruction of 785,066¹⁷ binary items, including 415,108 artillery projectiles, 369,958 separately declared DF and OPA canisters, and 306 other containers for binary components.

¹⁶ No chemical weapons destruction activities took place in Iraq and Libya.

¹⁷ This includes 154 DF canisters mutilated and confirmed as destroyed at the CWDF, the contents of which were withdrawn for purposes not prohibited by the Convention.

- (b) Category 2 chemical weapons: The Secretariat had verified the destruction of 919.931 MTs of Category 2 chemical weapons (no destruction of Category 2 chemical weapons took place in 2012): CNS, thiodiglycol (TDG), 2-chloroethanol (2-CE), phosgene, sodium sulphide, sodium fluoride, chloroacetophenone (CN), phosphorous trichloride, and adamsite (DM), as well as 3,847 artillery projectiles.
- (c) Category 3 chemical weapons: As at the end of 2012, the Secretariat had verified the destruction of 416,364 items of Category 3 chemical weapons declared to the OPCW (46 were destroyed in 2012). The destruction of 207 Category 3 items, which were declared by Libya in 2011, was still pending at the end of the reporting period.

Iraq

- 3.11 No destruction of declared chemical weapons took place in this State Party in 2012.
- 3.12 Iraq reiterated on numerous occasions its firm commitment to meeting its obligations under the Convention, including the destruction of its declared chemical weapons, and continued to work throughout 2012 with the Secretariat and other States Parties to initiate the assessment of the declared weapons and decide on an appropriate method of destruction. Iraq continued to keep the Secretariat and Member States informed on all steps being taken towards the assessment and destruction of the declared stockpiles of chemical weapons.

Libya

- 3.13 No destruction of chemical weapons has taken place in Libya since 8 February 2011, when operations were halted, due to the breakdown of a heating unit in the disposal station. In November 2011 and February 2012, Libya submitted declarations on chemical weapons not previously declared, which were subsequently verified by the Secretariat in January and April 2012.
- 3.14 In line with the same Conference decision (C-16/DEC.11), Libya reported to the Council through periodic and/or annual reports on the progress achieved towards the complete destruction of its remaining stockpile of chemical weapons. All reports were received in due time and in accordance with the provisions of the above-mentioned decision. In its annual progress report (dated 1 November 2012), Libya informed the Secretariat about activities being undertaken in order to resume destruction of chemical weapons (including newly discovered chemical weapons previously not declared), the status of destruction facilities, and other measures taken by the Libyan authorities to achieve complete destruction of its remaining chemical weapons stockpile.

Russian Federation

- 3.15 In 2012, the Secretariat verified the destruction by the Russian Federation of 4,026.336 MTs of Category 1 chemical weapons (4,425.194 MTs in 2011) at four destruction facilities located at Leonidovka, Maradykovsky, Pochep, and Shchuchye.

- 3.16 As at 31 December 2012, the Russian Federation had destroyed 28,014.556 MTs, or 70%, of its declared stockpile of Category 1 chemical weapons. The Russian Federation has destroyed all of its declared Category 2 chemical weapons (10.616 MTs) and Category 3 chemical weapons (330,024 items).

United States of America

- 3.17 In 2012, the United States of America destroyed 8.808 MTs of chemical weapons (1,995.579 MTs in 2011) at the TOCDF and RCWDF facilities. Because destruction operations were completed in 2012 at the TOCDF, the inspection files were closed.
- 3.18 As at 31 December 2012, the United States of America had destroyed 24,923.673 MTs, or 90%, of its declared stockpile of Category 1 chemical weapons. This State Party had also completed the destruction of its declared Category 2 chemical weapons (0.010 MTs), and had destroyed all 81,019 items of declared Category 3 chemical weapons. This included the destruction, in 2012, of 46 Category 3 end-caps from M441 shipping and firing tubes.

4. CHEMICAL WEAPONS PRODUCTION FACILITIES

Overview

- 4.1 The Secretariat conducts inspections to verify progress at those CWPFs that have not yet been fully destroyed or converted for purposes not prohibited under the Convention.¹⁸ Verification ceases once the Director-General certifies that destruction has been completed at a CWPF, whereas facilities that have been certified as converted remain subject to systematic inspections for 10 years under the provisions of the Convention and for the next five years under the provisions of the Council decision on the nature of continued verification measures at converted facilities 10 years after the Director-General's certification of their conversion (EC-67/DEC.7, dated 16 February 2012). In 2012, the Secretariat carried out 14 inspections at 13 CWPFs in four States Parties, which amounted to 204 inspection days.
- 4.2 Consultations between Iraq and the Secretariat continued in 2012, in order to clarify details of Iraq's initial declaration, and with a view to developing detailed plans for the destruction or conversion of the five declared CWPFs. In November 2012, the Secretariat conducted its initial inspection of the Al-Rashad site CWPF, which is scheduled for conversion. During the inspection, the OPCW team verified the declared perimeter of the facility, the inventory and condition of buildings, as well as the overall status of the facility.
- 4.3 As at 31 December 2012, 70 CWPFs had been declared to the OPCW. With regard to 64 of these, the Director-General had certified the completion of destruction or conversion. Forty-three had been destroyed. Twenty-one had been converted for purposes not prohibited by the Convention. The following six CWPFs had yet to be certified as destroyed or converted:

¹⁸ See subparagraph 1(c) of Article III, and Article V of the Convention, as well as Part V of the Verification Annex.

- (a) the facility for production of a Vx-type substance and filling it into munitions, FGUP GosNIIOKhT, Novocheboksarsk, the Russian Federation (to be certified as converted);
- (b) Al-Muthanna CWPF, Iraq (to be certified as destroyed);
- (c) Fallujah 1 CWPF, Iraq (to be certified as destroyed);
- (d) Fallujah 2 CWPF, Iraq (to be certified as destroyed);
- (e) Fallujah 3 CWPF, Iraq (to be certified as destroyed); and
- (f) Al-Rashad Site CWPF, Iraq (to be certified as converted).

4.4 In May 2012, following the Council's adoption of a decision (EC-67/DEC.7) on this issue, the Secretariat resumed the verification of CWPFs for which the 10-year period following the Director-General's certification of conversion had expired. In 2012, five such facilities in the Russian Federation and one in A State Party were inspected in accordance with the provisions of the said decision.

Residual production capacity

4.5 In accordance with the Convention, residual production capacity (RPC) shall be reduced to zero 10 years after the EIF of the Convention, that is, by 29 April 2007. Guided by a decision of the Conference (C-I/DEC.29, dated 16 May 1997) and by a document that sets forth the method for calculating the RPC of CWPFs (S/260/2001, dated 5 June 2001), the Secretariat assessed the RPC at the end of 2012 for all 13 States Parties that had declared CWPFs.

5. OLD AND ABANDONED CHEMICAL WEAPONS

Overview

- 5.1 With regard to OCWs, the verification work of the Secretariat includes inspections at declared storage sites in States Parties declaring OCW holdings in order to verify the consistency of any changes (recoveries or destruction) reported in semi-annual declarations or other notifications.
- 5.2 The Secretariat also carries out inspections to monitor ongoing activities with regard to ACWs. With respect to chemical weapons abandoned by Japan on the territory of China, the Secretariat also carries out quarterly inspections to verify destruction operations.
- 5.3 In 2012, the Secretariat conducted five OCW inspections in five States Parties and 11 abandoned chemical weapons (ACW) inspections in two States Parties. The discovery of approximately 850 OCWs was declared, while more than 3,470 OCWs were reported as destroyed. A total of 2,340 newly recovered ACWs were declared, and 728 ACWs were reported as destroyed during the review period.
- 5.4 Chemical weapons abandoned by Japan on the territory of China were subject to the destruction deadline of 29 April 2012 (EC-46/DEC.4, dated 5 July 2006). According

to a Council decision (EC-67/DEC.6), the destruction of chemical weapons abandoned by Japan on the territory of China was to continue after 29 April 2012 (in accordance with the provision of the Convention). The first destruction facility for chemical weapons abandoned by Japan on the territory of China, the Abandoned Chemical Weapons Mobile Destruction Facility (ACW-MDF) at Nanjing, became operational in October 2010; upon completion of destruction operations in June 2012, a total of 35,681 ACWs had been destroyed at this facility. Apart from these, an additional 250 ACWs were destroyed at the MDF at Shijiazhuang, making a total of 35,931 ACWs destroyed as at 31 December 2012. At the end of the period under review, approximately 13,600 JACWs were being kept at storage sites in China, awaiting final destruction.

Declared stocks

- 5.5 Between EIF of the Convention and 31 December 2012, 15 States Parties declared OCWs. Of these, 11 States Parties¹⁹ had declared 71,893 OCWs produced between 1925 and 1946, while eight States Parties²⁰ had declared 61,040 OCWs produced before 1925. All of these States Parties have provided information to the Secretariat on recovery and destruction operations, and on steps being taken to destroy or otherwise dispose of the OCWs as toxic waste.
- 5.6 A number of States Parties that informed the Secretariat that they had completed destruction of all recovered OCWs by 29 April 2007 continue occasionally to inform the Secretariat about new discoveries. In 2012, OCWs and/or suspected OCW discoveries were reported to the Secretariat by Australia, Belgium, Canada, France, Germany, Italy, Japan, and the United Kingdom of Great Britain and Northern Ireland.
- 5.7 Based on information received, six States Parties²¹ still had OCWs or suspected OCWs on their territories at the end of the review period, and more than 36,500 OCWs have yet to be destroyed or otherwise disposed of.
- 5.8 As at 31 December 2012, approximately 50,000 items of ACWs had been discovered at over 70 locations within China. This figure includes those items that had already been destroyed.

Verification activities

- 5.9 In 2012, the Secretariat conducted five OCW inspections in five States Parties.
- 5.10 As outlined in the agreed detailed plan for verification (EC-61/DEC.1 and EC-61/DEC.2, (both dated 29 June 2010), the Secretariat verifies the destruction of chemical weapons at the ACW-MDF through quarterly physical inspections during

¹⁹ Australia, Austria, Canada, France, Germany, Italy, Japan, Poland, the Russian Federation, the Solomon Islands, and the United Kingdom of Great Britain and Northern Ireland

²⁰ Belgium, France, Germany, Italy, Slovenia, Switzerland, the United Kingdom of Great Britain and Northern Ireland, and the United States of America

²¹ Belgium, Canada, France, Germany, Italy, and the United Kingdom of Great Britain and Northern Ireland

destruction operations, by the use of monitoring equipment, and by a review of relevant documentation related to destruction.

- 5.11 As previously agreed between China and Japan, four temporary storehouses in the vicinity of Nanjing were consolidated in Nanjing for the purpose of destruction during 2011 and 2012. Destruction operations were initially anticipated to be completed within one year; however destruction operations were not completed until June of 2012.
- 5.12 As mentioned above, as at 31 December 2012, the Secretariat had verified the destruction of 35,681 chemical weapons abandoned by Japan on the territory of China, of which 478 were destroyed in 2012. This figure accounts for all items of ACWs that were declared at Nanjing, and those items transferred to Nanjing for destruction from surrounding locations. The Secretariat had not yet verified the destruction of 250 items at the mobile destruction facility (MDF) at Shijiazhuang in December 2012.
- 5.13 During the period under review, 11 ACW inspections were conducted. Ten of these were in relation to chemical weapons abandoned by Japan on the territory of China, including three inspections to verify destruction activities; one inspection took place in relation to a suspected ACW declared by another State Party, confirming that the item did not contain chemical-warfare agent.

6. INDUSTRY VERIFICATION

Overview

- 6.1 States Parties to the Convention undertake to declare facilities and activities related to chemicals that are listed in Schedule 1, 2, and 3 of the Convention's Annex on Chemicals, as well as OCPFs.
- 6.2 In 2012, the total number of facilities declared worldwide in connection with the Article VI verification regime at the end of the review period was 5,383, of which 4,898 were subject to systematic verification (see Table 5).

TABLE 5: FACILITIES DECLARED PURSUANT TO ARTICLE VI AS AT 31 DECEMBER 2012

Number of Declared Facilities					
Number of States Parties Having Declared Article VI Facilities					
Regime	Schedule 1	Schedule 2	Schedule 3	OCPF	Total
Declared	28	481	445	4,429	5,383
Declarable	28	390	437	4,428	5,283
Inspectable	28	169	412	4,289	4,898
States Parties	23	39	35	80	80

- 6.3 In 2012, the Secretariat verified the declared activities at 219 inspectable facilities and plant sites. The breakdown of inspections per verification regime changed slightly from that recorded for 2011, with an increase of 10 inspections in the OCPF regime. Thus, 11 Schedule 1 facilities, 42 Schedule 2 plant sites, 29 Schedule 3 plant sites,

and 137 OCPF plant sites were inspected in 2012. No uncertainties were recorded during 2012 inspections. However, an IRFA or IRFAs were recorded at 19 inspections, that is, at two Schedule 1 inspections, 10 Schedule 2 inspections, five Schedule 3 inspections, and two OCPF inspections. In addition, 188 observations during inspections were marked “gather further information” (this typically refers to declaration issues that do not amount to IRFAs, according to the Secretariat’s internal practices).

- 6.4 During 2012, the Secretariat continued the efforts to maximise the number of sequential inspections as a way of optimising the use of human and material resources. Four OCPF inspections were carried out at plant sites that turned out to be non-inspectable.
- 6.5 Two thousand and twelve (2012) was the first year of the implementation of the “Policy Guidelines for Determining the Number of Article VI Inspections” (EC-66/DEC.10, dated 7 October 2011). The requirements of guidelines 1(a), 1(b), and 1(d) were fully met. Guideline 1(c) was not fully achieved. Detailed information can be found in the Note by the Director-General, “Report on the Results of the Implementation of Policy Guidelines for Determining the Number of Article VI Inspections” (EC-72/DG.4, dated 5 April 2013).

Transfers of scheduled chemicals

Transfers of scheduled chemicals between States Parties

- 6.6 According to 14 notifications received concerning transfers that were due to take place in 2012, five States Parties were anticipated to be involved in seven Schedule 1 transfers in 2012—four as sending States Parties and four as recipients; the total amount of chemicals that were to be transferred in 2012 was 3.12 grams. Notification had been given by both the sending and receiving States Parties of the seven transfers that had been anticipated to take place in 2012. Of the 14 notifications relating to transfers in 2012, 12 were received within the 30-day notification period. In addition, one transfer notification was received in 2012 for a transfer that is anticipated to take place in 2013.
- 6.7 The annual declarations of past activities (ADPAs) for 2011 that were provided in 2012 indicate that 50 States Parties had transferred Schedule 2 chemicals in 2011, and that the total volume of this trade came to approximately 4,700 MTs. Meanwhile, 116 States Parties transferred Schedule 3 chemicals in 2011, and the total volume of this trade was approximately 324,500 MTs.
- 6.8 The total quantities of Schedule 1, 2, and 3 chemicals transferred in 2011, as declared by 31 December 2012, were as follows: 0.002153 kg of Schedule 1 chemicals; 4,700 MTs of Schedule 2 chemicals; and 324,500 MTs of Schedule 3 chemicals.

Transfers of Scheduled chemicals to States not Party to the Convention

- 6.9 There were no reported transfers of Schedule 1 and Schedule 2 chemicals to States not Party in 2011. Eleven States Parties had exported four Schedule 3 chemicals to four

States not Party. Thionyl chloride accounted for 51% of the 2,054 MTs of Schedule 3 chemicals declared as having been exported to States not Party in 2011.

OPTIMISATION OF THE ARTICLE VI INSPECTION REGIME

- 6.10 Throughout 2012, the Secretariat continued its efforts to optimise the effectiveness and efficiency of the Article VI inspection regime.²²

Sequential inspections

- 6.11 Sequential inspections (two inspections in one mission) are an important tool for making the inspection process more efficient, and further efficiencies could be achieved, should additional States Parties agree to the conduct of sequential inspections on their territories (in particular those with large numbers of annual Article VI inspections). In this regard, 12 of the 16 States Parties that received four or more industry inspections in 2012 have advised the Secretariat that they concur with the use of sequential inspections on their territory. Two additional States Parties conducted trial sequential inspections in 2012. Out of the 48 sequential inspections in 2012, 46 took place in the same countries, whereas two were conducted in two countries.

TABLE 6: SEQUENTIAL INSPECTIONS

Sequential Inspections (On a Year-by-Year Basis)									
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
8	16	23	26	26	37	42	40	47	48

- 6.12 The following States Parties with inspectable Schedule 3 and/or OCPF plant sites have not yet agreed to conduct sequential inspections in some form: Algeria, Azerbaijan, Belgium, Chad, Ecuador, Georgia, India, Indonesia, Iran (Islamic Republic of), Jordan, Latvia, Libya, Lithuania, Oman, Pakistan, Portugal, Russian Federation, Saudi Arabia, Tajikistan, Ukraine, United Arab Emirates, Uruguay, and Viet Nam.

Sampling and analysis

- 6.13 The Secretariat has continued to conduct Schedule 2 inspections using S&A on a routine basis, completing 55 such missions in 22 States Parties by the end of 2012 (see Table 7). In 2012, there were nine inspections involving S&A: One inspection was part of a sequential mission; one inspection was the first involving S&A to an initial Schedule 2 inspection, and one could not be completed due to the damage to a part of the gas chromatographer-mass spectrometer (GC-MS) during transport.

²²

Starting in 2012, the Secretariat, in the interests of efficiency, also introduced changes to the process for handling industry inspection correspondence. For instance, within the framework of the new process, any inspection that does not record an IRFA is considered closed with the completion of the final report, and is so indicated in the accompanying letter (see paragraph 35 of EC-67/DG.14 (dated 14 February 2012)).

- 6.14 As at 31 December 2012, 96% (22 out of 23) of the States Parties with inspectable Schedule 2 plant sites had received at least one mission involving S&A.

TABLE 7: SAMPLING AND ANALYSIS AT SCHEDULE 2 PLANT SITES

Number of Inspections with S&A							
2006	2007	2008	2009	2010	2011	2012	Total
2	9	9	9	9	8	9	55

- 6.15 The Secretariat provided a non-paper to the Industry Cluster on the questions raised during the Fifth Meeting of the Open-ended Working Group for the Preparation of the Third Review Conference, setting out its views in regard to the use of S&A in Schedule 3 and OCPF plant sites in the future. In another meeting of the Industry Cluster, the Secretariat provided the basis for selection of Schedule 3 and OCPF plant sites that would be subject to S&A. In the S&A break-out group discussion during the National Authorities meeting hosted at the OPCW Headquarters in 2012, the Secretariat also provided an update on S&A and highlighted the technical and logistical challenges that may arise when S&A is carried out at Schedule 3 and OCPF plant sites in those States Parties that have never received such an inspection.
- 6.16 Analytical data have been continually included in the OCAD, following validation by the Validation Group and approval by the Council (see paragraph 8 below for more details). The Council decision to include the derivatives of scheduled chemicals was an important step towards improving the OCAD.

Non-inspectable OCPFs

- 6.17 In 2012, the number of inspections conducted at OCPF plant sites that proved to be non-inspectable was four, lower than that recorded in 2011 (see Table 8).

TABLE 8: INSPECTIONS AT SITES THAT ARE NON-INSPECTABLE

Number of inspections at non-inspectable sites					
2007	2008	2009	2010	2011	2012
13	5	5	11	6	4

- 6.18 The causes for the four inspections at non-inspectable OCPF sites can be attributed to errors in the interpretation of the OCPF declaration requirements. There were two inspections at plant sites where formulation was considered as synthesis. One of these two was verified as declarable, but not inspectable. In another case, the plant site counted all intermediates produced on the plant site and aggregated the result, even though many intermediate steps occurred within the same plant. Finally, in another case, the plant site was exclusively producing explosives. In the past few years, the Secretariat has made efforts to address the issue of non-inspectability through a variety of means, which include bilateral consultations and requests for clarifications, internal analyses and checks, and education and outreach at training courses and seminars for National Authorities.

Secretariat support to consultations on industry and other Article VI issues

- 6.19 In 2012, the Industry Cluster continued to discuss salts of scheduled chemicals that were not included in the Annex on Chemicals, and consensus was achieved to remove two issues entitled “Declaration of Salts of Scheduled Chemicals” and “Study of the Need for a Recommendation Regarding the Future Treatment of Salts of Schedule 1 Chemicals That Are Not Explicitly Mentioned in Schedule 1” from the list of outstanding issues (subitem 9.14 of C-17/5, dated 29 November 2012). The Cluster held consultations on “The Risk Posed by Schedule 2 Plant Sites to the Object and Purpose of the Convention”, and it was agreed to close this issue (paragraph 5 of EC-67/WP.2, dated 14 February 2012). The Cluster also pursued consultations on “Access to Records during Schedule 2, Schedule 3, and OCPF Inspections”, and “The Number, Intensity, Duration, Timing, and Mode of Inspections for Schedule 1 Single Small-Scale Facilities and for Other Schedule 1 Facilities”; consequently an understanding was reached and a decision was adopted (C-17/DEC.8).
- 6.20 The Secretariat assisted the Vice-Chairperson and facilitator of the Industry Cluster, and provided presentations and non-papers at the request of States Parties in relation to all issues under consideration. In addition, a discussion was held on the possible use of S&A during Schedule 3 and OCPF inspections. Briefings were also given by the Secretariat on the use of product group codes in OCPF declarations and possible ways to improve the accuracy and quality of OCPF declarations by revising these codes in the Declarations Handbook, and on the Secretariat’s verification practice at chemical facilities that submit industry declarations under more than one Part of the Convention (so-called “mixed plant sites”).

7. OTHER VERIFICATION-RELATED ACTIVITIES

Implementation matters

- 7.1 This section provides information about several ongoing matters that constitute challenges to the Secretariat’s ability to effectively discharge its verification responsibilities. It is not an exhaustive list. By highlighting these subjects, the Secretariat is giving States Parties an opportunity to see how matters are affected by remedial action taken by the Secretariat and States Parties; the Secretariat will continue to monitor how these challenges develop over time.

Outstanding initial declarations

- 7.2 Despite ongoing efforts to remind States Parties of their obligations and to provide declaration training, a number of States Parties have still not submitted their initial declarations, as required by the Convention. The Secretariat is not able to fulfil its verification tasks with regard to these States Parties.

Follow-up actions

- 7.3 Since the EIF of the Convention, the Secretariat has reminded States Parties of their declaration obligations through, inter alia, reminder letters, bilateral meetings, and presentations at regional and subregional meetings and workshops. During the reporting period, the Secretariat held bilateral meetings with Cape Verde, the Congo,

and Guinea-Bissau, on declaration issues. A technical-assistance visit focussing on declaration issues was undertaken to Cameroon.

Progress and status

- 7.4 During the year, the Secretariat received an initial declaration from the Congo, pursuant to Articles III and VI of the Convention. This means that, by the end of 2012, 181 of the 188 States Parties had submitted initial declarations in accordance with Article III and/or Article VI.
- 7.5 As at 31 December 2012, the following seven States Parties had not yet submitted their required initial declarations: Cape Verde (9 December 2003),²³ Guinea-Bissau (19 July 2008), Haiti (23 April 2006), Timor-Leste (6 July 2003), Tonga (28 July 2003), Tuvalu (19 March 2004), and Vanuatu (15 November 2005). Two States Parties—Kiribati and the Solomon Islands—had yet to submit their initial declarations under Article VI; and one, Saint Vincent and the Grenadines, had yet to submit its chemical weapons-related initial declaration pursuant to Article III. These three States Parties' initial declarations thus remained unfinished at the end of the review period.

Outstanding or late annual declarations

- 7.6 In order for the Secretariat to be able to continue to perform its verification tasks effectively, it is of the utmost importance that States Parties continue to submit their ADPAs and annual declarations of anticipated activities (ADAAs) in a timely manner. When planning its inspection activities, the Secretariat uses the most recent information available on file, in order to determine inspectable facilities and plant sites, and the relevance of these for the object and purpose of the Convention. Outdated information not only leads to erroneous site selections, but also risks increasing the rate of inspections at non-inspectable sites. Both of these scenarios involve an inefficient use of inspection resources. In addition, late submission of AND can cause transfer discrepancies, thus resulting in unnecessary RFCs. This imposes a burden on States Parties that have submitted their AND declarations on time, but then receive an RFC of a transfer discrepancy, due to the late submission by the other State Party involved in the transfer.

Follow-up actions taken

- 7.7 In November 2007, the Council adopted a decision on the timely submission of Article VI declarations (EC-51/DEC.1, dated 27 November 2007), in which it requested, inter alia, that all the States Parties concerned would continue to ensure that their Article VI declarations were submitted on time, and that the Secretariat continued to inform States Parties of their reporting requirements. The decision also called on States Parties to inform the Secretariat of the circumstances as to why they did not meet their reporting obligations, and asked them to indicate whether they would welcome assistance from the Secretariat in order to do so.

23

The dates indicate the due date of the initial declaration for the State Party concerned (that is, 30 days after the EIF of the Convention for the State Party).

- 7.8 In order to stress the importance of timely submissions and to offer advice and assistance (if needed), the Secretariat held bilateral meetings with representatives of States Parties whose annual declarations had been submitted more than 30 days late at least twice since November 2007 (26 States Parties fell into this category). In 2012, the Secretariat held consultations with 10 States Parties with regard to the specific issue of the timeliness of submissions, as well as with three additional States Parties that did not submit their declarations. Out of the remaining 13 States Parties, eight submitted ADPA 2011 on time—thus bilateral meetings on this issue were, for the most part, not required, while the Secretariat did not have an opportunity to have bilateral meetings on this issue in 2012 with five States Parties.

Progress and status

- 7.9 Due in part to such consultations in 2011 and 2012, 12 of the 26 States Parties referred to in paragraph 7.8 above submitted their ADPAs for 2011 or ADAAs for 2013 on time, while one State Party submitted its ADPA for 2012 on 12 November 2012, which was ahead of the established deadline (31 March 2013). In three cases, this was the first time since the approval of the above-mentioned decision taken by the Council on timely submission that declarations had been submitted on time. As at the end of the reporting period, the overall number of States Parties submitting their ADPAs for 2011 more than 30 days late stood at 15. The Secretariat plans to continue to hold bilateral meetings with those States Parties submitting late annual declarations.
- 7.10 Since the 2007 decision on the timely submission of Article VI declarations, the Secretariat has regularly been requested to prepare a status report for the Council on the implementation of that decision. Two such status reports (EC-67/DG.4, dated 19 January 2012; and EC-69/DG.7, dated 18 June 2012 and Corr.1, dated 10 July 2012) were submitted by the Secretariat in 2012. Some of the key developments are summarised below.
- 7.11 Overall, 91 States Parties (88 in the previous year) submitted ADPAs for 2011 during 2012. Of these:
- (a) Fifty-five (54 in the previous year) States Parties with declarable facilities or activities met the deadline of 30 March 2012 for submitting at least part of their required declarations.
 - (b) Twenty-eight (the same as the previous year) States Parties submitted their ADPAs for 2011 between 1 April and 31 December 2012.
 - (c) Eight (six in the previous year) States Parties submitted ADPAs for 2011 with no declarable facilities and activities (nil declarations).
- 7.12 By the end of the review period, the Secretariat had received ADAAs for 2013 from 48 States Parties (51 in 2011). Of these:
- (a) Eighteen States Parties met the deadline (2 October) for Schedule 1 chemicals and facilities and 37 States Parties met the deadline (1 November) for Schedule 2 and 3 chemicals and facilities. In total 49 (36 in the previous year)

States Parties met the deadline for submitting at least part of their required 2013 ADAAs.

- (b) Five (nine in the previous year) States Parties submitted their required ADAAs for 2013 after the deadline, but before 31 December 2012.
 - (c) Four (six in the previous year) States Parties reported no declarable facilities or activities (nil declarations).
- 7.13 The Council requested that States Parties anticipating difficulties in the timely submission of their declarations inform the Secretariat at the earliest possible date of the circumstances of such difficulties (operative paragraph 3 of EC-51/DEC.1). With regard to the ADPAs for 2011 and ADAAs for 2013, most States Parties that provided such information quoted “logistical difficulties” as the main reasons for delays in submitting annual declarations.

Transfer discrepancies

- 7.14 Since EIF, discrepancies between the Schedule 2 and 3 transfer data provided by the importing States Parties and those provided by the exporting States Parties in respect of the same transfer have been of such magnitude (approximately 69% of the transfers between States Parties have discrepancies) that data monitoring for non-proliferation purposes is very difficult to achieve.

Follow-up actions taken

- 7.15 One reason for transfer discrepancies has been the lack of a common understanding on the meaning of the terms “import” and “export” for declaration purposes. A 2002 decision by the Conference at its Seventh Session (C-7/DEC.14, dated 10 October 2002) contained guidelines for reporting AND, but it stopped short of containing a definition of imports and exports. In 2008, the Conference adopted a decision (C-13/DEC.4, dated 3 December 2008) setting out voluntary guidelines for the declaration of import and export data for Schedule 2 and 3 chemicals, with the intention of reducing the number of transfer discrepancies. This decision, which focused on the physical movement of scheduled chemicals, rather than on customs procedures, included a definition of the meaning of the terms “import” and “export” (albeit solely for the purposes of the submission of declarations).
- 7.16 In its decision on voluntary guidelines (C-13/DEC.4), the Conference requested the Secretariat to “report in three years on the progress achieved through the implementation of this decision for consideration by the Council”. In order to prepare such a report, the Secretariat undertook a questionnaire-based survey in 2011 (S/900/2011, dated 16 February 2011), and a report (EC-67/S/1, dated 16 January 2012) was provided to the Council at its Sixty-Seventh Session.
- 7.17 The Second Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention encouraged the Secretariat, in close consultation with States Parties, to continue efforts to resolve ambiguities and discrepancies, and to provide them with appropriate assistance (paragraph 9.45 of RC-2/4, dated 18 April 2008). The Secretariat organised five regional and

subregional courses in 2012, in order to provide States Parties with in-depth training for customs authorities on practical ways of implementing the transfer provisions of the Convention (and with a view to reducing discrepancies). In addition, transfer issues and the implementation of the above-referenced voluntary guidelines were an important element of the agenda at all 2012 regional meetings of National Authorities.

Progress and status

- 7.18 As was the case in previous years, there were still considerable inconsistencies between the Schedule 2 and 3 transfer data provided by the importing States Parties and the data provided by the exporting States Parties in respect of the 2011 transfers. However, a small improvement has been noted: As at 31 December 2012, approximately 69% of transfers between States Parties had discrepancies, compared to 71% in 2010, 74% in 2009, and 76% in 2008.
- 7.19 With regard to Schedule 2 chemicals, 601 AND declarations of imports and exports for the year 2011 (compared to 660 in 2010) were received during the reporting period, equivalent to 473 (525 in 2010) transfers between States Parties.²⁴ Of these, 210 (214 in 2010) were above the declaration thresholds established by the Conference (C-7/DEC.14) at its Seventh Session. One hundred and one of the 210 transfers that were above the declaration thresholds, or 48% (45% in 2011), were declared by just one of the two States Parties involved.
- 7.20 A total of 1,629 Schedule 3 AND declarations of imports and exports covering the year 2011 were received during the reporting period—equivalent to 1,166 transfers between States Parties. Five hundred forty-seven (529 in 2010) of these transfers were above the declaration thresholds established by the Conference (C-7/DEC.14), of which 207—or 38% (30% in 2010)—were declared by just one of the two States Parties involved.

Quality of declarations

- 7.21 The sections above focus on issues related to outstanding or late declarations, and transfer discrepancies. Another matter of relevance to the implementation of the Convention concerns States Parties with declarable activities that nevertheless declare that they do not have such activities or that under-declare.

Follow-up actions taken

- 7.22 Actions taken by the Secretariat to address the issue of the quality of import/export declarations are largely the same as for transfer discrepancies. Particular emphasis is placed on those States Parties that are repeatedly named in transfer discrepancies, but do not submit any AND declarations of their own.
- 7.23 During 2012, the Secretariat met with six States Parties that have had transfer discrepancies in two or more of the last three years, but have not submitted AND

²⁴

For reporting purposes, the Secretariat has taken “transfer between States Parties” to mean the sum of all imports and exports of a specific scheduled chemical between two States Parties in the year in question, including those declared by only one of the States Parties involved.

declarations, in order to highlight the importance of making import/export declarations and to offer advice and assistance. In addition, customs officers from five States Parties belonging to this group of countries received in-depth training on Convention-related transfer issues at regional or subregional customs workshops during 2012.

- 7.24 During 2012, the Secretariat followed up on its AND trend-analysis project, which analyses trends (over the previous five years) in AND declarations in order to identify potential additional declarable activities involving Schedule 2 chemicals. During 2012, the Secretariat approached one additional State Party, held follow-up meetings with this additional State Party, and also held meetings with the seven States Parties that had been approached in late 2011.
- 7.25 During 2012, one of the seven States Parties approached in 2011 declared an additional Schedule 2 plant site that had been identified as a result of enquiries made based on this analysis. Another State Party declared two additional Schedule 2 plant sites, partly as a result of this analysis and its follow up of transfer-discrepancy issues. The Secretariat will continue to follow up with the remaining States Parties that have yet to provide a response to this issue and will continue to conduct periodical analyses as part of its routine data-monitoring activities.

Progress and status

- 7.26 Because its analyses are based on declared information alone, the Secretariat has only limited means of determining the prevalence of situations involving transfer discrepancies. However, there are a considerable number of States Parties with repeated transfer discrepancies that do not submit any AND declarations at all. Of the 82 States Parties that had transfer discrepancies in 2011, 18 (or 22%), did not submit any AND declarations for that year.
- 7.27 As at 31 December 2012, 10 States Parties have had repeated (two or more) transfer discrepancies in the previous three years (2011, 2010, and 2009) and did not submit AND declarations for any of those years. Five States Parties previously reported in 2011 as being in this group submitted AND declarations during 2012, following consultations with the Secretariat.
- 7.28 A document (S/862/2010/Rev.1, dated 31 August 2010), prepared by the Secretariat in 2010 as a reference tool for States Parties to consult when they are compiling their lists of OCPFs, suggests that the number of OCPFs appears to correlate to factors such as the size of the chemical industry in a particular State Party, the gross domestic product (GDP) of the State Party, the amount of chemical exports, the size of the economically active population, the expenditure on research and development, and International Organization for Standardization (ISO) 14001 certifications. As a follow-up, the Secretariat issued another document (S/1026/2012, dated 29 June 2012), which provided an update of the information contained in S/862/2010/Rev.1. Out of five publicly available indicators, three were from the same information source that had been specified in the previous document. The use of one indicator was discontinued, due to the unavailability of information and another indicator was replaced by a new one that showed a higher correlation with the declared number of

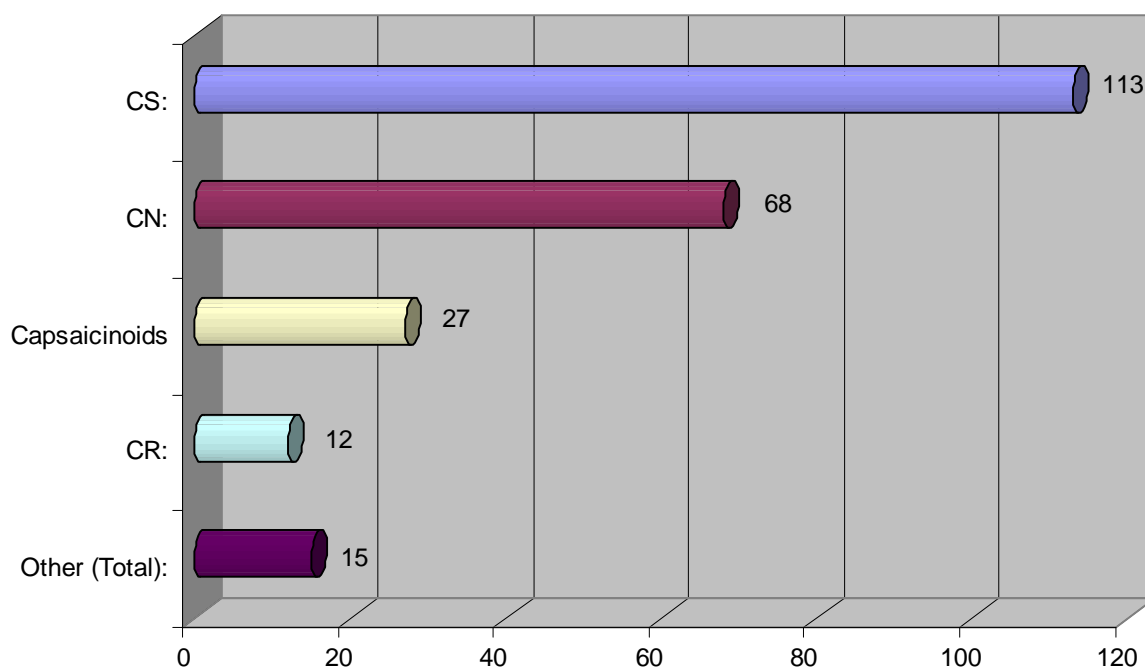
OCPF plant sites. While no detailed conclusions can be derived from such indicators, they could be used as a tool for identifying the possible existence of additional declarable facilities.

Status of required declarations

Riot control agents (RCAs)

- 7.29 As at 31 December 2012, of the 180 States Parties that had submitted initial declarations under Article III, 177 States Parties submitted information on riot control agents (RCAs), while the information on RCAs was missing from three States Parties' declarations. Of the 177 States Parties that provided information on their RCAs, 131 declared possession of RCAs, while 46 States Parties declared that they did not possess RCAs.
- 7.30 In line with efforts undertaken in previous years to keep information received from States Parties in regard to chemicals held for riot control purposes up to date, in reconciling 2012, the Secretariat commenced activities related to the review of RCA declarations received since the EIF of the Convention. The aim of this project was to identify the latest information received from each State Party in relation to RCAs, communicate these details back to States Parties (with a request that the States Parties review the information and confirm its validity, and/or amend it with updated data, if necessary (see Figure 2)).

FIGURE 2: NUMBER OF STATES PARTIES HAVING DECLARED RIOT CONTROL AGENTS – BY TYPE OF AGENT



Other facilities primarily for the development of chemical weapons

- 7.31 With regard to other facilities primarily for the development of chemical weapons, the situation remained unchanged in 2012. As at 31 December 2012, 30 such facilities had been declared by 11 States Parties. This included 16 proving-and-testing grounds, and 14 laboratories and research-and-defence establishments. At the end of the reporting period, four such facilities were being used as research centres or laboratories for defence and protective purposes, or for the destruction of OCWs.

Handling of declarations

Clarification of declarations

- 7.32 As part of its verification activities, the Secretariat sometimes needs to ask States Parties for clarifications related to their declarations (by issuing RFCs). In a 2004 decision (EC-36/DEC.7, dated 26 March 2004), the Council urged States Parties to expedite their responses to RFCs, established a 90-day deadline for responding to such requests, and recommended that the Secretariat take follow-up action in cases where it cannot determine whether or not a facility is inspectable.
- 7.33 During 2012, the Secretariat did not issue any RFCs addressing inspectability-related issues. However, 82 RFCs were issued with regard to transfer discrepancies. During the reporting period, the Secretariat also issued 153 reconciliation letters to ensure that the information held by the Secretariat on declared Schedule 2 and 3 facilities and OCPFs was up to date; it also issued 31 other Article VI-related RFCs and reminder letters.

Processing of declarations

- 7.34 In 2012, the Secretariat received 823 incoming documents, comprising 12,264 pages, from States Parties. These documents included 93 ADPA 2011, two ADPA 2012, 49 ADAA 2013, and other verification-related documents. Three hundred and fifty-eight documents, or 43.5%, comprising 2,404 pages were unclassified. However, the majority of the pages that were received continued to be classified: One hundred and ten documents (4,143 pages) were classified as “OPCW Highly Protected”, 111 documents (3,645 pages) as “OPCW Protected”, and 244 documents (2,072 pages) as “OPCW Restricted”. In other words, 56.5% of the documents (48% in 2011), and 81% of the pages (78% in 2011) were classified. The Secretariat continues to ensure that all documents are handled in strict compliance with the OPCW confidentiality regime. Meanwhile, the Secretariat continues to encourage States Parties to minimise the number of classified documents.

Electronic declarations

- 7.35 Forty-one States Parties provided their original ADPAs for 2011 either solely or additionally in electronic format (as compared with 40 States Parties in the preceding year). A total of 29 States Parties submitted their original ADAAs for 2013 in electronic format (30 the year before).

- 7.36 The Secretariat has continued to provide States Parties with required support in relation to their submission of electronic declarations using EDNA. Furthermore, 22 representatives from 18 States Parties attended the EDNA training courses that took place during the Seventeenth Session of the Conference. The Secretariat has also provided a basic course on electronic declarations as part of the “Training Course on National Authorities and Chemical Databases”, organised by the Finnish Institute for Verification of the Chemical Weapons Convention (VERIFIN) in August 2012.
- 7.37 In 2012, the Secretariat organised a Third User-Group Forum for EDNA on the sidelines of the Sixty-Ninth Session of the Council. The main theme of the event was the initiative for secure electronic transmission of electronic declarations. The Secretariat has received significant interest from the States Parties in regard to this initiative. A detailed report on the forum has been made available to States Parties (S/1047/2012, dated 19 October 2012).
- 7.38 In 2012, the Secretariat observed continued interest in electronic declarations. The EDNA project team, on the basis of requests received from States Parties during user-group forums, regional workshops, and training sessions held at OPCW Headquarters, has continued to work on improvements to the tool. As a result of this work, a new version of EDNA, version 2.5, was made available to States Parties in September 2012. The new version includes a number of enhancements, including reporting and data-analysis capabilities. The EDNA project team continues to work on further enhancements, focusing mainly on the implementation of necessary functionality in EDNA to enable the declaration of Schedule 1 facilities. With this functionality in place, the States Parties will be able to make a single electronic declaration for all their declarable activities under Article VI of the Convention.

Implementation by States Parties of the 2009 Conference decision on low-concentration limits for mixtures of chemicals concerning Schedule 2A and 2A* chemicals

- 7.39 The Conference at its Fourteenth Session approved a decision (C-14/DEC.4, dated 2 December 2009) on guidelines regarding concentration limits for mixtures containing Schedule 2A and 2A* chemicals. Under the decision, States Parties were requested to implement the guidelines as soon as practicable, and the Secretariat was requested to report on progress made by States Parties in implementing the decision, beginning not later than 1 January 2012. To gather information for this report, subsequent to the first survey on the States Parties’ implementation of this decision (S/948/2011, dated 6 July 2011) carried out in 2011, the second survey was carried out in 2012 (S/1040/2012, dated 18 September 2012).
- 7.40 By the deadline of the second survey (31 December 2012), five States Parties had responded. One State Party out of these five indicated that it had fully implemented the decision; the other four indicated that they were in the process of implementing the decision.
- 7.41 With respect to the total responses to the first and second surveys, 36 (19%) of the 188 States Parties responded. Of these 36 States Parties, 22 States Parties indicated that they had fully implemented the decision; eight indicated they were in the process

of implementation; and six indicated that they had not yet implemented the decision. Of the 14 States Parties that had indicated that they were in the process of implementing or had not yet implemented the decision, six indicated in the responses to the first survey that they anticipated achieving implementation during 2012, and four indicated in the responses to the second survey that they anticipated implementing the decision during 2013. Four States Parties did not give any indication of a date for implementation.

- 7.42 In addition to the States Parties that responded to the first survey, two other States Parties provided submissions under paragraph 5 of Article VII of the Convention in 2010; these submissions indicated that they had implemented this decision.

8. TECHNICAL SUPPORT FOR VERIFICATION ACTIVITIES

Sampling and analysis for verification purposes

- 8.1 The laboratory calibrated, prepared, and dispatched GC-MS instruments for nine S&A missions in 2012; the ninth mission was not completed due to equipment damage during transport. In each case, the instrumentation was fully certified by the Office of Internal Oversight (OIO).
- 8.2 Quality reviews of two Article VI inspections that included S&A were conducted during the reporting period. These reviews indicated a number of areas where on-site S&A procedures could be improved for greater efficiency.
- 8.3 In preparation for inspections involving S&A, assistance and support were provided to the inspectors who are analytical chemists. This included acquiring the chemicals needed to emulate process streams and consultations on the methods used for analysing the results.
- 8.4 A second confidence-building exercise for biomedical sample analysis was conducted in February 2012. Twenty-two laboratories from 18 Member States participated. The results indicated a marked improvement over the first exercise and highlighted the skill and expertise of Member States' laboratories.
- 8.5 A workshop on confidence-building exercises for biomedical sample analysis was held during the year to discuss the findings from the second exercise, and to initiate planning for a third exercise. A third confidence-building exercise for biomedical sample analysis was conducted in February 2013.

Official OPCW proficiency tests

- 8.6 Each year, the OPCW carries out proficiency tests for institutions that may wish to participate in the OPCW network of analytical laboratories. The year under review saw the completion of the Thirtieth, the holding of the Thirty-First, and the start of the Thirty-Second OPCW Proficiency Tests. The particulars of these tests are provided in Table 9 below.

TABLE 9: SUMMARY OF THE THIRTIETH, THIRTY-FIRST, AND THIRTY-SECOND OFFICIAL OPCW PROFICIENCY TESTS

	Thirtieth Proficiency Test	Thirty-First Proficiency Test	Thirty-Second Proficiency Test
Sample Preparation	AMMS, China	WIS, Germany	VERTOX, India
Evaluation Results	LLNL, United States	IICT, India	LAVEMA, Spain
Number of Nominations ²⁵	20	18	28
Results	11 As 0 Bs 1 C 1 D 1 failure 3 procedural failures 1 trial test	7 As 1 B 3 Ds 7 Fs	14 As 2 Bs 4 Cs 1 D 6 Fs 1 trial test

8.7 At the end of the reporting period, there were 22 designated laboratories from 17 Member States, four of which had had their designation temporarily suspended. Annex 2 shows the status of each designated laboratory as at 31 December 2012.

OPCW Central Analytical Database (OCAD)

8.8 The Validation Group met twice in 2012 and technically approved 580 new analytical data. These data, and some from 2011, were processed and forwarded to the Council for its approval.

8.9 Two-hundred and sixty-one new analytical data approved by the Council were incorporated into the new version of the OCAD (V.15_2012), which was certified by the OIO and released to States Parties in December 2012. The OCAD (database/extracted analytical data) was issued 13 times for on-site inspections and training purposes.

8.10 The contents of the OCAD, as approved by the Council for inclusion in the OCAD by 31 December 2012, are reflected in Table 10.

²⁵

Including sample preparation/evaluation laboratories

TABLE 10: CONTENTS OF THE OPCW CENTRAL ANALYTICAL DATABASE

	Number of Analytical Data in the OCAD (Status at the End of Each Year)										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
MS ²⁶	1490	2137	2603	3219	3434	3563	3950	4183	4382	4823	4957
IR ²⁷	667	667	710	757	808	899	925	936	936	964	975
NMR ²⁸	1255	1305	1391	1391	1391	1391	1391	1391	1391	1391	1391
GC(RI) ²⁹	1468	1902	2273	2969	3053	3159	3324	3494	3649	4137	4253
	Number of chemical species in the OCAD ³⁰ (Status at the end of each year)										
MS						2846	3049	3214	3321	3657	3731
IR						671	687	698	698	716	723
NMR						298	298	298	298	298	298
GC (RI)						2655	2747	2894	3018	3470	3560

OPCW Laboratory accreditation

- 8.11 The proficiency-testing scheme was conducted under the regulations of the International Labour Accreditation Council ILAC/G13 (prior to 2012). The Laboratory's quality documentation was updated to conform to a newer proficiency testing standard—ISO 17043— which went into effect in 2012.
- 8.12 Two internal audits, to cover three areas of activities in regard to the accreditation of the OPCW Laboratory (official OPCW proficiency tests; the calibration and testing of analytical inspection equipment; and the OCAD), were conducted by the OIO in 2012, confirming that the Laboratory is following ISO 17025 and 17043 standards.
- 8.13 The full reassessment audit by the Dutch Raad voor Accreditatie (RvA) was carried out successfully in 2012. Minor non-conformities were noted, primarily related to documentation. Corrective actions were taken and the accreditation was granted in January 2013.

Analytical equipment

- 8.14 The equipment replacement plan was updated and executed. Two new GC-MS systems were received, and a new liquid chromatography-mass spectrometry (LC-MS) system was installed. Old GC-MS systems are retained at the OPCW Laboratory for inspector training purposes.

²⁶ MS = mass spectrometry

²⁷ IR = infrared

²⁸ NMR = nuclear magnetic resonance spectrometry

²⁹ GC(RI) = gas chromatography-retention indices

³⁰ Number of distinct chemicals represented in the OCAD

Annex 2

LIST OF DESIGNATED OPCW LABORATORIES³¹

No.	State Party	Laboratory Name	Date of Designation
1.	Belgium	Defence Laboratories Department*	12 May 2004
2.	China	The Laboratory of Analytical Chemistry Research Institute of Chemical Defence	17 November 1998
3.	China	Laboratory of Toxicant Analysis Institute of Pharmacology and Toxicology, Academy of Military Medical Sciences	14 September 2007
4.	Finland	VERIFIN, Finnish Institute for Verification of the Chemical Weapons Convention	17 November 1998
5.	France	DGA Maîtrise NRBC Département d'analyses chimiques	29 June 1999
6.	Germany	Bundeswehr Research Institute for Protective Technologies and NBC Protection	29 June 1999
7.	India	VERTOX Laboratory Defence Research and Development Establishment	18 April 2006
8.	India	Centre for Analysis of Chemical Toxins Indian Institute of Chemical Technology	4 September 2008
9.	India	Institute of Pesticide Formulation Technology*	3 August 2011
10.	Iran (Islamic Republic of)	Defense Chemical Research Laboratory	3 August 2011
11.	Netherlands	TNO Defence, Security and Safety	17 November 1998
12.	Republic of Korea	Chemical Analysis Laboratory CB Department, Agency for Defence Development	3 August 2011
13.	Republic of Korea	The Chemical Defence Research Institute	4 September 2012
14.	Romania	Chemical Analysis and Testing Laboratory Scientific Research Center for CBRN Defense and Ecology	4 September 2012
15.	Russian Federation	Laboratory for Chemical and Analytical Control Military Research Centre	4 August 2000
16.	Singapore	Verification Laboratory Defence Medical and Environmental Research Institute, DSO National Laboratories	14 April 2003
17.	Spain	Laboratorio de Verificación de Armas Químicas (LAVEMA), Instituto Tecnológico, La	16 August 2004

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An asterisk (*) next to the name of a laboratory means that its status as an OPCW designated laboratory remained suspended as at the end of the reporting period because of its performance in a recent official OPCW proficiency test. These laboratories will not be considered for receipt of samples taken for off-site analysis until they perform satisfactorily in future OPCW proficiency tests.

No.	State Party	Laboratory Name	Date of Designation
		Marañosa*	
18.	Sweden	FOI, CBRN Defence and Security Swedish Defence Research Agency	17 November 1998
19.	Switzerland	Spiez Laboratory Swiss NBC Defence Establishment	17 November 1998
20.	United Kingdom of Great Britain and Northern Ireland	Defence Science and Technology Laboratory (Dstl) Chemical and Biological Systems, Porton Down	29 June 1999
21.	United States of America	Edgewood Chemical and Biological Forensic Analytical Center	17 November 1998
22.	United States of America	Lawrence Livermore National Laboratory*	14 April 2003

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