### **Technical Secretariat**



**OPCW** 

Verification Division S/1207/2014<sup>\*</sup> 8 August 2014 Original: ENGLISH

#### NOTE BY THE DIRECTOR-GENERAL

#### SUMMARY OF VERIFICATION ACTIVITIES IN 2013

- 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 2013, 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 classified information.

Annexes:

Annex 1:OPCW Verification Summary for 2013Annex 2:List of Designated OPCW Laboratories

<sup>\*</sup> Reissued for technical reasons.

#### Annex 1

#### **OPCW VERIFICATION SUMMARY FOR 2013**

#### 1. EXECUTIVE SUMMARY

#### Overview

- 1.1 As at 31 December 2013, there were 190 States Parties to the Chemical Weapons Convention (hereinafter "the Convention").
- 1.2 Five States Parties had not submitted their initial declarations pursuant to the Convention by the end of 2013. The Secretariat was not able to fulfil its verification tasks with regard to these States Parties. Two additional States Parties had submitted incomplete declarations (that is, their information in regard to either Article III or Article VI had not been provided).
- 1.3 There were two signatory States not Party<sup>1</sup> and four non-signatory States,<sup>2</sup> for which no verification activities could be undertaken. Somalia and the Syrian Arab Republic joined the Convention in 2013.

#### **Verification operations**

- 1.4 With regard to the chemical demilitarisation and industry verification programmes, disarmament, and non-proliferation, the Secretariat performed 373 inspections/rotations in 2013, which accounted for 13,527 inspector days at 297 sites in 47 States Parties. This total consisted of 144 inspections or rotations connected to chemical weapons demilitarisation under Articles IV and V, and 229 inspections related to industry verification under Article VI.
- 1.5 In addition to these routine activities, the participation in the United Nations mission to investigate the alleged use of chemical weapons in the Syrian Arab Republic and the sequence of deployed missions in that country as a new State Party to the Convention resulted in a further 2,019 inspector days spent by the Secretariat in 2013. This includes 12 missions to 12 chemical weapons storage facilities (CWSFs) and 24 missions to 24 chemical weapons production facilities (CWPFs).
- 1.6 The number of inspector days related to chemical weapons was 10,738 (79%) at 68 sites, while 2,789 inspector days (21%) were spent at 229 declared facilities and plant sites pursuant to Article VI.
- 1.7 The Secretariat was able to meet the mandated inspection aims at all inspections carried out in 2013. Two inspections registered uncertainties. Issues requiring further attention (IRFAs) were registered in connection with 23 inspections.
- 1.8 No challenge inspections (CIs) or investigations of alleged use (IAUs) were requested in 2013.

<sup>&</sup>lt;sup>1</sup> Israel and Myanmar.

<sup>&</sup>lt;sup>2</sup> Angola, the Democratic People's Republic of Korea, Egypt, and South Sudan.

- 1.9 In August 2013, the Secretariat provided inspectors to a United Nations-led team investigating allegations that chemical weapons had been used in the Syrian Arab Republic. The conclusion that such weapons had been used led to negotiations with a view to elimination of the Syrian chemical weapons. The Syrian Arab Republic deposited its instrument of accession to the Convention on 14 September 2013.
- 1.10 In 2013, the Secretariat verified the destruction of 2,977.245 metric tonnes (MTs) of chemical weapons at seven chemical weapons destruction facilities (CWDFs): one in Libya, five in the Russian Federation, and one in the United States of America.
- 1.11 Also in 2013, destruction of chemical weapons was undertaken at one Libyan CWDF, including two non-contiguous sites. The Libyan authorities worked with the Secretariat and the United States of America to ensure the security of the first site, and training was conducted in Germany and Sweden prior to starting destruction activities at the second site. The Secretariat completed two final engineering reviews in Libya in 2013.
- 1.12 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.
- 1.13 In 2013, Iraq submitted an initial draft of the detailed facility agreement for the Al-Muthanna Destruction Project.
- 1.14 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 58,528.932 MTs, or 81%, of the declared chemical weapons stockpiles of 72,531.519  $MTs^3$  had been verified as destroyed;<sup>4</sup>
  - (b) A State Party,<sup>5</sup> Albania, and India had destroyed their entire declared stockpiles of chemical weapons;
  - (c) With regard to Category 1 chemical weapons, Libya had destroyed 87%, the Russian Federation had destroyed 78%, and the United States of America 90%, of their respective declared quantities;

<sup>&</sup>lt;sup>3</sup> Excluding Iraq.

<sup>&</sup>lt;sup>4</sup> 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").

<sup>&</sup>lt;sup>5</sup> 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."

- (d) Libya had also destroyed 40% of its Category 2 chemical weapons (unchanged from last year);
- (e) Libya had destroyed its remaining Category 3 items declared in 2011; and
- (f) Discussions were being pursued on the destruction of declared chemical weapons in Iraq.
- 1.15 By 31 December 2013, the Director-General had certified that 66 out of 96 CWPFs had either been destroyed (in 43 instances) or converted (in 23 instances). In 2013, the Secretariat carried out 33 inspections at 32 CWPFs in three States Parties (the Russian Federation; the Syrian Arab Republic, where 24 initial inspections at the CWPFs were performed; and the United Kingdom of Great Britain and Northern Ireland). Of the total number, three 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).
- 1.16 In 2013, the Secretariat conducted 10 inspections at eight CWSFs in four States Parties, which amounted to 325 inspector days. In addition to these, 12 CWSFs were inspected at 12 sites in the Syrian Arab Republic.
- 1.17 Since the entry into force (EIF) of the Convention, 16 States Parties have declared old chemical weapons (OCWs). Of these, 11 States Parties had declared OCWs produced between 1925 and 1946, and nine States Parties had declared pre-1925 OCWs. The Secretariat conducted eight OCW inspections in Belgium, Canada, France, Germany, Italy, the Netherlands, and the United Kingdom of Great Britain and Northern Ireland in 2013. Although in many cases destruction operations have made considerable progress, recoveries of significant quantities of OCWs continue to be made.
- 1.18 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 Executive Council (hereinafter "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.
- 1.19 In terms of Article VI of the Convention, the Secretariat verified declared activities at 229 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 147 other chemical production facility (OCPF) plant sites (3%).
- 1.20 In 2013, the Secretariat continued its efforts to maximise the number of sequential inspections as a way of saving resources. Thirteen of the 15 States Parties that had received four or more industry inspections in 2013 had advised the Secretariat that they concurred with the use of sequential inspections on their territories. One additional State Party conducted trial sequential inspections. In total, the Secretariat carried out 57 sequential inspections.

- 1.21 Sampling and analysis (S&A) was used during eight Schedule 2 inspections in 2013.
- 1.22 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 the electronic declaration software for National Authorities (EDNA) as a widely used declaration tool, in 2013 the Secretariat continued working on the establishment of a secure information exchange (SIX) system, which has been available to States Parties since July 2014, and which allows the secure electronic submission of Article VI declarations and exchange of other information, including that which is classified. Detailed information about the system and registration procedures has been made available to States Parties (S/1192/2014, dated 1 July 2014). The VIS and associated data-analysis tools provide the necessary capabilities for the processing and effective monitoring of verification-related information.
- 1.23 In total, the Secretariat processed 874 incoming documents, declarations, and other verification-related documents, comprising 13,958 pages received from States Parties in 2013.
- 1.24 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

2.1 During 2013, the Secretariat conducted 373 inspections/rotations, which accounted for 13,527 inspector days at 297 sites in 47 States Parties. On average, 1127 inspector days were undertaken each month (compared with 972 in 2012). Table 1 lists the number and types of inspections or rotations completed in 2013 and other summary statistics on inspection activities. Overall, the Secretariat carried out 5,394 inspections/rotations in 84 States Parties between the EIF of the Convention and 31 December 2013.

Type of Facility	No. of Inspectable or Operational Facilities <sup>6</sup>	No. of Inspections Completed	No. of Facilities or Sites Inspected	No. of Inspector Days
Che	mical Weapon	s-Related Inspe	ections	
CWDF	7	73	7	7,714
CWSF	10	$10(+12)^7$	9 (+12)	325
CWPF	27	9 (+24)	5 (+24)	89
OCW	6	8	7	81
ACW	33	3	3	76
ACWD	2	1	1	32
DHCW <sup>8</sup>	N/A	4	0	402
Syrian Arabic Republic	Including	12 CWSFs and	24 CWPFs	2,019
Subtotals		144	68	10,738
A	Article VI (Ind	ustry Inspectio	ns)	
Schedule 1	23	11	11	179
Schedule 2	192	42	42	815
Schedule 3	399	29	29	299
OCPF	4,284	147	147	1,496
Subtotals	4,901	229	229	2,789
Combined totals		373	297	13,527

#### TABLE 1:INSPECTION ACTIVITIES IN 2013

#### **Distribution of inspections**

- 2.2 Forty-six States Parties received Article VI inspections in 2013. As can be seen in Table 2, this number was higher than previous years (44 States Parties in 2012). 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 first 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 10% to 15% in 2012.

For CWDFs and abandoned chemical weapons destruction facilities (ACWDs): operational facilities in 2013; for CWSFs, CWPFs, OCWs, and abandoned chemical weapons (ACWs): inspectable in 2013; for Article VI facilities: inspectable in 2013.

Inspections related to the OPCW participation in the UN-led mission to investigate the alleged use of chemical weapons in the Syrian Arab Republic and the subsequent deployed missions.

<sup>&</sup>lt;sup>8</sup> DHCW = destruction of hazardous chemical weapons.

TABLE 2: DISTRIBUTION OF ARTICLE VITINSPECTIONS									
	2006	2007	2008	2009	2010	2011	2012	2013	
No. of inspections	180	200	200	208	208	208	219	229	
No. of States Parties hosting inspections	54	58	40	38	38	39	44	46	
No. of States Parties accounting for 50% of the inspections	11	13	6	6	6	7	6	7	

#### TABLE 2:DISTRIBUTION OF ARTICLE VI INSPECTIONS

## TABLE 3:REGIONAL DISTRIBUTION OF INDUSTRY INSPECTIONS<br/>DURING THE REPORTING PERIOD

Regional Groups	No. of Industry Inspections	Percentage of Total	Percentage of Inspectable OCPFs
African	5	2%	1%
Asian	100	44%	57%
Eastern European	13	6%	5%
Latin America and the Caribbean	16	7%	5%
Western European and Other Countries	95	41%	32%

#### Challenge inspections and investigations of alleged use

- 2.3 No CIs were requested in 2013. 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.<sup>9</sup>
- 2.4 Inspectorate training and other readiness activities in regard to contingency operations in 2013 were conducted in a manner that recognised the many operational commonalities between CIs and IAUs. Consequently, training courses in 2013, 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.
- 2.5 In 2013, no CI field exercises were conducted.
- 2.6 The Secretariat received no requests from States Parties for an IAU during the year in review.
- 2.7 However, it is relevant to emphasise that the OPCW, at the request of the United Nations Secretary-General, successfully supported the United Nations in an actual investigation of alleged use of chemical weapons in the Syrian Arab Republic. This investigation required a significant number of working days at OPCW Headquarters

<sup>&</sup>lt;sup>9</sup> Paragraphs 7.91 and 7.100 of RC-1/5, dated 9 May 2003; paragraphs 9.90 and 9.105 of RC-2/4, dated 18 April 2008; and paragraphs 9.109 and 9.111 of RC-3/3\*, dated 19 April 2013.

on mission preparation and, afterwards, on mission reporting, and confirmed the readiness of the Secretariat to conduct such activity.

#### **Inspector training**

- 2.8 Inspectorate training in 2013 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.
- 2.9 The 2013 Inspectorate Training Programme commenced on 14 January and finished on 18 December 2013. The Inspectorate Division completed 2,318 equivalent training days within the inspector-training subprogramme. Delivery of training by inspectors required 704 equivalent training days. The programme comprised 54 individual courses, with a total of 49 calendar weeks focused on training. The total number of training days represented a reduction of 27% below the planned number (3,200) of inspector days for technical training—a decrease that can be attributed to the cancellation of many courses as a consequence of team preparations and verification activities related to the mission in the Syrian Arab Republic.

#### Home-team activities

2.10 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 2013.

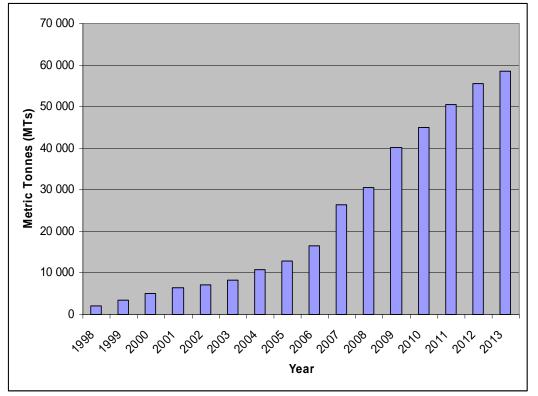
#### **3.** CHEMICAL WEAPONS

- The Secretariat verifies the destruction of chemical weapons by maintaining a 3.1 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. Bv 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 7,714 inspector days during 2013 (7,202 in 2012), while inspection efforts at CWSFs totalled 325 inspector days (497 in 2012).
- 3.2 In 2013, the Secretariat verified the destruction of 2,977.245 MTs of chemical weapons. This was a decrease compared to 2012, when total verified destruction amounted to 4,035.143 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 from chemical weapons stocks for purposes not prohibited under the Convention, totalled 58,517.177 MTs, or 80.68%, of the declared chemical weapons (see Figure 1).

#### FIGURE 1: VERIFIED DESTRUCTION OF CHEMICAL WEAPONS CUMULATIVE FROM 1998 TO 2013



3.4 In 2013, seven CWDFs (the same number as in 2012) were involved in the destruction of Category 1 chemical weapons: one in Libya, five in the Russian Federation, and one 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 Shchuchye and Maradykovsky facilities were completed in 2013. The construction of the Kizner facility was finalised in 2013; in November 2013, the Secretariat conducted the final engineering review at this facility, which became operational in December 2013. Two CWDFs in the United States of America located at Pueblo, Colorado; and Blue Grass, Kentucky; were, as at the end of 2013, in different phases of construction and systemisation.

## TABLE 4:CHEMICAL WEAPONS DESTRUCTION FACILITIES IN<br/>SERVICE OR UNDER CONSTRUCTION IN 2013

<b>Chemical Weapons Destruction Facilities by State Party</b>								
Libya								
Rabta Toxic Chemicals Destruction Facility (RTCDF) <sup>10</sup>								
Russian Federation								
Maradykovsky CWDF								
Shchuchye CWDF								
Pochep CWDF								
Leonidovka CWDF								
Kizner CWDF								
United States of America								
Recovered Chemical Weapons Destruction Facility (RCWDF)								
Blue Grass Chemical Agent Destruction Pilot Plant (BGCAPP)*								
Pueblo Chemical Agent Destruction Pilot Plant (PCAPP)*								
* Eacility under construction as at the and of 2013								

- \* Facility under construction as at the end of 2013
- 3.5 In 2013, the Secretariat conducted two final engineering reviews in Libya, one of the Ruwagha Hydrolysis and Neutralisation System 1 (RHNS1) and the other of the Ruwagha Static Detonation Chamber. Libya operated the RHNS1 for two months (April and May 2013) and completed the destruction of the remaining mustard agent in bulk containers. In November 2013, Libya started the destruction operations using the RSDC for the chemical weapons that could not be destroyed using the RHNS1.
- 3.6 Iraq developed an initial draft of the detailed facility information for the Al-Muthanna Destruction Project. The detailed facility information will be completed once assessment of the Al-Muthanna storage bunkers contents is finalised.
- 3.7 At the end of the review period, there remained five States Parties with declared chemical weapons that had yet to be completely destroyed—Iraq, Libya, the Russian Federation, the Syrian Arab Republic, and the United States of America.

#### **Progress in meeting destruction obligations**

3.8 In 2011, the Conference of the States Parties (hereinafter "the Conference") at its Seventeenth Session adopted a decision regarding the final extended deadline of 29 April 2012 (C-16/DEC.11, dated 1 December 2011). 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.

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The Ruwagha Hydrolysis and Neutralisation System1 (RHNS1) and Ruwagha Static Detonation Chamber (RSDC), both non-contiguous sites of the RTCDF, were in service in 2013.

- 3.9 As at 31 December 2013, OPCW inspectors had verified the destruction of the quantities listed below 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:<sup>11</sup>
  - Category 1 chemical weapons: The Secretariat had verified the destruction of (a) 57,597.246 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, 56,377.284 MTs were unitary chemical weapons (2,977.245 MTs in 2013), including lewisite, sarin (GB), sulfur mustard (including H, HT, and HD), tabun (GA), tabun with UCON, soman (GD) and viscous soman (GD), VX, and Vx, and unknown agent, contained in 4,925.301 munitions and containers (304,310 in 2013), as well as in other storage vessels that had a volume of less than 2m<sup>3</sup> 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 785,066 binary items, including 415,108 artillery projectiles, 369,958 separately declared DF and OPA canisters, and 306 other containers for binary components.
  - (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 2013): 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 2013, the Secretariat had verified the destruction of 417,825 items of Category 3 chemical weapons declared to the OPCW. The destruction of 207 Category 3 items, which were declared by Libya in 2011, and 1,254 items declared by the Syrian Arab Republic in 2013, took place in 2013.

#### Iraq

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- 3.10 No destruction of declared chemical weapons took place in this State Party in 2013.
- 3.11 Iraq has 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 keep the Secretariat and Member States informed of all steps being taken towards the assessment and destruction of the declared stockpiles of chemical weapons.

No chemical weapons destruction activities took place in Iraq and the Syrian Arab Republic.

#### Libya

- 3.12 In April and May 2013, Libya destroyed the remaining bulk sulfur mustard (HD) stored in six transportation tanks. Libya also destroyed the Category 3 chemical weapons that it declared in November 2011.
- 3.13 Libya submitted detailed facility information for the RSDC, providing all information required under the Convention.

#### **Russian Federation**

- 3.14 In 2013, the Russian Federation provided the Secretariat with information regarding leaking munitions at the Kizner CWSF. A total of 12,406 munitions were reported to have been found to be leaking. All munitions newly discovered to be hazardous were placed in airtight containers and stored at this CWSF and subsequently destroyed between May and August 2013 under OPCW inspection team systematic verification.
- 3.15 The Russian Federation also notified the Secretariat about other activities at CWSFs and CWDFs—notably, the transfer of munitions within the same CWSF or from a CWSF to a CWDF. Notifications were also received regarding the suspension of destruction operations to allow for the servicing of the processing equipment and the discovery of damaged OPCW tags, as well as other operational information.

#### **United States of America**

- 3.16 In 2013, the United States of America submitted amendments to its initial declaration adjusting the chemical weapons inventory. In one declaration received, this State Party declared the completion of all chemical destruction activities at the Western Area Demilitarisation Facility (WADF), Hawthorne Army Depot, Nevada, and the non-contiguous Safety-Kleen (Aragonite) Inc. Destruction of the last chemical weapon at this facility occurred in 2002 and was verified by the OPCW inspectors at Tooele Chemical Agent Disposal Facility, and subsequently documented in the final inspection report in 2012.
- 3.17 Furthermore, the United States of America submitted an amendment to the detailed facility information (DFI) for the Prototype Test and Destruction Facility (PDTDF) at Aberdeen Proving Ground (APG), Maryland and three DFIs for the Pueblo Chemical Agent-Destruction Pilot Plant Explosive Destruction System (PCAPP EDS).
- 3.18 In addition, the United States of America also submitted to the Secretariat notifications related to the preparations for the destruction activities at the PCAPP and Blue Grass Agent-Destruction Pilot Plant (BGAPP).
- 3.19 In 2013, this State Party informed the Secretariat of the destruction of six chemical weapons munitions recovered between August 2012 and March 2013.
- 3.20 As a result, the United States of America destroyed 0.0205 MTs of Category 1 chemical weapons (unknown agent) at the RCWDF.

3.21 As at 31 December 2013, the United States of America had destroyed 24,921.015 MTs of its declared stockpile of Category 1 chemical weapons. In 2013, this State Party also informed the Secretariat of the destruction of six chemical weapons munitions recovered between August 2012 and March 2013; destruction took place in three operations in November 2013.

#### 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.<sup>12</sup> 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). In 2013, the Secretariat carried out 33 inspections at 29 CWPFs in three States Parties, which included 24 initial inspections at the CWPFs to be destroyed in the Syrian Arab Republic.
- 4.2 Consultations between Iraq and the Secretariat continued in 2013, 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.
- 4.3 As at 31 December 2013, 96 CWPFs had been declared to the OPCW. With regard to 66 of these, the Director-General had certified the completion of destruction or conversion. Forty-three had been destroyed, 23 had been converted for purposes not prohibited by the Convention, and the following CWPFs had yet to be certified as destroyed:
  - (a) Al-Muthanna CWPF, Iraq;
  - (b) Fallujah 1 CWPF, Iraq;
  - (c) Fallujah 2 CWPF, Iraq; and
  - (d) Fallujah 3 CWPF, Iraq.
- 4.4 In 2013, following the Council's adoption of the aforementioned decision (EC-67/DEC.7) on continued verification measures at converted facilities 10 years after the Director General's certification of their conversion, the Secretariat inspected one such facility in the Russian Federation and two in the United Kingdom of Great Britain and Northern Ireland.

<sup>&</sup>lt;sup>12</sup> See subparagraph 1(c) of Article III, and Article V of the Convention, as well as Part V of the Verification Annex.

#### **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. 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 2013 for all 14 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 2013, the Secretariat conducted eight OCW inspections in seven States Parties and four ACW inspections in one State Party. The discovery of approximately 2,160 OCWs was declared, while approximately 320 OCWs were reported as destroyed. A total of 188 ACWs in China were reported as newly recovered and/or identified, and 16 previously declared items were deleted from the declaration as they were found not to be ACWs. During the review period, 1,383 ACWs were reported as destroyed.
- 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 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 provisions of the Convention). The second destruction facility for chemical weapons abandoned by Japan on the territory of China, the Abandoned Chemical weapons Mobile Destruction Facility (ACW-MDF) at Shijiazhuang, continued operations in 2013. At the end of the period under review, 37,064 ACWs had been destroyed in China and approximately 12,600 ACWs had been declared at storage sites in China and were awaiting final destruction.

#### **Declared stocks**

5.5 Between EIF of the Convention and 31 December 2013, 16 States Parties declared OCWs. Of these, 11 States Parties<sup>13</sup> had declared 71,983 OCWs produced between

<sup>&</sup>lt;sup>13</sup> Australia, Austria, Canada, France, Germany, Italy, Japan, Poland, the Russian Federation, the Solomon Islands, and the United Kingdom of Great Britain and Northern Ireland.

1925 and 1946, while nine States Parties<sup>14</sup> had declared 63,067 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 2013, OCWs and/or suspected OCW discoveries were reported to the Secretariat by Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, and the United Kingdom of Great Britain and Northern Ireland.
- 5.7 Based on information received, six States Parties<sup>15</sup> still had OCWs or suspected OCWs on their territories at the end of the review period, and more than 36,500 OCWs had yet to be destroyed or otherwise disposed of.
- 5.8 As at 31 December 2013, approximately 50,000 items of ACWs had been discovered at over 70 locations within China. At the end of the period under review, of these, 37,064 ACWs had been destroyed in China and approximately 12,600 ACWs had been declared at storage sites in China and were awaiting final destruction.
- 5.9 In its initial declaration, the Syrian Arab Republic declared possession of two ACW items, namely, bombs with liquid fill suspected to be sarin (GB), along with two almost empty bombs. The Syrian Arab Republic stated that all items had been temporarily moved to a nearby military base and would be moved to a CWSF for verification by an OPCW inspection team and for safe storage until the final destruction of the munitions in accordance with the destruction plan.

#### Verification activities

- 5.10 In 2013, the Secretariat conducted eight OCW inspections in Belgium, Canada, France, Germany, Italy, the Netherlands, and the United Kingdom of Great Britain and Northern Ireland.
- 5.11 As previously agreed between China and Japan, nine temporary trust warehouses in the vicinity of Wuhan and six in the vicinity of Shijiazhuang are scheduled to be consolidated in Wuhan and Shijiazhuang respectively, for the purpose of destruction.
- 5.12 During the period under review, four ACW inspections were conducted. All of these were in relation to chemical weapons abandoned by Japan on the territory of China, including one inspection to verify destruction activities.

<sup>&</sup>lt;sup>14</sup> Belgium, France, Germany, Italy, the Netherlands, Slovenia, Switzerland, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.

<sup>&</sup>lt;sup>15</sup> Belgium, Canada, France, Germany, Italy, and the United Kingdom of Great Britain and Northern Ireland.

#### 6. INDUSTRY VERIFICATION

#### Overview

- 6.1 States Parties to the Convention undertake to declare facilities and activities related to chemicals that are listed in Schedules 1, 2, and 3 of the Convention's Annex on Chemicals, as well as OCPFs.
- 6.2 In 2013, the total number of facilities declared worldwide in connection with the Article VI verification regime at the end of the review period was 5,311, of which 4,901 were subject to systematic verification (see Table 5).

## TABLE 5: FACILITIES DECLARED PURSUANT TO ARTICLE VI AS AT<br/>31 DECEMBER 2013

Number of Declared Facilities										
Num	Number of States Parties Having Declared Article VI Facilities									
Regime	Schedule 1	Schedule 2	Schedule 3	OCPF	Total					
Declared	26	462	433	4,390	5,311					
Declarable	26	417	427	4,389	5,259					
Inspectable	26	192	399	4,284	4,901					
States Parties	22	37	35	80	80					

- 6.3 In 2013, the Secretariat verified the declared activities at 229 inspectable facilities and plant sites. The breakdown of inspections per verification regime changed slightly from that recorded for 2012, 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 147 OCPF plant sites were inspected in 2013. One uncertainty was recorded during 2013 Schedule 2 inspections. Additionally, an IRFA or IRFAs were recorded at 19 inspections, that is, at one Schedule 1 inspection, 13 Schedule 2 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 In 2013, two Schedule 2 and five OCPF inspections were carried out at plant sites that turned out to be non-inspectable.

#### **Transfers of scheduled chemicals**

#### Transfers of scheduled chemicals between States Parties

- 6.5 According to 36 notifications received concerning transfers that were due to take place in 2013, 13 States Parties were anticipated to be involved in 20 Schedule 1 transfers in 2013—two as sending States Parties and 13 as recipients; the total amount of chemicals that were to be transferred in 2013 was 6.14 grams. Notification had been given by both the sending and receiving States Parties of the 16 transfers that had been anticipated to take place in 2013. Of the 36 notifications relating to transfers in 2013, 18 were received within the 30-day notification period.
- 6.6 The annual declarations of past activities (ADPAs) for 2012 that were provided in 2013 indicate that 48 States Parties had transferred Schedule 2 chemicals in 2012, and

that the total volume of this trade came to approximately 5,200 MTs. Meanwhile, 122 States Parties transferred Schedule 3 chemicals in 2012, and the total volume of this trade was approximately 345,500 MTs.

#### Transfers of scheduled chemicals to States not Party to the Convention

6.7 There were no reported transfers of Schedule 1 or Schedule 2 chemicals to States not Party in 2013. Twelve States Parties had exported four Schedule 3 chemicals to three States not Party. Thionyl chloride accounted for 39% of the 1,721 MTs of Schedule 3 chemicals declared as having been exported to States not Party in 2012.

#### **OPTIMISATION OF THE ARTICLE VI INSPECTION REGIME**

6.8 Throughout 2013, the Secretariat continued its efforts to optimise the effectiveness and efficiency of the Article VI inspection regime.<sup>16</sup>

#### **Sequential inspections**

6.9 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 2013, the Secretariat continued the efforts to maximise the number of sequential inspections as a way of optimising the use of human and material resources. In this regard, 13 of the 15 States Parties that received four or more industry inspections in 2013 have advised the Secretariat that they concur with the use of sequential inspections on their territory. As a result of performing sequential inspectors, the Secretariat saved at least USD 335,000 in travel costs and 143 inspector weeks of work.

TABLE 0. SEQUENTIAL INSTECTIONS										
Sequential Inspections (On a Year-by-Year Basis)										
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8	16	23	26	26	37	42	40	47	48	57

TABLE 6:SEQUENTIAL INSPECTIONS

6.10 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, Chad, Ecuador, Georgia, Germany, India, Indonesia, Iran (Islamic Republic of), Jordan, Latvia, Lithuania, Oman, Pakistan, Portugal, the Russian Federation, Tajikistan, Ukraine, the United Arab Emirates, and Viet Nam.

<sup>&</sup>lt;sup>16</sup> Starting in 2012, the Secretariat also introduced changes to the process for handling industry inspection correspondence, in the interests of efficiency. 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).

#### Sampling and analysis

- 6.11 The Secretariat has continued to conduct Schedule 2 inspections using S&A on a routine basis, completing 63 such missions in 22 States Parties by the end of 2013 (see Table 7). In 2013, there were eight inspections involving S&A, four of which were initial Schedule 2 inspections.
- 6.12 As at 31 December 2013, 91% (20 out of 22) of the States Parties with inspectable Schedule 2 plant sites had received at least one mission involving S&A.

TABLE	27: S	AMPL	ING AN	ID ANA	LYSIS	AT SCI	HEDULE 2	2 PLAN'	T SITES
	Number of Inspections with S&A								
2006	2007	2008	2009	2010	2011	2012	2013	Total	
2	9	9	9	9	8	9	8	63	

Analytical data have been continually included in the OPCW Central Analytical 6.13 Database (OCAD), following validation by the Validation Group and approval by the Council. The Council decision to include the derivatives of scheduled chemicals was an important step towards improving the OCAD.

#### Non-inspectable OCPFs

In 2013, the number of inspections conducted at OCPF plant sites that proved to be 6.14 non-inspectable was five, higher than that recorded in 2012 (see Table 8).

	Number of inspections at non-inspectable sites									
2007	2008	2009	2010	2011	2012	2013				
13	5	5	11	6	4	5				

TABLE 8: INSPECTIONS AT SITES THAT ARE NON-INSPECTABLE

The causes for the five inspections at non-inspectable OCPF sites can be attributed to 6.15 errors in the interpretation of the OCPF declaration requirements. There was one inspection at a plant site where no chemical synthesis occurred. Four sites were found to have low production. One of these four was verified as declarable, but not inspectable. In the other three cases, the plant sites were below the declaration threshold.

#### Secretariat support to consultations on industry and other Article VI issues

6.16 Seven informal consultations were conducted in 2013, and were webcast to enable representatives of National Authorities to remotely observe consultation proceedings. States Parties undertook consultations on 10 outstanding issues, including transfer discrepancies, the SIX project, the update of the Declarations Handbook (2013 version) and the Secretariat's procedure for selection and planning of inspections at Schedule 1 facilities.

#### 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 Guinea-Bissau, Haiti, Saint Vincent and the Grenadines, Somalia, and Tuvalu on declaration issues.

#### Progress and status

- 7.4 During the year, the Secretariat received an initial declaration from Cabo Verde, Guinea-Bissau, the Syrian Arab Republic, and Tuvalu pursuant to Articles III and VI of the Convention. In addition, the Secretariat received an initial declaration from Saint Vincent and the Grenadines pursuant to Article III. This means that by the end of 2013, 185 of 190 States Parties had submitted their initial declarations in accordance with Article III and/or Article VI.
- 7.5 As at 31 December 2013, the following five States Parties had not yet submitted their required initial declarations: Haiti (23 April 2006), Somalia (28 July 2013), Timor-Leste (6 July 2003), Tonga (28 July 2003), and Vanuatu (15 November 2005). Two States Parties—Kiribati and the Solomon Islands—had yet to submit their initial declarations under Article VI (due dates being 6 November 2000 and 22 November 2004, respectively).

#### **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 requests for clarification (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.
- 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 (31 States Parties fell into this category). In 2013, the Secretariat held consultations with 14 States Parties with regard to the specific issue of the timeliness of submissions, and followed up with telephone calls and/or e-mail exchanges in the course of 2013. For the remaining 16 States Parties, bilateral meetings on this issue were not required as their recent submissions had been on time, or not more than 30 days late. The Secretariat did not have an opportunity for bilateral meetings on this issue in 2013 with one State Party.

#### Progress and status

- 7.9 As a result of the initiative described in paragraph 7.8 above, 11 of the 31 States that fell into that category submitted their ADPAs for 2012 on time. Of the remaining 20 States Parties, two had not submitted their ADPAs for 2012 but their previous ADPA had been on time. Ten States Parties had submitted their ADPAs for 2012 more than 30 days late; three States Parties had submitted their ADPAs 30 or fewer days late; and the remaining five States Parties had not submitted their ADPAs for 2012, and their last ADPAs had been more than 30 days late. 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-71/DG.7, dated 23 January 2013 and EC-73/DG.6, dated 24 June 2013) were submitted by the Secretariat in 2013. Some of the key developments are summarised below.

- 7.11 Overall, 91 States Parties (the same as in the previous year) submitted ADPAs for 2012 during 2013. Of these:
  - (a) Fifty-six (55 in the previous year) States Parties with declarable facilities or activities met the deadline of 31 March 2013 for submitting at least part of their required declarations.
  - (b) Twenty-seven (28 in the previous year) States Parties submitted their ADPAs for 2012 between 1 April and 31 December 2013.
  - (c) Eight (the same as in the previous year) States Parties submitted ADPAs for 2012 with no declarable facilities and activities (nil declarations).
- 7.12 By the end of the review period, the Secretariat had received ADAAs for 2014 from 48 States Parties (the same as in previous year). Of these:
  - (a) Nineteen States Parties met the deadline (2 October) for Schedule 1 chemicals and facilities and 36 States Parties met the deadline (1 November) for Schedule 2 and 3 chemicals and facilities. In total, 37 (39 in the previous year) States Parties met the deadline for submitting at least part of their required 2014 ADAAs.
  - (b) Nine (five in the previous year) States Parties submitted their required ADAAs for 2014 after the deadline, but before 31 December 2013.
  - (c) Two (four 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 2012 and ADAAs for 2014, most States Parties that provided such information quoted "logistical difficulties" as the main reason 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 68% 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. 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 The Third Review Conference encouraged the cluster on chemical industry and other Article VI issues to consult on the ways to resolve ambiguities and discrepancies, and called upon the States Parties and the Secretariat to continue working to identify the causes of discrepancies related to Article VI declarations. The Secretariat organised six regional and subregional courses in 2013, 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 general, transfer issues were an important topic on the agenda at all 2013 regional meetings of National Authorities.

#### Progress and status

- 7.17 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 2012 transfers. However, a small improvement has been noted: As at 31 December 2013, approximately 68% of transfers between States Parties had discrepancies, compared to 69% in 2011, 71% in 2010, and 74% in 2009.
- 7.18 With regard to Schedule 2 chemicals, 659 AND declarations of imports and exports for the year 2012 (compared to 601 in 2011) were received during the reporting period, equivalent to 529 (473 in 2011) transfers between States Parties.<sup>17</sup> Of these, 181 (210 in 2011) were above the declaration thresholds established by the Conference (C-7/DEC.14, dated 10 October 2002) at its Seventh Session. One hundred and sixteen of the 181 have discrepancies, and 74 of the 116 transfers were declared by just one of the two States Parties involved.
- 7.19 A total of 1,842 Schedule 3 AND declarations of imports and exports covering the year 2012 were received during the reporting period—equivalent to 1,338 transfers between States Parties. Five hundred and fifty (547 in 2011) of these transfers were above the declaration thresholds established by the Conference (C-7/DEC.14).

#### **Quality of declarations**

7.20 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.

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.

#### Follow-up actions taken

- 7.21 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.
- 7.22 During 2013, the Secretariat met with nine States Parties that have had transfer discrepancies in two or more of the last three years, but have not submitted AND 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 2013. As a result of the follow-up actions taken, three States Parties submitted AND declarations in 2013.
- 7.23 During 2013, 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. One State Party declared two additional Schedule 2 plant sites and amended AND declarations that had been identified as a result of enquiries made based on this analysis.

#### Progress and status

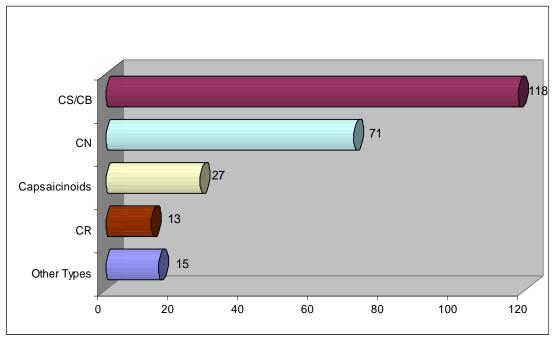
- 7.24 During 2013, the Secretariat carried out the AND trend analysis with all States Parties. As a result, six States Parties have been identified as relevant for inclusion in the AND trend analysis and have been approached. These six were among the eight identified as relevant in the 2011 project and, with regard to the two States Parties remaining from the 2011 project, the Secretariat has no outstanding issues.
- 7.25 As at 31 December 2013, six States Parties had had repeated (two or more) transfer discrepancies in the previous three years (2012, 2011, and 2010) and did not submit AND declarations for any of those years. Three States Parties previously reported in 2012 as being in this group submitted AND declarations in 2013, following consultations with the Secretariat.

#### **Status of required declarations**

#### Riot control agents (RCAs)

7.26 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, the Secretariat takes every opportunity—through bilateral consultations, follow-up correspondence, RFCs, and reminder letters—to highlight to the States Parties the need to update their declarations with respect to RCAs. The latest information on the number of States Parties that declared RCA by agent type is contained in Figure 2.

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



#### Handling of declarations

#### Clarification of declarations

- 7.27 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.
- 7.28 During 2013, 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 79 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 43 other Article VI-related RFCs and reminder letters.

#### Processing of declarations

7.29 In 2013, the Secretariat received 874 incoming documents, comprising 13,958 pages, from States Parties. These documents included 91 ADPA 2012, 48 ADAA 2014, and other verification-related documents. Four hundred and fifty-four documents, or 55.4%, comprising 2,615 pages were unclassified. However, the majority of the pages that were received continued to be classified: One hundred and twenty-two documents (1,965 pages) were classified as "OPCW Highly Protected", 133 documents (7,071 pages) as "OPCW Protected", and 135 documents (2,307 pages) as "OPCW Restricted". In other words, 44.6% of the documents

(56.5% in 2012), and 81% of the pages (81% in 2012) 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

- 7.30 Forty-four States Parties provided their original ADPAs for 2012 either solely or additionally in electronic format (as compared with 41 States Parties in the preceding year). A total of 30 States Parties submitted their original ADAAs for 2014 in electronic format (29 the year before).
- 7.31 The Secretariat has continued to provide States Parties with required support in relation to their submission of electronic declarations using EDNA. Furthermore, 10 representatives from nine States Parties attended the EDNA training courses that took place during the Eighteenth 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 2013.
- 7.32 In 2013, the Secretariat organised a fourth user-group forum for EDNA within the programme of the Fifteenth Annual Meeting of National Authorities. A detailed report on the forum has been made available to States Parties (S/1146/2014, dated 7 January 2014).
- 7.33 Also in 2013, the Secretariat observed continued interest in electronic declarations. The EDNA project team has continued to work on improvements to the tool. As a result of this work, a new version of EDNA (version 3.0) was finalised in December 2013. The new version includes a dedicated module for the declaration of Schedule 1 facilities and activities.

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

- 7.34 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 two surveys on the States Parties' implementation of this decision (S/948/2011, dated 6 July 2011) carried out in 2011 and in 2012 (S/1040/2012, dated 18 September 2012), a third survey was carried out in 2013 (S/1125/2013, dated 17 September 2013).
- 7.35 By December 2013, 17 States Parties had responded to one or both of the second or third surveys. With respect to the total response to the three surveys, 25% of States Parties responded. Of these 47 States Parties, 30 indicated that they had fully implemented the decision, six that they were in the process of implementation, and

11 that they had not yet implemented it. Of the 17 States Parties that had indicated that they were in the process of implementing or had not yet implemented the decision, four 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, while two indicated that they anticipated achieving implementation in 2014. Seven States Parties did not give any indication of a date for implementation.

7.36 In addition to the States Parties that responded to the first survey, one other State Party provided a submission under paragraph 5 of Article VII of the Convention in 2010; this submission indicated that the State Party in question had implemented this decision.

#### 8. TECHNICAL SUPPORT FOR VERIFICATION ACTIVITIES

#### Sampling and analysis for verification purposes

- 8.1 The OPCW Laboratory calibrated, prepared, and dispatched gas chromatography-mass spectrometry (GC-MS) instruments for eight S&A missions in 2013. In each case, the instrumentation was fully certified by the Office of Internal Oversight (OIO).
- 8.2 In preparation for inspections involving S&A, assistance and support were provided to the analytical-chemist inspectors. This included acquiring the chemicals needed to emulate process streams and consultations on the methods used for analysing the results.
- 8.3 A third confidence-building exercise for biomedical sample analysis was conducted in February 2013. Twenty-one laboratories from 17 Member States participated, with 17 laboratories returning reports. The results indicated a marked improvement over the first two exercises and highlighted the skill and expertise of Member States' laboratories.
- 8.4 A workshop on confidence-building exercises for biomedical sample analysis was held during the year to discuss the findings from the third exercise, and to initiate planning for a fourth exercise, which was to be conducted in February 2014.
- 8.5 Samples from the United Nations Mission to Investigate Allegations of the Use of Chemical Weapons in the Syrian Arab Republic were received at the OPCW Laboratory, where they were extracted (if necessary) and split into multiple aliquots. The aliquots of both the environmental and biomedical samples were sent to partner laboratories for analysis.

#### **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 Thirty-Second, the holding of the Thirty-Third, and the start of the Thirty-Fourth OPCW Proficiency Tests. The particulars of these tests are provided in Table 9.

TEST	S		
	Thirty-Second Proficiency Test	Proficiency lest	
Sample Preparation	VERTOX, India	RCID, China	Republic of Korea
<b>Evaluation Results</b>	LAVEMA, Spain	DSO, Singapore	Dstl, United
			Kingdom
Number of	28	20	26
Nominations <sup>18</sup>			
Results	14 As	4 As	Available in 2014
	2 Bs	2 B	
	4 C	2 Cs	
	1 D	3 Ds	
	6 failures	3 failures	
	1 trial test	6 trial tests	

TABLE 9:SUMMARY OF THE THIRTY-SECOND, THIRTY-THIRD,<br/>AND THIRTY-FOURTH OFFICIAL OPCW PROFICIENCY<br/>TESTS

8.7 At the end of the reporting period, there were 21 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 2013.

#### **OPCW Central Analytical Database (OCAD)**

- 8.8 The Validation Group met twice in 2013 and technically approved 518 new analytical data. These data, and some from 2012, were processed and forwarded to the Council for its approval.
- 8.9 Over five hundred new analytical data approved by the Council were incorporated into the new version of the OCAD (V.16\_2013), which was certified by the OIO and released to States Parties in the first quarter of 2014. The OCAD (database/extracted analytical data) was issued 12 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 2013, are reflected in Table 10.

18

Including sample preparation/evaluation laboratories.

	DA	TABA	SE						
	Nui	mber o	f Analy	tical D	ata in 1	the OC	AD		
	(Status at the End of Each Year)								
	2007	2008	2009	2010	2011	2012	2013		
MS <sup>19</sup>	3563	3950	4183	4382	4823	4957	5248		
$IR^{20}$	899	925	936	936	964	975	983		
NMR <sup>21</sup>	1391	1391	1391	1391	1391	1391	1391		
$GC(RI)^{22}$	3159	3324	3494	3649	4137	4253	4485		
	Nur	nber of	chemic	cal spec	ies in tl	ne OCA	$D^{23}$		
		(Stat	tus at th	e end o	f each	year)			
MS	2846	3049	3214	3321	3657	3731	298		
IR	671	687	698	698	716	3903	298		
NMR	298	298	298	298	298	723	3560		
GC (RI)	2655	2747	2894	3018	3470	729	3737		

## TABLE 10:CONTENTSOFTHEOPCWCENTRALANALYTICALDATABASE

#### **OPCW** Laboratory accreditation

- 8.11 Two internal audits, to cover three areas of activities in regard to the accreditation of the OPCW Laboratory (the official OPCW proficiency tests; the calibration and testing of analytical inspection equipment; and OCAD), were conducted by the OIO in 2013, confirming that the Laboratory is following ISO<sup>24</sup> 17025 and 17043 standards.
- 8.12 The audit by the Dutch *Raad voor Accreditatie* (RvA) was carried out successfully in 2013. Minor non-conformities were noted, primarily related to documentation. Corrective actions were taken and the accreditation was granted in January 2014.

#### Analytical equipment

8.13 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.

 $<sup>^{19}</sup>$  MS = mass spectrometry.

IR = infrared.

NMR = nuclear magnetic resonance spectrometry.

GC(RI) = gas chromatography-retention indices.

<sup>&</sup>lt;sup>23</sup> Number of distinct chemicals represented in the OCAD.

<sup>&</sup>lt;sup>24</sup> ISO = International Organization for Standardization.

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#### Annex 2

## LIST OF DESIGNATED OPCW LABORATORIES<sup>25</sup>

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.	Iran (Islamic Republic of)	Defense Chemical Research Laboratory*	3 August 2011
10.	Netherlands	TNO Defence, Security and Safety	17 November 1998
11.	Republic of Korea	Chemical Analysis Laboratory CB Department, Agency for Defence Development	3 August 2011
12.	Republic of Korea	The Chemical Defence Research Institute	4 September 2012
13.	Romania	Chemical Analysis and Testing Laboratory Scientific Research Center for CBRN Defense and Ecology*	4 September 2012
14.	Russian Federation	Laboratory for Chemical and Analytical Control Military Research Centre	4 August 2000
15.	Singapore	Verification Laboratory Defence Medical and Environmental Research Institute, DSO National Laboratories*	14 April 2003
16.	Spain	Laboratorio de Verificación de Armas Químicas (LAVEMA), Instituto Tecnológico, La Marañosa	16 August 2004
17.	Sweden	FOI, CBRN Defence and Security Swedish Defence Research Agency	17 November 1998
18.	Switzerland	Spiez Laboratory Swiss NBC Defence Establishment	17 November 1998
19.	United Kingdom of Great Britain and Northern Ireland	Defence Science and Technology Laboratory Chemical and Biological Systems, Porton Down	29 June 1999
20.	United States of America	Edgewood Chemical and Biological Forensic Analytical Center	17 November 1998
21.	United States of America	Lawrence Livermore National Laboratory	14 April 2003

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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.