



OPCW

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NOTE BY THE TECHNICAL SECRETARIAT
REVIEW OF THE OPERATION OF THE CHEMICAL WEAPONS CONVENTION
SINCE THE FIRST REVIEW CONFERENCE

1. INTRODUCTION

- 1.1 The Director-General, in accordance with the practice established at the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (hereinafter “the First Review Conference”), herewith submits this Note, with background material, prepared by the Technical Secretariat (hereinafter “the Secretariat”) for 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”), convened in accordance with paragraph 22 of Article VIII of the Chemical Weapons Convention (hereinafter “the Convention”). The Note updates information submitted by the Director-General to the Open-ended Working Group for the Preparation of the Second Review Conference established by the Executive Council (hereinafter “the Council”).¹
- 1.2 The introductory comments by the Director-General present his assessment of what the OPCW has accomplished in 10 years of treaty implementation, with particular emphasis on the years since the First Review Conference in 2003. Then, looking at the challenges that lie ahead, the Director-General gives his recommendations and views to the States Parties on how these challenges can best be met.
- 1.3 The background information on the operation of the Convention since the First Review Conference (Section 3 of this Note) covers the following areas:
- (a) the role of the Convention in enhancing international peace and security;
 - (b) measures to ensure the universality of the Convention;
 - (c) developments in science and technology;
 - (d) general obligations and related declarations;

* Reissued in English for technical reasons

¹ WGRC-2/S/1, dated 27 November 2007, and Corr.1, dated 25 January 2008.



- (e) national implementation;
- (f) consultations, cooperation, and fact-finding;
- (g) assistance and protection against chemical weapons;
- (h) economic and technological development;
- (i) Articles XII to XV and final clauses; and
- (j) functioning of the OPCW.

2. INTRODUCTORY COMMENTS BY THE DIRECTOR GENERAL

- 2.1 Ten years after its entry into force, the Convention is widely appreciated as a unique multilateral agreement that, alone among treaties of a similar nature, effectively bans an entire category of weapons of mass destruction, for all countries and in a non-discriminatory fashion and under strict international control. To its great credit, the Treaty contains a comprehensive and operative agenda of disarmament, non-proliferation and international cooperation and assistance, and it establishes a functional and effective multilateral verification regime. The States Parties as well as the individual delegates and experts and the chemical industry representatives actively involved in its negotiation deserve due recognition for such a far-sighted achievement.
- 2.2 As the Organisation for the Prohibition of Chemical Weapons (the OPCW) prepares for its Second Review Conference, it can take stock of 10 years of successful implementation of the Convention and can look forward positively to the further strengthening of its primary programmes. The following comments and observations are made to facilitate the States Parties' review of the operations of the Convention. First, we look back at the achievements of the OPCW, and second, we address how future challenges can be met.

WHAT THE OPCW HAS ACCOMPLISHED

- 2.3 The OPCW has become a respected international organisation that is seen as an example of effective multilateralism in the field of disarmament and non-proliferation. It has demonstrated that the concept of global disarmament under strict international verification can be made to work. The high standing gained by the OPCW in its short existence was made amply evident during the year 2007 that marked the tenth anniversary of entry into force of the Convention and of the creation of the Organisation. The Second Review Conference will offer another opportunity to review the achievements of the Convention since the First Review Conference, and addressing, at the same time, the challenges that lie ahead.
- 2.4 The regime that the Convention represents is becoming truly global. The universality action plan, called for by the First Review Conference, has led to an increase in membership to currently 183 States Parties. At the time of the First Review Conference in 2003, there were 40 States not Party to the Convention. On the eve of the Second Review Conference, there remain only 12, and there is a good chance that some of these States will soon join. This broad participation in the Convention

demonstrates a consensus that chemical weapons are illegal, no matter what the circumstances.

- 2.5 The completion of chemical weapons disarmament by the Convention's timelines is at the core of the current phase of implementation. It is encouraging to note the strong political commitment to the Convention's disarmament objectives and the progress achieved, in some cases with the invaluable assistance of other States Parties, by all the countries that have declared chemical weapons as well as old and/or abandoned chemical weapons or chemical weapons production facilities (CWPFs). In fact, one possessor State Party has already completed the destruction of its entire stockpile and the remaining five have all complied in timely fashion with the intermediate destruction deadlines approved for them by the Conference of the States Parties (hereinafter "the Conference"). Of particular importance is the recognition by all possessor States Parties of their solemn obligation under the Convention to complete the elimination of their chemical weapons stockpiles by 29 April 2012.
- 2.6 As at 31 December 2007, OPCW inspectors had verified the destruction of more than 25,411 metric tonnes, or the equivalent of 36.53%, of the approximately 70,000 metric tonnes of Category 1 chemical weapons initially declared by Albania, A State Party, the Libyan Arab Jamahiriya, India, the Russian Federation, and the United States of America, as well as 915 metric tonnes (or 51.80%) of the Category 2 chemical weapons declared by Albania, India, the Libyan Arab Jamahiriya, and the Russian Federation. In addition, all the States Parties that declared Category 3 chemical weapons—A State Party, India, the Libyan Arab Jamahiriya, the Russian Federation, and the United States of America, have completed the destruction of these weapons. Five of the six possessor States Parties requested and have been granted extensions in their destruction deadlines.
- 2.7 On 11 July 2007, Albania became the first State Party to completely destroy its declared chemical weapons stockpile, in accordance with the Convention. It did so in spite of facing serious technical difficulties beyond its control. For that reason, it marginally missed the 10-year deadline, but it resolutely pursued the task and, with the help of a number of other States Parties, was able to complete the destruction of its stockpile. In handling this issue, the Council showed wisdom and a good sense of balance, confirming the ability of the OPCW to respond flexibly but firmly even to extraordinary situations.
- 2.8 The two major possessors—the Russian Federation and the United States of America—have been granted extensions until April 2012 to complete their destruction programmes—the latest date permissible under the Convention.
- 2.9 The Russian Federation's destruction programme has gained further momentum with a number of new facilities that have recently come online. Two more CWDFs are planned to be commissioned in 2008. As at 31 December 2007, Russia had already destroyed 24.4% of its chemical weapons. It has expressed confidence that it will achieve the destruction of 45% of its declared stockpile in 2009 and has stated its determination to destroy 100% of its chemical weapons by 29 April 2012. Notwithstanding the fundamental principle of the Convention, according to which each possessor State Party has the exclusive responsibility of destroying all its

declared chemical weapons, the Russian destruction programme has received significant financial support from the G8 and individual Member States of the OPCW.

- 2.10 For its part, as at 31 December 2007, the United States of America had destroyed 50.7% of its declared stockpile and is thus ahead of its second intermediate deadline. In the United States, five CWDFs are fully operational, three have completed their work, and two more are planned to be built and commissioned in the future. The United States of America has committed substantial financial resources to its chemical weapons destruction programme. Despite some delays in the implementation of the latter, it has remained fully committed to its obligations under the Convention. The United States of America has repeatedly stated that the destruction of chemical weapons in a safe and environmentally friendly manner is an express policy imperative in this field.
- 2.11 All the other possessor States Parties have made significant progress. As at 31 December 2007, India had already destroyed 93.1% of its chemical weapons stockpile and is expected to reach its 100% target by April 2009. A State Party has accomplished 96.3% destruction of its aggregate inventory and is expected to finish the process by the end of 2008. The Libyan Arab Jamahiriya's entire chemical weapons stockpile is expected to be destroyed by the year 2011, following the extension of its intermediate and final destruction deadlines, as per its request. It informed the Council that it was finalising arrangements for setting up the requisite destruction facility for completing this task within those deadlines.
- 2.12 Of the 65 chemical weapons production facilities (CWPFs) declared by 12 States Parties, 94% have either been destroyed or converted for peaceful purposes, in accordance with the Convention. The remaining 6% are one facility to be destroyed and three facilities to be converted. The converted facilities and the facilities still to be destroyed or converted (23 in total) remain under OPCW verification in accordance with Article V of the Convention.
- 2.13 Progress has also been made with the destruction of old and abandoned chemical weapons (OACWs):
 - (a) China and Japan have indicated that they have established a joint implementing body under the Haerba-ling project in Jilin Province for the destruction of chemical weapons abandoned by Japan in China's territory (ACWs). They have regularly provided information on recoveries of such ACWs and on related planned operations and have recently announced the introduction of a mobile system to accelerate their destruction. All these developments are good examples of cooperation between the two States Parties and should lead to an early start of the destruction of ACWs in China.
 - (b) Other States Parties with old chemical weapons (OCWs) or ACWs continue to declare new discoveries and to destroy their OCWs/ACWs in accordance with the requirements of the Convention.
- 2.14 An additional key achievement of the OPCW is the establishment of an effective and reliable global verification system that is supported by all 183 States Parties. This system provides assurances on both the disarmament process and the legitimate

chemical-industry activities which are of direct relevance to the non-proliferation of chemical weapons. Since the start of operations, OPCW inspection teams have carried out more than 3,000 inspections at over 1,080 military and industrial sites in 80 countries. The OPCW systematically verifies the destruction of chemical weapons stockpiles and the destruction or conversion for peaceful purposes of former CWPfFs. At the same time, a system of industry verification through data monitoring and on-site inspections that provides additional assurances of non-proliferation has been set up, as required under Article VI of the Convention.

- 2.15 Between the entry into force of the Convention and 31 December 2007, the OPCW had conducted 182 inspections of Schedule 1 facilities. With the exception of a new Schedule 1 facility first declared in December 2007, all Schedule 1 facilities have been inspected many times, with an average of 6.7 inspections per facility. In the same time-frame, 405 inspections of Schedule 2 facilities were conducted, including 161 subsequent re-inspections. This represents inspection coverage of 250% of all Schedule 2 facilities, and an average inspection frequency of 2.5 inspections per facility over a period of 10 years. Two hundred eighteen inspections have been conducted at Schedule 3 facilities, with inspection coverage of 50% of all declared Schedule 3 facilities. This distribution reflects an adequate level of inspections for the three schedule categories. The OPCW has inspected a total of 521 (around 11%) of the more than 4,560 inspectable other chemical production facilities (OCPFs).
- 2.16 OCPF inspections started in April 2000 and the number of OCPF inspections has increased yearly since 2001. This notwithstanding, for a variety of reasons, the inspection effort carried out so far in this category still does not provide a sufficient level of assurances for non-proliferation purposes:
- (a) First, when compared with the high and evolving number of declared OCPFs, the percentage of inspections remains comparatively very low. To better appreciate this problem, it must be recalled that a good quantity of declared OCPFs have technological features (such as multipurpose process equipment and flexible piping) that could be easily and quickly re-configured for the production of chemical weapons. This makes such facilities highly relevant to the object and purpose of the Convention.
 - (b) Second, as a result of the site-selection methodology being applied, Member States with fewer declared plant sites have received proportionately significantly more inspections than Member States with a larger number of facilities. This imbalance reflects the fact that, in the absence of a decision by the Conference on paragraph 11 of Part IX of the Verification Annex to the Convention, up to now site selection has taken place using an algorithm that includes only two of the three factors enumerated in the said provision² and gives all Member States with declared OCPFs equal chances of receiving inspections, irrespective of how many exist in their territory.

² The algorithm was initially introduced by the Secretariat in 2000 and incorporates only the factors mentioned in subparagraphs 11(a) and (b) of Part IX of the Verification Annex to the Convention (hereinafter “the Verification Annex”), since these fall within its competence. Subparagraph 11(c) requires the agreement of States Parties.

- (c) Third, the Secretariat has had to rely on the restricted data included in the declarations in accordance with the Convention. On occasions, such data have been provided or updated late. These limitations have led to the inspection of a number of OCPFs that were either not as relevant as might have been expected or not inspectable at all, with the consequent waste of time, money and inspector resources.
- 2.17 In 2007, the Secretariat started using sampling and analysis at Schedule 2 plant sites. Under the Verification Annex, such a method is mandatory for this category of industrial sites, and may be undertaken also for inspections of Schedule 3 plant sites and OCPFs. Its initial use has demonstrated that the equipment and procedures developed by the Secretariat work well in a wide range of conditions and that OPCW inspectors have been trained appropriately for the task. During the start-up period, inspectors, as at 31 December 2007, had already carried out sampling and analysis at 11 Schedule 2 plant sites—in 11 different States Parties. They did so in both “open” and “blind” modes, as determined by the inspected State Party. The “open” mode allows for the clarification of ambiguities that might result during the process of identification of different chemical compounds by using databases other than the OPCW Central Analytical Database (OCAD). The use of sampling and analysis in Schedule 2 inspections has also helped to maintain the Secretariat’s readiness to conduct other types of inspections that in accordance with the Convention may make use of this method.
- 2.18 Challenge inspections are a key mechanism of the Convention for purposes of verification and deterrence; consequently, it is necessary for the Secretariat to maintain continuous readiness for carrying them out, should the eventuality arise in accordance with the Convention. The need for such readiness was expressly asserted by the First Review Conference. As a result, the Secretariat has held, with the valuable support of Member States on occasion, regular exercises to test its ability to undertake this type of inspection. The exercises have shown the preparedness of the Secretariat and the technical feasibility of the mechanism. Additionally, they have served to identify pending relevant standing arrangements required by the Convention from the Member States, for example, issuing visas to designated inspectors, designating point(s) of entry, and other arrangements to support the inspections.
- 2.19 The Verification Information System (VIS) is an important tool for planning inspections and for analysing verification data. Since the First Review Conference, significant progress has been made with its implementation. Following provisional approval by Security Audit Team IV (SAT-IV), the remaining modules for processing Article VI declarations have been placed on the Secretariat’s security-critical network, and all the annual Article VI declarations of past activities for 2006 have been evaluated and validated with the use of VIS-Industry. Eight States Parties have already submitted their Article VI declarations in electronic form. The Secretariat is actively supporting and encouraging National Authorities to avail themselves of this possibility, with a view to facilitating the transition towards a more efficient declaration management system.
- 2.20 The full implementation of the Convention by Member States is indispensable to ensuring both compliance and its effectiveness. The success of its implementation

depends on establishing a comprehensive verification regime, not only in relation to disarmament but also to non-proliferation.

- (a) For the proper functioning of the Convention's non-proliferation system, it is essential that all States Parties establish and enforce the administrative and legislative measures required by the Treaty, as they are obliged to do under its Article VII. These measures give legal power to the prohibitions of the Convention at the national level, ensuring the implementation of the basic non-proliferation obligations of Article VI and, more specifically, the submission of declarations, the receipt of inspections and the required controls on transfers of scheduled chemicals. The adoption and enforcement of comprehensive and effective national implementation measures also helps to build confidence among all States Parties, which rely on the robustness and completeness of the national implementation systems of all the other States Parties.
- (b) The First Review Conference provided a major impetus to the efforts to promote the national implementation of the Convention by recommending an Action Plan to boost effective national implementation by all States Parties. The Secretariat has worked actively in pursuance of the Action Plan, supporting Member States through a wide range of activities, including technical assistance visits, advice on national legislation, and the promotion of better knowledge of the Convention by lawmakers. In certain cases, the technical assistance visits have been conducted with the support of individual Member States, or the latter have provided bilateral support on their own.
- (c) Since the First Review Conference, there has been a steady increase in the number of States Parties that have initiated administrative measures and commenced the process of enacting the appropriate legislation, including penal legislation. The number of States Parties that have enacted comprehensive legislation has increased from approximately 50 in October 2003 to 81 at present. Another 44 States Parties have laws in place that cover some key areas. The number of States Parties that have yet to enact legislation and adopt administrative measures needed for comprehensive implementation of the Convention is currently 102. The number of States Parties that had designated or established their National Authority—a step required under the Convention—had increased by March 2008 to 176, or 96% of all States Parties.

2.21 International cooperation and assistance, as envisioned in Articles X and XI of the Convention, are matters of great importance to the OPCW, particularly for Member States whose economies are developing or in transition. The OPCW is making further efforts towards the full implementation of both provisions.

- (a) Since the First Review Conference, the Secretariat has continued to enhance its assistance and protection activities. In pursuance of paragraph 5 of Article X, it has created a protection databank (available to Member States through the internet), which has been under authentication since the end of 2007. The Secretariat has responded positively to requests by States Parties for programmes to develop and improve their capacity to protect themselves

against chemical weapons. Acting under paragraph 8 of the same Article, the Secretariat continues to maintain its ability to manage international response by procuring equipment, organising training related to the delivery of assistance, and conducting exercises for its Assessment, Coordination, and Assistance Team (ACAT). The Secretariat, in cooperation with Member States, has also trained representatives of States Parties in order to familiarise them with different types of equipment and has encouraged regional cooperation by organising relevant workshops and courses. On their part, in accordance with paragraph 7 of Article X, 73 Member States are actively involved in providing assistance through the Organisation.

- (b) As established under the Convention, the OPCW has continued to enhance its mechanism to coordinate the delivery of emergency assistance to States Parties in the case of an attack or the threat of an attack with chemical weapons. The Secretariat has been working to respond with programmes tailored to the requirements of Member States. Examples of successful projects in this area include the Joint Assistance exercise conducted in 2005 in Ukraine and the TRIPLEX 2006 exercise in Finland. States Parties are also keen to build their national capacity to deal with threats or actual incidents involving the use of chemical weapons or toxic chemicals.
- (c) With the aim of effectively advancing international cooperation under Article XI of the Convention, the OPCW has designed a broad range of programmes that focus on promoting compliance with the Treaty as well as the enhancement of national capacities in the peaceful application of chemistry. Particularly successful have been the programmes providing courses to develop analytical skills, the support to conferences relevant to the Convention, the granting of funds for research projects, and the placement of interns at various institutions around the world. The Associate Programme is widely recognised as an outstanding means for providing chemists and chemical engineers from Member States with economies that are either developing or in transition with a better understanding of the Convention and with expertise in chemicals management, modern chemical operations, and chemical safety.
- (d) Many of the Secretariat's programmes have benefited from generous voluntary contributions by the European Union (EU)³ and individual Member States in the form of financial support or by other means, such as making experts available for specific projects. These contributions remain an important source of funding for supplementary programmes not covered by the OPCW's regular budget.

2.22 Although the OPCW is not an anti-terrorist organisation and can operate only within the strict limits of its well-defined competence, there is a clear expectation in the international community that it will contribute to global efforts in this field. Such belief has been reflected in several developments:

³ Through three Joint Actions in support of OPCW activities adopted in the framework of its strategy against the proliferation of weapons of mass destruction.

- (a) The concern about the possible use of chemical weapons by terrorists and other non-state actors has both encouraged adherence to the Convention and inspired an increasing number of requests for support in terms of capacity building under the provisions of Article X.
- (b) Additional worry has arisen from recent instances in which a non-scheduled chemical (chlorine) was used by terrorists, a development that received the immediate and strong condemnation of the Council and the Director-General.
- (c) References to the Convention and the OPCW are also to be found in relevant resolutions of the United Nations (UN). In such a context, the OPCW has supported the work of the Committee established by the UN Security Council in its mandatory resolution 1540 (2004), which seeks to deprive terrorists from obtaining access to weapons of mass destruction. The Global Counter-Terrorism Strategy adopted on 8 September 2006 by the UN General Assembly (UNGA) expressly refers to the contribution that could be made by the OPCW.
- (d) OPCW Member States have continued with their discussions in the framework of the Open-ended Working Group on Terrorism and, on occasions such as the Industry Protection Forum held in the context of the OPCW Tenth Anniversary, have used the OPCW as a venue for consultation and cooperation in regard to the security of chemical facilities, as well as a venue for allowing experts to exchange information and discuss best practices.

2.23 The implementation of the Convention has benefited greatly from the OPCW reaching out to other relevant international organisations and institutions.

- (a) The support and advice of the scientific community has been particularly important. Most significantly, the Director-General has been able to draw upon the advice of the Scientific Advisory Board (SAB)—now comprising 25 eminent scientists and engineers with a wide range of technical expertise. The SAB's advice relates to all areas of implementation that require technical expertise, such as verification, assistance, and protection and identifying opportunities to foster international cooperation in the peaceful uses of chemistry.
- (b) The OPCW has gained equally from its interactions with other international organisations in capacity building for peaceful uses of chemistry, support for implementation, and assistance and protection against chemical weapons. Such links were encouraged by the First Review Conference and have included organisations in the UN system, regional organisations,⁴ specialised technical organisations as appropriate, associations in the chemical industry,⁵ and the International Union of Pure and Applied Chemistry (IUPAC). Cooperation and coordination of this type allows for a better use of available

⁴ Such as the African Union, the European Union, or the Organisation of American States.

⁵ Including the International Council of Chemical Associations (ICCA), the European Chemical Industry Council (CEFIC), and other subregional and national chemical associations.

resources, avoids duplication of efforts, and benefits from the synergies between the OPCW and other partners.

- (c) Collaboration with the chemical industry and IUPAC has also enabled the OPCW to promote the wider issues of raising awareness and encouraging treaty compliance, including self-governance, as represented in such measures as the chemical industry's Responsible Care[®] initiative or IUPAC's endeavours to prevent the misuse of chemistry by developing educational tools and professional codes of conduct. The Organisation has held meetings in the context of its tenth anniversary and of the preparation for the Second Review Conference, with the aim of offering an opportunity for chemical industry associations to present their views and better acquaint themselves with the advance of the OPCW.
- 2.24 The Secretariat is fully committed to the functions entrusted to it in Article VIII of the Convention. To that end, it has continued to enhance the efficiency and effectiveness of its programme delivery and to implement its work using a results-based approach. All this is reflected in its ability to sustain for the last three consecutive years a larger number of programme activities in the verification and international cooperation areas with zero nominal-growth in the OPCW's budget. The OPCW financial situation is stable, a condition achieved in spite of the fact that some assessed contributions have not been received on time or in full. The Secretariat has implemented the tenure policy of the OPCW as per its regulatory framework and the decisions of the Conference, privileging excellence and with due regard to geographical and gender representation. A great deal of progress has been made in streamlining and completing procedures and, as appropriate, in harmonising them with the UN common system.
- 2.25 The support from the Host Country has greatly facilitated the successful establishment and consolidation of the Organisation in the Netherlands. Of particular value has been the strong backing of the Dutch Government and the Municipality of The Hague, expressed in political terms and through voluntary contributions. The Host Country has worked closely with the Secretariat in the endeavours related to the implementation of the Headquarters Agreement and in the Host Country Committee created by the Conference at its Eleventh Session. The excellent links between the OPCW and the Host Country had their symbolic climax at the unveiling, by Her Majesty Queen Beatrix of the Netherlands, of the permanent memorial dedicated to all victims of chemical weapons, during a solemn ceremony held on 9 May 2007. This was held at OPCW headquarters in the framework of the tenth anniversary of the entry into force of the Convention and the establishment of the OPCW.
- 2.26 During 2007, in the framework of the tenth anniversary, around 30 national and international events took place across the world, including a Symposium on the Second Review Conference of the Convention, organised in Berlin in April 2007 by the European Union Presidency. A High-Level Meeting, organised by the Netherlands and Poland, was held in the UN headquarters in New York on 27 September 2007. The meeting was co-chaired by the Foreign Ministers of the Netherlands and Poland and included the participation of the UN Secretary-General and a large number of Foreign Ministers and other high representatives from UN Member States, including some from countries that have not yet joined the

OPCW. All these important activities eloquently demonstrated the high regard of the international community for the Convention and the OPCW, and the extent and strength of the support it enjoys around the globe.

CHALLENGES THAT LIE AHEAD

- 2.27 The experience gained in 10 years of implementation of the Convention and delivery of OPCW programmes, forms a sound basis for addressing the significant challenges that lie ahead. These challenges are as much a result of the stringent requirements of the Convention itself as they are the consequence of changes in the environment within which the OPCW operates (such as security, science and technology, and the chemical industry).
- 2.28 Completing the destruction of their chemical weapons by the deadlines of the Convention constitutes a solemn legal obligation for the possessor States Parties. Some 63% of the declared Category 1 chemical weapon stockpiles are yet to be destroyed in the remaining four years. All remaining possessor States Parties will need to keep up the momentum and spare no effort to that end.
- 2.29 The challenge is particularly significant for the Russian Federation and the United States of America, each of which still has a substantive amount of Category 1 chemical weapons to destroy. It should be stressed that both major possessor States Parties have fully complied with the revised intermediate deadlines established for them by the Conference and continue to give evidence of being committed to the goals and objectives of the Convention. However, in light of the volume yet to be destroyed, the fast-approaching deadline, and the difficulties that might arise from safety and environmental and financial issues, it is very difficult to estimate with precision and to presume whether they will be able to fulfil their obligation on time.
- 2.30 There will be a need for the OPCW, therefore, to continue closely monitoring the progress being made by both countries, with full awareness that the Treaty provisions, Article VIII in particular, provide for a variety of options to deal with the matter as it develops. If the future situation warrants it, States Parties may even wish to consider the option of calling, at an appropriate date close to 2012, a Special Session of the Conference in order to review the status of destruction and agree on whatever action they might deem necessary.
- 2.31 As part of monitoring the destruction process, the Conference has already decided on a framework for visits to be made by the Chairperson and members of the Council to CWDFs in those States Parties that have obtained extensions beyond the original 10-year destruction deadline (C-11/DEC.20, dated 8 December 2006). These visits have the purpose of addressing any questions or concerns about a State Party's plans to fulfil its destruction obligations by the extended deadline. They foster transparency and the building of confidence and help in better evaluating the progress being made. The first such visit was conducted in October 2007 at the Anniston Chemical Agent Disposal Facility in the United States of America, and a similar one is to take place in the Russian Federation in 2008 at the latest.
- 2.32 One major conclusion of the Council's first visit is that political attention should continue to be paid equally to the overall performance of existing destruction facilities

and to the progress in the construction and operation of planned new facilities, since all of these elements are critical to the ability of the State Party concerned to meet the extended deadline. The timely construction and functioning of all the planned CWDFs in the two major possessor States Parties will be crucial to their ability to meet the final deadline. This, in turn, requires their opportune allocation of the necessary financial resources. In this sense, the continuation of ongoing voluntary international financial support to the Russian Federation seems a desirable supportive addition.

- 2.33 As new CWDFs are built and come into operation, the Secretariat will continue to make certain that the facility agreements and the verification plans that it finalises with the possessor States Parties and submits to the Council for approval, are fully consistent with its established practice, ensuring the unity and integrity of the verification process, as envisioned in Article IV of the Convention.
- 2.34 At the same time that the destruction of declared chemical weapons stockpiles approaches completion, the OPCW will gradually shift its emphasis from being mainly a disarmament organisation to being primarily a non-proliferation organisation that, together with its regular verification programme, also dedicates particular attention to matters such as the non re-emergence of chemical weapons, monitoring developments in industry and science, and compliance with the treaty provisions on the transfer of chemical weapons and on not assisting in acquiring them. This projected shift in the OPCW's focus will coincide with the growing expectations of the international community with regard to effective verification and comprehensive national implementation. It will be important for the Secretariat and the OPCW as a whole to be ready for this new stage in the life of the Organisation.
- 2.35 In regard to industry verification, it will be important to continue developing the regime in a way that balances the underlying risks and, at the same time, ensures adequate levels of verification of the four categories of inspectable chemical facilities. Verification activities need to maximise the experience gathered in previous years and to adapt to the changing environment in the chemical industry, the advances in science and technology, and the cross-over between chemistry and biology. The Second Review Conference will provide the necessary forum for considering the future enhancement of the industry-verification regime from a wider policy-making perspective.
- 2.36 The recent use of sampling and analysis at Schedule 2 plant sites has clearly demonstrated its utility and feasibility. In discharging its verification obligations, the Secretariat has seen clear advantages in being able to operate its GC-MS instrument in "open" mode and intends, in due course, to make its experience with sampling and analysis available to the policy-making organs. The Director-General will also take into account the advice from the SAB's temporary working group on sampling and analysis.
- 2.37 As mentioned in paragraph 2.16, for a number of reasons the Secretariat remains apprehensive about the present insufficient level of verification in relation to OCPFs.
- (a) In order to address the problems arising from the low number of inspections, it is desirable that the trend to increase the yearly figure should continue,

naturally bearing in mind the limitations imposed by the Convention as to the maximum number of different industry inspections to be received by Member States each year.

- (b) For the purpose of achieving a more balanced distribution of inspections and a better use of resources, as already announced to the Conference and the Council (S/641/2007, dated 25 May 2007; and Corr.1, dated 4 June 2007), and as an interim measure, a modified site-selection methodology is being used by the Secretariat since 1 January 2008. Ultimately, however, the definitive OCPF site-selection mechanism can be established only when a decision is taken on the weighting factor mentioned in subparagraph 11(c) of Part IX of the Verification Annex, i.e., proposals by States Parties. By virtue of paragraph 25 of Part IX of the Verification Annex, such a decision is the responsibility of the Conference.
 - (c) Additionally, OCPF inspections could be focussed on more-relevant facilities if Member States would agree, in the context of Part IX of the Verification Annex, to provide more specific data in their OCPF declarations. The Secretariat could use such data to direct the inspection effort in a more effective, selective, and relevant manner, while at the same time avoiding unnecessary inspections.
 - (d) The efficiency of the verification regime could also be greatly enhanced if declarations of OCPFs were accurate and updated in a timely fashion.
- 2.38 The nature of the information available on chemical plant sites and activities (information other than declared data) has changed significantly since the Convention entered into force. Today, reliable and authoritative data are easily accessible from open sources. The OPCW should consider how these data can best be used in its non-proliferation efforts.
- 2.39 There remain a number of issues in the individual or collective hands of the States Parties, which, if resolved soon, would enhance the functioning of the Convention's verification regime and greatly favour its non-proliferation goals, such as:
- (a) the late submission of declarations of Schedule 3 plant sites;
 - (b) persisting discrepancies between the transfer declarations of exporting and importing States Parties, which indicates that national regulations continue to differ on how to gather and calculate these data and that some States Parties still lack the appropriate means to gather these data;
 - (c) an appropriate concentration limit for the declaration of Schedule 2A/A* chemicals, which needs to be resolved in order to ensure equal and fair treatment of all States Parties with relevant facilities, as well as adequate coverage of such facilities by the Convention's verification regime;
 - (d) more general acceptance of sequential inspections in industry, which would help to further optimise the verification regime: the experience of several years of conducting sequential inspections under Article VI has demonstrated

the feasibility of the concept and shown that sequential inspections can be conducted without compromising the protection of confidential information; and

- (e) with regard to transfers of Schedule 3 chemicals to States not Party, what additional measures States Parties might wish to agree on in pursuance of the Convention. Past experience has shown that regulations on transfers of scheduled chemicals can be effective in encouraging States not Party to consider joining the Convention.

2.40 In view of the importance of challenge inspections in the Convention, it will remain necessary for the Secretariat to maintain its readiness for that purpose through regular training, on its own or with the support of Member States, and through exercises that focus on procedures and logistics. It is equally important for the effectiveness and reliability of this mechanism that Member States ensure that the standing arrangements required by the Convention are effectively in place.

2.41 The Secretariat should also continue to maintain its high standards of preparedness for the investigation of any alleged use of chemical weapons, as foreseen in the Convention. In this regard, besides training and exercises, it is important for the OPCW to continue to develop its capacity to analyse biomedical samples. The Secretariat has made some initial progress and a workable concept has been developed with the help of the SAB. The next step is for Member States to engage fully with this process by supporting the confidence-building phase and the subsequent establishment of the OPCW capability required by the Convention.

2.42 While significant advancement has taken place in the implementation of Article VII, it is clear that more must be done to ensure that all key provisions of the Convention are being fully implemented by all States Parties, for which purpose attention needs to be paid to related qualitative factors. There is still some way to go before the objectives of the national implementation action plan are achieved, and Member States might wish to remain especially focussed on this important matter until this goal has been reached. In that sense:

- (a) There are a number of States Parties that manufacture or trade organic chemicals, which have not yet enacted the comprehensive legislation required under the Convention. These States Parties should be encouraged to pass and apply these measures as soon as possible. They, like the rest of Member States, can take advantage of the assistance provided by the Secretariat and can request assistance from other States Parties.
- (b) In measuring and promoting progress with the implementation of the Convention, the OPCW needs to consider the constraints imposed by the small bureaucracies, limited resources, and competing legislative priorities in some States Parties, which will continue to require targeted assistance in implementing the Convention's complex obligations.
- (c) In the same way that the negotiation of the Convention and the preparations for its implementation greatly benefited from the constructive involvement of the chemical industry, the achievement of the non-proliferation and other

goals of the Convention would benefit from continuing interaction with this stakeholder. This is especially important in light of the changes taking place in chemical manufacturing with regard to both production technologies and locations.

- (d) Recent trends in chemical production have reinforced the need to support the adoption and enforcement of national implementation measures. One such trend is the move of chemical manufacturing from traditional locations in North America, Western Europe, and Japan to other regions of the world. It is important that, as this happens, the national implementation systems of the States Parties where new chemical production is starting up are adequately prepared for the evolving situation—including having domestic trade and export controls in place.
- (e) In a broader sense, assistance to States Parties in enhancing their national implementation systems can be strengthened by taking advantage of opportunities to involve other international agencies that have mandates in fields germane to the aims of the Convention. In this as in other areas of programme delivery, coordination is necessary to avoid duplication of efforts, exploit synergies, and maximise the use of OPCW resources.

2.43 As it moves into a new stage once all declared chemical weapons are destroyed and, indeed, at all stages in its life, the OPCW will be expected to maintain, in accordance with the Convention, a firm commitment to the provision of assistance and protection to its Member States against chemical weapons and to international cooperation for purposes not prohibited by the Convention.

- (a) The OPCW should continue to consolidate its role as a credible provider of highly specialised skills and expertise in treaty compliance. Requests for effective, tailored OPCW assistance in the area of national implementation of the Convention will probably continue to increase in number. High-quality support in response to such requests should continue to be actively pursued by the Secretariat. This might include, at the request of the State Party concerned, assistance to National Authorities, technical-assistance visits, legal advice in the sphere of national legislation, and the promotion of better knowledge about the Convention by Parliamentarians and other stakeholders. Regional and subregional workshops (focussed increasingly on specific thematic issues) should also continue, as should meetings in Brussels and London for the benefit of developing States Parties that are not represented in The Hague.
- (b) Enhanced capacity in the area of assistance and protection will remain an important safeguard in relation to the possible use of toxic chemicals against States Parties, whether by States or non-State actors. The OPCW must continue to improve its own capability to respond to requests for assistance in a swift and effective manner. More training in the field and on the Secretariat's internal procedures, good coordination with other agencies and organisations that have mandates to respond to chemical incidents and emergencies, and the conduct of joint exercises will continue to be important. At the same time, since any response to a chemical incident needs to be swift,

the development of local response capacity is essential. The OPCW programme for assistance and protection should reflect these needs adequately through effective capacity-building measures (such as national and regional training courses and the provision of expert advice to States Parties that wish to improve their protective capacity). Member States can make an additional contribution by furthering their own current efforts in this field.

- (c) The experience gained in the first decade of the Organisation shows that the ability of the OPCW to respond effectively to requests under Articles X and XI of the Convention, can be greatly enhanced by voluntary contributions from its Member States. Voluntary contributions help the OPCW both to deliver the required programmes and to maintain its financial discipline.
 - (d) The fact that Article XI is also relevant to ensuring the safe and secure operation of chemical production, transportation, and storage facilities, will probably make activities such as the Associate Programme even more attractive for voluntary support from Member States and the chemical industry.
 - (e) To maximise the benefits from Article X and XI programmes, it will be important to further improve programme evaluation.
 - (f) The Secretariat will continue to develop and implement a tailored programme to respond to specific regional needs. An example of this is the programme specially developed for Africa, which will enable Member States of that region to realistically assess their needs and requirements and which will help the Secretariat to offer relevant and effective cooperation projects that reflect the needs of the recipient States Parties. In order to achieve tangible results, the programme builds in a structured way on activities already provided under the regular budget and is expected to benefit from voluntary contributions. Other regions, too, might gain from such a tailored approach (for example, the Pacific Island States or the States Parties in the Caribbean region).
- 2.44 In pursuance of the Convention, the Secretariat will need to continue observing the necessity of securing the highest standards of efficiency, competence, and integrity in staff, while paying due regard to the importance of gender balance and of recruiting staff from as wide a geographical basis as possible. This remains the paramount consideration in the employment of staff and in determining the conditions of service. Effective recruitment (in an increasingly competitive environment), training, knowledge transfer, and the maintenance of an attractive package are all important conditions for the work of the Organisation—at all times and at all stages of its evolution. The conditions of employment in the OPCW must be such as to attract individuals who will ensure the continued excellence of the Secretariat. All these elements are indispensable for the OPCW and they are highly relevant to the implementation of its tenure policy.
- 2.45 The Secretariat will also need to continue streamlining processes and procedures, automating systems, and harmonising its regulations and rules with those of the UN, as appropriate. In so doing, the Secretariat will need to remain committed to best

management practices and to making good use of the valuable advice of the Advisory Board for Administrative and Financial Matters (ABAF).

- 2.46 The OPCW's financial stability and the parallel ability of the Secretariat to ensure full programme delivery depend on the payment of Member States' assessed contributions in full and in a timely fashion. This is all the more necessary in light of the Secretariat's ongoing commitment to ever greater efficiency and to strict financial discipline.
- 2.47 The OPCW would benefit from continuously reaching out to the scientific community, thus raising awareness about the Convention's objectives and requirements. The OPCW should continue to support the current IUPAC efforts (with the cooperation of the SAB) aimed at the adoption of codes of conduct that fully and appropriately reflect the goals and requirements of the Convention, and which promote full compliance with its provisions.
- 2.48 The objectives of the Convention would also be advanced by more systematic contacts with other stakeholders, including non-governmental organisations and civil society at large. The implementation of the Convention affects many sectors of society and needs the active participation and support of a range of actors at the national as well as the international level. This includes raising awareness about the Convention's norms and requirements, promoting knowledge about its implementation, adopting ethical norms and professional codes of conduct in respect to its prohibitions, and promoting a wider regime of governance that will (in a lasting and sustainable manner) prevent the recurrence of the menace of chemical warfare.
- 2.49 The inexorable march of science and technology and the rapid evolution in the field of chemistry and chemical production can be expected to be of great benefit to humanity. At the same time, such progress will require from the OPCW important steps that will be crucial to ensuring that, in the future, the Convention's hard-earned prohibitions continue to be respected and the OPCW remains an effective tool against proliferation.
- (a) This is particularly true for the interface between chemistry and biology, where science is advancing rapidly and scientific research is likely to bring about new discoveries that might affect the Convention. Issues in such contexts are, for example, the use of biological or biologically mediated processes for the production of chemicals, and whether the current OPCW verification mechanisms will remain adequate and provide enough confidence that the industrial activities of States Parties are still in compliance with the Convention's non-proliferation requirements.
- (b) Other advances might include, for example, the discovery of new chemicals with properties that make them relevant to the Convention. The issue of novel toxic chemicals is hardly new, but what has changed is the significantly reduced time required for the initial screening of large numbers of newly synthesised compounds. It is essential to understand how the production of precursor chemicals or toxic chemicals that can be weaponised could be affected by those new developments. In due course, there will also be a need to address questions such as what effect the possible introduction of

incapacitating agents for the purposes of law enforcement and of new means for their use will have on the Convention.

- (c) Due priority should therefore be accorded to facilitating the work of the SAB and its temporary working groups, which greatly enhances the OPCW's capabilities and helps the Organisation to appreciate the impact of scientific advances and to adjust its implementation practices to changing conditions in chemical research, development, and production. The OPCW would benefit greatly from ensuring, through voluntary contributions to the SAB trust fund, that the SAB and its temporary working groups will continue to meet with the frequency necessary to sustain their important work.
 - (d) The "General Purpose Criterion" enshrined in its binding text is the Convention's main safeguard against eventual negative repercussions from the trends and developments noted above. It is clear from a number of the Convention's provisions that chemical weapons are not only associated with the scheduled chemicals, but, rather, that the definition covers all toxic chemicals that can cause death, temporary incapacitation, or permanent harm to humans or animals. At the level of national implementation, as well as when reviewing the impact of new developments, it will be important for Member States to use this key criterion as the basis of their assessments.
- 2.50 The potential misuse of toxic industrial chemicals by terrorists and other non-State actors will remain a source of serious concern. In that light, it seems appropriate for the OPCW to continue to develop, within the strict limit of its specific mandate, its relationship with the UNSC Resolution 1540 Committee and its contribution to the UNGA Global Counter-Terrorism Strategy. The role of the OPCW can be further strengthened by the work of the Open-ended Working Group on Terrorism and by following up on the results of the Industry Protection Forum held in The Hague in November 2007.
- 2.51 The full implementation of the Convention by all Member States will not be enough to ensure its success unless true universal membership is achieved.
- (a) Indeed, the ultimate crucial goals of complete chemical weapons disarmament and non-proliferation will not be realised for as long as there remain States not Party that possess or could develop such weapons. Achieving universality should, therefore, remain a high priority for the OPCW.
 - (b) The absence from the Treaty of countries in unstable areas has the negative practical effect of keeping open the chemical option in those regions, thus depriving the peoples concerned of the benefits of the Convention and probably wasting a concrete opportunity for advancing the cause of peace.
 - (c) Of particular concern are those States in the Middle East that, under the justification of concerns for regional security, have not yet indicated their intention to join the Convention. It is equally regrettable that in the Korean peninsula one State has not yet made any visible progress towards accession.

- (d) Under the guidance provided by the policy-making organs, the Director-General and the staff of the Secretariat will further work with the remaining States not Party, underlining the benefits that derive from membership, as well as offering them any assistance they might need in joining the Convention. Such efforts will pay due regard to relevant regional considerations.
- (e) Member States, too, can make significant contributions to the promotion of universality, acting through the OPCW or in the context of their bilateral and regional relations. Specially convened meetings, like those held in the past to promote universality in the Mediterranean Basin and in Africa, could also be of significant help in promoting universality in the regions concerned.

2.52 In conclusion, 10 years of implementation of the Convention have shown that the OPCW has matured to a stage where it is in a position to meet future challenges. With adequate political support, multilateralism can indeed work as an effective tool for dealing successfully with the disarmament and non-proliferation of weapons of mass destruction. The OPCW has accomplished this in a way that has satisfied the interests of both individual nations and the international community as a whole. The Second Review Conference will be an opportunity to review the experience gathered in this process, to draw lessons learned, and to agree on further strategic guidance to the policy-making organs and the Secretariat of the OPCW for the coming years.

3. BACKGROUND INFORMATION ON THE OPERATION OF THE CHEMICAL WEAPONS CONVENTION SINCE THE FIRST REVIEW CONFERENCE

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

- 3.1 The Charter of the UN expresses the aspirations of the international community for a peaceful international system and establishes the principles and mechanisms for realising this. Together with identifying the goals of social and economic development of all peoples, as well as the promotion of international peace and security, the Charter specifically mandates the General Assembly to “consider the general principles of co-operation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments” (Article 11, Para. 1, Chapter IV).
- 3.2 Such principles and objectives, which include those that apply to weapons of mass destruction, were further elaborated in the resolutions and decisions of the UN. A number of bodies were set up to deliberate these questions further or to negotiate international agreements in specific areas.
- 3.3 When the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction was concluded in 1972, it also stressed in its Preamble the importance and urgency of eliminating from the arsenals of States, through effective measures, such dangerous weapons of mass destruction as those using chemical or bacteriological agents, and affirmed the “recognized objective of effective prohibition of chemical weapons”. Under Article IX of that Convention, States Parties undertook to continue negotiations to achieve early agreement on effective measures to eliminate chemical weapons.
- 3.4 After almost 20 years of negotiation in the Conference on Disarmament, the Convention was opened for signature in Paris on 13 January 1993 as a tool designed to facilitate the complete prohibition and elimination of chemical weapons and of the facilities for their production.
- 3.5 The Convention is the first multilateral treaty that addresses chemical disarmament in a comprehensive and non-discriminatory manner, while at the same time establishing an unequivocal prohibition on the use of chemical weapons under any circumstances.
- 3.6 States Parties to the Convention have committed to the complete exclusion of the possibility of the use of chemical weapons and to ensuring that attainments in the field of chemistry are used only for purposes not prohibited under the Convention.
- 3.7 The Convention aims not only at achieving chemical disarmament and ensuring non-proliferation under strict and effective international control, but also supporting effective domestic implementation and promoting international cooperation in the peaceful uses of chemistry.

- 3.8 In the face of a risk of the possible use of chemical weapons, the Convention further contains provisions for improving the preparedness and emergency response capabilities of States Parties in case of the threat of or actual chemical attack.
- 3.9 The Convention is also the first disarmament treaty to establish an organisation that oversees the overall implementation of its provisions, as well as verifies compliance. Together with carrying out the task of verification, the OPCW provides a forum for consultation and cooperation among States Parties and, when needed, facilitates the clarification, co-operation, and fact finding that contribute to building confidence among States Parties.
- 3.10 In the follow-up to the First Review Conference in 2003, the States Parties reached agreement on the core objectives of the OPCW in pursuance of the goals of the Convention. Having identified these objectives, the States Parties can now evaluate the critical contribution that the Convention has made in promoting international peace and security, by referring to the progress that has been made in the realisation of these goals.

MEASURES TO ENSURE THE UNIVERSALITY OF THE CHEMICAL WEAPONS CONVENTION

- 3.11 The First Review Conference “stressed the importance of universal adherence by all States to the Convention” and further recommended that the Council, “with the cooperation of the Secretariat, develop and implement a plan of action to further encourage, in a systematic and coordinated manner, adherence to the Convention and assist States ready to join the Convention in their national preparations to implement it”.
- 3.12 At its Twenty-Third Meeting, held in October 2003, the Council adopted an “Action Plan for the Universality of the Chemical Weapons Convention” (hereinafter, “the Action Plan”) (EC-M-23/DEC.3, dated 24 October 2003). The Action Plan established the objective of achieving universal adherence 10 years after the entry into force of the Convention (EIF), and urged States Parties, together with the Council and the Secretariat, to undertake further efforts to promote the universality of the Convention, “including initiatives to address specific regions, subregions or States, and covering all States not Party, in particular those whose non-adherence is a cause of serious concern”.
- 3.13 The implementation of the Action Plan was further supported by the relevant decisions adopted by the Conference at its Tenth (C-10/DEC.11, dated 10 November 2005), Eleventh (C-11/DEC.8, dated 7 December 2006), and Twelfth (C-12/DEC.11, dated 9 November 2007) Sessions, which stressed that achieving the object and purpose of the Convention requires ratification or accession by all States not Party.
- 3.14 As provided by the Action Plan and the relevant decisions adopted by the Conference, the Director-General has submitted annual reports to the Conference and regularly briefs the Council on developments relating to universality, as well as the relevant activities and plans of the Secretariat. Furthermore, synergies and coordination in the activities between Member States and the Secretariat have been enhanced and sustained through regular consultations on universality. Between 2003 and 2007,

these consultations were facilitated by Ms Consuelo Femenía, Alternate Representative of Spain to the OPCW (2003 to 2004), Ms Héra Lahmar, Alternate Representative of Tunisia to the OPCW (2004 to 2006), and the current facilitator, Mr Saïd Moussi, Alternate Representative of Algeria to the OPCW. Certain Member States also volunteered to act as points of contact on universality. As at the end of March 2008, the following Member States had designated such points of contact: Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Chile, China, Germany, Iran (Islamic Republic of), Italy, Jamaica, Japan, Kenya, Mexico, Netherlands, Oman, Palau, Poland, Portugal, Republic of Korea, Russian Federation, Slovakia, Slovenia, South Africa, Sudan, Switzerland, Tajikistan, United Kingdom of Great Britain and Northern Ireland, United States of America, and Yemen.

- 3.15 The Director-General continued his high-level contacts with senior officials of States not Party to create an awareness of the need for them to join the Convention. He also maintained such contacts with heads of regional organisations, including the African Union (AU), the Organisation of American States (OAS), the EU, and the League of Arab States (LAS). Universality also featured prominently in the statements the Director-General delivered to regional and international forums, including the UN General Assembly, the Security Council, and high-level meetings of the United Nations Secretary-General. On these latter occasions, he regularly met with the Permanent Representatives of States not Party accredited to the UN.
- 3.16 The programmes and activities on universality were conducted in concert with Member States, which hosted many of the events and provided critical support. The Secretariat organised a series of regional workshops for States not Party in Africa, Asia, Latin America and the Caribbean, the Mediterranean Basin, and the Middle East, which were aimed at addressing regional challenges to universality and encouraging States not Party in the relevant regions to join the Convention. Tailor-made events were also organised in particular countries to address specific national challenges to adherence. In addition, representatives of States not Party were sponsored to participate in OPCW events, including training programmes for States Parties, to assist them in their preparations for ratification or accession.
- 3.17 Since the adoption of the Action Plan, activities related to universality have also been supported through specific voluntary contributions provided by a number of Member States, including China, Japan, the Republic of Korea, and Spain. The Secretariat has also benefited significantly from the support provided by the European Union within the framework of its “Strategy against Proliferation of Weapons of Mass Destruction” (December 2003). Under this strategy, between 2004 and 2007, the European Council adopted three Joint Actions that have provided over five million Euros in support of OPCW programmes and activities. Nearly one-half million Euros from these funds have been used to promote universality.
- 3.18 Efforts to implement the Action Plan have yielded positive results: membership in the OPCW has continued to grow steadily. No other disarmament treaty has shown such rapid progress toward universal acceptance as the Convention. By the end of March 2008, the total number of States Parties to the Convention stood at 183. At the time the Action Plan was adopted, there were 40 States not Party. Since then, a total of 29, or more than two-thirds (73%), of them have joined the Convention.

- 3.19 Hence, the total number of States not Party decreased from 40 in 2003 to 12 as at the end of March 2008. Of the 12 States not Party, 5 are signatory States and 7 are non-signatory States.
- 3.20 The Convention now covers about 98% of the world population. There are 195 nations in the world that are recognised by the UN as capable of taking treaty actions in relation to treaties for which the UN is the depositary. Almost 94% them are governed by the Convention, which demonstrates the success of the Action Plan.
- 3.21 The following paragraphs indicate the progress made in the various geographical areas.

Developments in Africa

- 3.22 Since the First Review Conference, the number of States Parties in Africa had increased from 36 to 49 by the end of March 2008. Twelve of these States joined after the adoption of the Action Plan: Cape Verde, the Central African Republic, Chad, the Comoros, the Congo, the Democratic Republic of the Congo, Djibouti, Liberia, the Libyan Arab Jamahiriya, Madagascar, Rwanda, and Sierra Leone. Sao Tome and Principe joined on 9 October 2003, after the First Review Conference, but just before the Action Plan was adopted. As at the end of March 2008, there were only four States not Party remaining in Africa, namely, Angola, Guinea-Bissau, Somalia, and Egypt.
- 3.23 The decision by the Libyan Arab Jamahiriya to accede to the Convention on 6 January 2004 was regarded as an important milestone towards achieving not only universality of the Convention in Africa but also the universal ban on chemical weapons.
- 3.24 The positive developments towards universality in Africa were facilitated by enhanced contacts with all States not Party from the region and the range of activities organised by the Secretariat. These activities included four regional workshops on universality, held in Khartoum, Sudan in 2003; Addis Ababa, Ethiopia in 2004; Addis Ababa (AU Headquarters) in 2005; and Algiers, Algeria in 2007. The Secretariat also provided tailor-made assistance to States not Party, including multiple copies of the Convention and information packages explaining the benefits of adherence to the Convention. In order to address the specific needs of States not Party in the region, eight bilateral visits were conducted in States not Party that requested them: Madagascar (December 2003), Angola (November 2004), the Democratic Republic of the Congo (July and October 2004), Comoros (February 2006), the Central African Republic (May 2006), and the Congo (May 2006) and Guinea-Bissau (February 2008).
- 3.25 The Secretariat sponsored more than 30 representatives of States not Party in the region to attend events on various aspects of the Convention. These events were organised by the OPCW together with its Member States and included the basic courses for personnel of National Authorities of Member States, which were held in Paris (2005 and 2006); the basic and advanced courses for personnel from lusophone States Parties, which were held in Lisbon (2005 and 2006); and in Salvador, Brazil (2007); the Seventh and Ninth Annual Meetings of National Authorities held in The

Hague (2005 and 2007 respectively); as well as various regional and subregional meetings for National Authorities, which were held in Senegal (2004), Zimbabwe (2004), Cameroon (2005), and Nigeria (2005). These events helped to enhance awareness of the benefits of adherence to the Convention.

- 3.26 Pending a decision by the States Parties within the framework of the decision adopted by the Conference at its Tenth Session (C-10/DEC.13, dated 10 November 2005) on the establishment of an OPCW Office in Africa, the Director-General, in consultation with the African Group of States Parties to the Convention, has developed a Programme for Africa. This Programme is aimed at strengthening cooperation with the region and accelerating efforts both to achieve universality and to ensure the full implementation of the Convention in Africa.
- 3.27 The Director-General also engaged senior government officials of States not Party in the region to solicit their support in expediting their respective national processes for ratifying or acceding to the Convention. These contacts were followed up through correspondence with Heads of State and Ministers of Foreign Affairs of the States concerned.
- 3.28 In the context of the AU decision on the universality and effective implementation of the Convention in Africa, adopted in Durban, South Africa (AHG/Dec.181 (XXXVIII), of 8 July 2002), the Director-General also intensified cooperation with the AU. In this context, he attended several AU Summits, held in Maputo, Mozambique (July 2003), Addis Ababa, Ethiopia (July 2004), Sirte, the Libyan Arab Jamahiriya (July 2005), and Khartoum, Sudan (January 2006). During these meetings, the Director-General met with senior officials of States not Party, including H.E. Mr Abdullahi Yusuf, President of the Transitional Federal Government of Somalia, and H.E. General François Bozizé, President of the Central African Republic.
- 3.29 The Secretariat and the AU Commission jointly organised a regional workshop on the universality of the Convention for States not Party in Africa, held at AU headquarters in Addis Ababa on 6 and 7 October 2005. In order to further strengthen cooperation, the two organisations concluded a Memorandum of Understanding (MOU), which was signed by the Director-General and by the Chairperson of the AU Commission, H.E. Professor Alpha Oumar Konaré, in the margins of the 6th AU Summit held in Khartoum, Sudan, on 24 January 2006. The MOU identifies areas where the two organisations could work jointly to accomplish common objectives.
- 3.30 The Director-General has used his bilateral contacts with States Parties in the region to emphasise the importance of universality and to coordinate a common approach on the issue. This featured visibly in his visits to Ethiopia (2004 and 2005), the Libyan Arab Jamahiriya (2004 and 2005), Kenya (2005), Algeria (2006 and 2007), and South Africa (2007). It was also featured in several visits to the OPCW by senior officials of States Parties in the region, including a visit by H.E. Chief Olusegun Obasanjo, President of the Federal Republic of Nigeria and, at the time, the Chairman of the African Union in July 2005, as well as a visit by H.E. Archbishop Desmond Tutu of South Africa in November 2006.

- 3.31 Diplomatic missions and representations of States not Party in the region were also engaged in the Secretariat's outreach activities. On several occasions, the Director-General met with representatives of the Permanent Missions of African States not Party, based in New York. These meetings took place during his official visits to UN forums, including the annual sessions of the General Assembly between 2004 and 2007. The Director of External Relations Division also regularly visited (in 2003, 2004, 2005, 2006, and 2007) the embassies of African States not Party based in Brussels, in order to brief them on the status of the Convention's implementation and to enhance coordination and cooperation in efforts to encourage their respective governments to join.
- 3.32 Angola, Guinea-Bissau, and Somalia have indicated to the Secretariat that they are favourably disposed towards joining the Convention and that they were taking steps towards that end. Angola and Guinea-Bissau attended the regional workshop on the Chemical Weapons Convention held in Algiers, Algeria, on 18 and 19 June 2007. The workshop, which was inaugurated by the Minister for Foreign Affairs of Algeria and the Director-General, was aimed at promoting universality and the effective implementation of the Convention in Africa. Interactions with Somalia, which did not attend that seminar, have also continued.

Developments in Asia

- 3.33 Significant progress was made towards achieving universality in Asia. Prior to the adoption of the Action Plan on universality, there were 10 States in the region that were not Party to the Convention. Eight of them have since joined the Convention: Afghanistan (24 October 2003), Tuvalu (18 February 2004), the Marshall Islands (18 June 2004), the Solomon Islands (23 October 2004), Niue (21 May 2005), Cambodia (18 August 2005), Bhutan (17 September 2005), and Vanuatu (16 October 2005). As at end of March 2008, there were a total of 48 States Parties from the region.
- 3.34 During the period under review, the Secretariat intensified its targeted bilateral and subregional assistance programmes with States not Party in the region. In this regard, six bilateral visits were undertaken to Cambodia (February 2004 and March 2005), the Solomon Islands (February 2004), Vanuatu (February 2005), Bhutan (May 2005), and Myanmar (August 2006). In the cases of Bhutan and Cambodia, the Secretariat organised national training courses on the Convention to sensitise government authorities and other players in the two countries. Technical assistance was provided to Bhutan in the translation of the Convention into the Dzongkha language to facilitate ratification of the Convention.
- 3.35 Between 2004 and 2006, the Secretariat sponsored 20 representatives of States not Party to attend several regional and subregional OPCW events organised in China (September 2004), the Islamic Republic of Iran (September 2005), Nepal (August 2006), and Indonesia (September 2006). Most of the States not Party in the region that benefited from OPCW's universality-related programmes eventually joined the Convention.
- 3.36 Contacts were made with the Government of Myanmar through its Permanent Mission in Geneva. The Director of External Relations Division visited Myanmar in

August 2006, where he met with officials of the Ministry of Foreign Affairs and the Attorney General's office. The Ambassador of Myanmar in Geneva, H.E. Mr U Nyunt Maung Shein paid a visit to the Secretariat in September 2006, during which he met with the Director-General and attended the sixth induction course for new diplomatic personnel involved in the work of the OPCW. The authorities of Myanmar subsequently requested information on the obligations and benefits of the Convention to States Parties, which the Secretariat provided. In September 2007, the Secretariat sponsored a representative of the Permanent Mission of Myanmar in Geneva to attend the seventh induction course held at the OPCW headquarters.

- 3.37 Contact with the Democratic People's Republic of Korea (DPRK) remains elusive as the Government has not responded to any of the efforts made by the Secretariat, including invitations to official functions from the Director-General. Some States Parties have also endeavoured to facilitate contact with the DPRK. The Permanent Representation of Indonesia informed the Secretariat that its Government had made arrangements for the DPRK to attend the Fourth Regional Meeting of National Authorities for States Parties to the Convention, held in Jakarta in September 2006. After some initial positive indications, the DPRK later declined to attend.

Developments in Latin America and the Caribbean

- 3.38 Barbados is the latest country in the region to join the Convention. That leaves the Bahamas and the Dominican Republic as the only States not Party in the Caribbean subregion, although both have signed the Convention. Since the Action Plan was adopted, a total of six States not Party from Latin America and the Caribbean have joined the Convention: Saint Kitts and Nevis (20 June 2004), Grenada (3 July 2005), Antigua and Barbuda (28 September 2005), Honduras (28 September 2005), Haiti (24 March 2006), and Barbados (6 April 2007).
- 3.39 Progress towards universality in the region was supported by bilateral contacts between States not Party in the region and some Member States, and a range of activities were conducted by the Secretariat. In this context, the Secretariat undertook a visit to Belize (December 2003) in order to further assist the Government in its preparations for joining the Convention. Regional and subregional workshops held in Saint Kitts and Nevis (November 2004) and in Saint Lucia (November 2005) contributed significantly to encouraging States not Party in the Caribbean to join the Convention. A national workshop was conducted in the Bahamas in April 2006, with a view to sensitising stakeholders and providing assistance to the efforts of the Government towards ratifying the Convention. These workshops were complemented by bilateral visits to Barbados (May 2005), Grenada (May 2005), and the Dominican Republic (March 2006).
- 3.40 Between 2004 and 2006, the Secretariat also sponsored about 20 representatives of States not Party in the region in attending regional and subregional events organised for States Parties to the Convention. These events were held in Managua, Nicaragua (July 2004), Cartagena, Colombia (April 2005), Guatemala City, Guatemala (July 2005), Paris, France (October 2005), Rodney Bay, Saint Lucia (November 2005), Basseterre, Saint Kitts and Nevis (April 2006), and Mexico City, Mexico (May 2006).

- 3.41 Between 2005 and 2007, the Director of External Relations Division paid visits on an annual basis to the High Commissions of the Bahamas, Barbados, and the Dominican Republic, based in London, in order to brief them on the status of implementation of the Convention and to encourage their countries to join. He also continued his contacts with the Permanent Mission of the Dominican Republic to the UN, based in New York, as well as the newly established mission in The Hague.
- 3.42 The Director-General continued his outreach to senior officials of States not Party in the Caribbean. In this context, he addressed letters to Ministers of Foreign Affairs and Heads of Government, encouraging them to join the Convention. Along those same lines, he encouraged those States to join in his statements at the UN.
- 3.43 Cooperation between the OPCW and the Organisation of American States (OAS) was also strengthened in the areas of universality and the effective implementation of the Convention. On 7 June 2005, the OAS General Assembly adopted Resolution 2107 (XXXV-O/05) establishing the Americas as a biological and chemical weapons-free zone. The Director-General visited OAS Headquarters in Washington, D.C., in 2004, 2005, and 2006, where he attended several high-level OAS meetings, including meetings of the Committee on Hemispheric Security. During these visits, he delivered keynote statements on the implementation of the Convention and its universality in Latin America and the Caribbean.
- 3.44 The Director-General also held bilateral meetings with H.E. Mr José Miguel Insulza, Secretary-General of the OAS. In a meeting in December 2006, the two discussed the possibility of greater cooperation between the OPCW and the OAS. Secretary-General Insulza offered his support in making the Americas a zone free of chemical weapons, in compliance with the OAS decision of 7 June 2005.
- 3.45 Furthermore, cooperation was also strengthened with the Organisation of Eastern Caribbean States (OECS). The OPCW Secretariat and the Secretariat of the OECS jointly organised a workshop on the Convention, in Rodney Bay, Saint Lucia, on 28 and 29 November 2005, at which issues related to universality and the effective implementation of the convention in the region were discussed.
- 3.46 The issue of universality was also highlighted in the Director-General's contacts and visits to States Parties in the region.
- 3.47 As for the Group of Latin American and Caribbean States (GRULAC), the Bahamas and the Dominican Republic remained the only two States not Party as at the end of March 2008, although they had indicated their support of the Convention and their intention to ratify it. The Cabinet of the Dominican Republic had informed the Secretariat that the instrument of ratification has been recommended to Parliament for its consideration; the Bahamas has informed the Secretariat that it was continuing consultations with relevant ministries with a view to finalising a decision on ratification.

Developments in the Mediterranean Basin and the Middle East

- 3.48 States from the region that have not yet become Party to the Convention are Egypt, Iraq, Israel, Lebanon, and the Syrian Arab Republic. Iraq and Lebanon have

expressed their full support for the Convention and have taken concrete steps towards joining. The prevailing circumstances in these two countries, however, have hindered this process. Lebanon informed the Secretariat that it had completed the legislative aspects of its accession. The depositing of the instrument of accession is still pending because of the internal situation in this State. Iraq has also informed the Secretariat that it is making progress towards joining the Convention. The Secretariat understands that the Iraqi Parliament has passed a bill on accession.

- 3.49 Between 2004 and 2007, the Secretariat organised three regional workshops on universality for States not Party in the Mediterranean Basin and the Middle East: in Malta (May 2004), Cyprus (June 2005), and Italy (October 2006). These workshops were attended by States not Party and interested Member States in the region. They helped to raise awareness of the Convention as an instrument for the promotion of international peace and security and to clarify the obligations of the Convention and its benefits for States Parties. The workshops also provided forums for the enhancement of contacts and channels of communication between the OPCW and States not Party, as well as for engaging representatives of these States in a dialogue on issues of adherence to the Convention.
- 3.50 In addition to the opportunities provided by these workshops, the Director-General also maintained direct contacts with the government officials of the countries concerned. He visited Israel from 2 to 4 April 2006 and Egypt on 17 April 2007. During these visits, the Director-General met with government officials, as well as representatives of academic and research institutions in the two countries. He continued to make a case for universality in the region, stressing the relevance of the Convention, particularly its potential for promoting peace and security in the Middle East. Contacts with diplomatic missions of the States not Party were also enhanced. The Ambassadors of Egypt, Iraq, Israel, Lebanon, and the Syrian Arab Republic have visited the Secretariat and met with the Director-General. In 2006 and 2007, the Director-General also hosted working lunches for the States not Party in the region.
- 3.51 In his statements at international forums, including the UN, the Director-General has consistently urged the leaders of the States not Party in the Middle East to seriously consider joining the Convention. This was also the message he delivered to the Deputy Minister for Foreign Affairs of Egypt when they met in January 2006 in Khartoum, Sudan, in the margins of the 6th AU Summit.
- 3.52 Cooperation with the LAS was enhanced during the reporting period. The Director-General visited the Headquarters of the LAS on 22 and 23 April 2004, in Cairo, where he held bilateral meetings with H.E. Mr Amr Moussa, Secretary-General of the LAS. The Secretariat sponsored the participation of the LAS in OPCW events, including the regional workshops on the Convention, held in Malta (2004), Cyprus (2005), Italy (2006), and Algeria (2007).
- 3.53 The Secretariat conducted four workshops on the Convention for senior officials of the Government of Iraq. These workshops were aimed at facilitating Iraq's accession and to develop its capacity to implement the Convention once it becomes a State Party. The workshops were supported by a number of Member States, including Jordan, Japan, the United Kingdom of Great Britain and Northern Ireland, and the United States of America. The first workshop, which took place at OPCW

headquarters in The Hague from 6 to 8 July 2005, focussed on practical issues related to adherence and implementation of the Convention and included modules on the basic obligations of States Parties and key requirements under the Convention. Participants were trained on the procedures and practical requirements for designating, establishing, and efficiently operating a National Authority; on promulgating legislation for implementation; on the OPCW's verification activities and regimes; on international programmes for cooperation and assistance; on preparing obligatory declarations; and on the required regulatory measures for eliminating chemical weapons and preventing their spread, in accordance with the Convention.

- 3.54 The second and third workshops were both held in Amman, Jordan; the second, on 6 to 9 February; and the third, on 11 to 14 December 2006. The main objective was to follow up on the first workshop and to provide advanced skills in some of the key areas of the Convention. Ample time was allotted to discussions on draft declarations and draft legislation for implementation, which was prepared by the Iraqis as part of the follow-up to the first workshop. The fourth workshop, which was held at the same venue, from 29 to 31 October 2007, reviewed the progress made towards accession and the way forward in Iraq's capacity to meet its obligations under the Convention.
- 3.55 At the request of the Lebanese Government, a team of the Secretariat visited Beirut on 27 and 28 August 2007 in order to assist the country in the finalisation of its process of accession to the Convention. The team met with representatives from the Ministry of Foreign Affairs, the Ministry of Defence, the Ministry of Economy and Trade and the Ministry of Justice, and elaborated on the key aspects of the Convention and the benefits of adherence.
- 3.56 Representatives of States not Party in the Middle East participated in a number of OPCW events. The representatives of Egypt, Israel, and the Syrian Arab Republic attended the Eleventh Session of the Conference, held in December 2006, as observers. In accordance with the Council's Rules of Procedure, the delegation of Iraq also participated in the Forty-Seventh and Forty-Eighth Sessions of the Council as an observer. In addition, the Secretariat sponsored four Iraqi officials to attend the following events: the Second Regional Meeting of National Authorities of States Parties in Asia, held in Beijing, China, from 20 to 22 September 2004; the Regional Workshop on the Chemical Weapons Convention, held in Nicosia, Cyprus, from 13 to 15 June 2005; and the foundation course for personnel of National Authorities involved in national implementation of the Convention, held in Swindon, the United Kingdom of Great Britain and Northern Ireland, from 17 to 26 January 2006.
- 3.57 Despite these efforts and their engagement with the OPCW, Egypt, Israel (a signatory State), and the Syrian Arab Republic continue, as of the end of March 2008, to cite issues of regional security as a justification for not joining the Convention.

Universality: Assessment and prospects

- 3.58 It is expected that, with the intensification of efforts by Member States and the Secretariat, further developments on universality could be achieved in Latin America

and the Caribbean and in Africa. The case of Somalia depends on the evolution of the country's security and political situation.

- 3.59 In Asia, the need for Democratic People's Republic of Korea and Myanmar to join the Convention is of utmost importance if a universal ban on chemical weapons is to be achieved in the region. Since 2006, there have been positive interactions with Myanmar, which will be continued. The Democratic People's Republic of Korea has not made any contact with the OPCW since September 2006 and therefore constitutes a difficult challenge to universality in Asia.
- 3.60 In the Middle East, Iraq and Lebanon are also expected to complete their procedures in due course. In the long term, however, universality will continue to pose difficulties with respect to Egypt, Israel, and the Syrian Arab Republic, which have all made a conscious political decision to stay out of the Convention.
- 3.61 The remaining challenges to universality are diverse and unique to each State not Party. This calls for a targeted approach to universality, tailor-made to meet specific national requirements for adherence. Current experience indicates that the Secretariat's programmes, complemented by bilateral contact from Member States, have been effective in promoting universality.
- 3.62 The Secretariat will continue to give priority to achieving universal adherence to the Convention; however, given the current challenges, such efforts are likely to be more successful if they are accompanied by the continued cooperation and assistance of Member States.

DEVELOPMENTS IN SCIENCE AND TECHNOLOGY

Significant changes in the chemical industry

- 3.63 The Secretariat notes the findings of the SAB in their report for the Second Review Conference and offers the following supplemental comments based on observations of the worldwide chemical industry, including trends in research and development.
- 3.64 Technological innovation and current trends—such as *flexibility in plant design*, modernisation of process controls and instrumentation, modular plant structures and specialised equipment (such as micro-reactors), online quality assurance, materials of construction for a wide range of operations, and the acceleration of process development—have made manufacturing operations more efficient, flexible, and cost effective. Chemical manufacturing operations are increasingly becoming smaller, faster, and cleaner. There are more compact, more flexible enterprises that can adapt their production parameters quickly to changing market demands—producing one chemical today and another one tomorrow with the same equipment setup or with minimal changes in the configuration.
- 3.65 Pilot-plant and laboratory-scale operations have introduced quick-fit connections, continuously operating micro-reactors in the laboratory, and highly effective heterogeneous catalytic systems, among other things. All these developments have contributed to an increased *switchover capability* making the manufacture of new chemicals an operation that is both easier and more quickly achievable.

- 3.66 A specific mention of the development of *micro-reactors* needs to be made here. This has generated wide interest in the scientific community; however, it is not a new development, and its relevance to the Convention has been widely debated. Initially this technology was seen as a tool that could be used to accelerate the pace of research and development of new molecules using high-throughput screening and on-line analysis and separation. Promising features include improved temperature control, increased yields, selectivity and flexibility of operation, and inherent safety when operated in an explosive or otherwise hazardous environment. Despite its economic potential, there has been only limited application of micro-reactor technology on an industrial scale. However, some of the major chemical companies have been working on using micro-reactors to produce specialty chemicals on a reasonably large scale, although the details of such developments have been kept extremely confidential for obvious commercial reasons.
- 3.67 Currently, there seems to be no established international regulatory framework to control the *transfer of micro-/mini-reactor technology* or the associated equipment. Drafters of the Convention had not envisaged any equipment constraints other than those limiting the size of reactors and their configuration for single small-scale facilities, as declared under Part VI of the Verification Annex. Here, the upper limit allowed for the volume of any reactor is 100 litres ($100 \times 10^{-3} \text{ m}^3$), and the process configuration must not be continuous. In comparison, the range of volumes for micro-reactors varies between 1×10^{-8} litres and 1×10^{-4} litres (10^{-11} m^3 and 10^{-7} m^3), and they are usually configured for a continuous process.
- 3.68 The practical implications related to the use of this technology stem from the fact that it has the potential to produce scheduled chemicals, including toxic chemicals, in significant quantities. Equipment that can be set up for the production of phosgene, hydrocyanic acid, and cyanogen chloride in quantities above the Schedule 3 declaration/verification thresholds (i.e., 30 tonnes/year) is available. The other 14 Schedule 3 chemicals are less likely to be produced using micro-reaction technology because of the unfavourable cost-benefit ratio, the simplicity of current production methods, or simply because the scale of their production and market demands would not justify the technological change.
- 3.69 Research into new molecules can be accomplished quickly using computers, combinatorial chemistry, and rapid-screening techniques. The potential production of new agents or toxic chemicals not covered under the Schedules is not a new problem, but what apparently has changed is the significantly reduced time required for target selection and the identification of lead chemicals, including the initial screening of a large number of newly synthesised compounds. In this context, it is essential to understand how the production of precursor chemicals or toxic chemicals that can be used as weapons could be affected by these new developments. Another question that should be answered is whether the current Convention's verification mechanisms will continue to remain adequate and to provide enough confidence that the industrial activities of States Parties are still in compliance with the Convention's non-proliferation requirements.
- 3.70 Driven by market requirements and the constant need to decrease costs, the chemical industry is undergoing significant restructuring related not only to technology, but

even more to the organisational structure of companies. This is an ongoing process in which the focus is on core business, while (as an answer to an increased risk of liability related, for example, to products, the environment, health and safety, or patent disputes) companies are split into small units or new companies, holdings are formed, and business lines from different companies are regrouped into new companies. New business models have been implemented, in which production is separated from stock keeping and distribution. The desire to decrease assets has made toll manufacturing and outsourcing more and more attractive; the ownership and operational responsibility of a plant might belong to different companies.

Chemical industry: Biotechnology

- 3.71 The continued growth of industrial biotechnology is expected to be a key development in the chemical industry over the coming years as the recent record prices for oil and natural gas, coupled with environmental concerns, drive the search for alternatives to petrochemicals. It has been projected that by 2010 about 20% of the global chemical industry will involve industrial biotech production.
- 3.72 The use of biotechnology in the production of pharmaceuticals (such as antibiotics) and for the production of bio-fuels (such as bio-ethanol, production of which is expected to rise to 30 billion gallons by 2020, and bio-diesel) is well known. Biotechnology is, however, being used to produce a variety of other chemicals from biological sources. For example, in the plastics industry, monomers such as lactic acid and propane-1,3-diol, both discrete organic chemicals (DOCs), are being produced from corn starch by enzymatic and fermentation reactions. Plants are also being genetically modified to produce biopolymers directly. In addition, there has been a great deal of work on the use of microbes or isolated enzymes to carry out reactions that would otherwise be difficult to achieve using conventional chemistry, particularly when only a single chiral form of a molecule is desired.
- 3.73 The SAB was tasked by the Conference at its Third Session to consider whether the term “production by synthesis”, used in Part IX of the Verification Annex, should include biochemical and biologically mediated processes. The SAB concluded that, from a scientific standpoint, it was “no longer possible to make a clear distinction between ‘chemical’ and ‘biological and biologically mediated’ processes” (paragraph 2.3 of SAB-II/1, dated 23 April 1999). The SAB reiterated this view in its report to the First Review Conference and also noted that its view “was not shared by a meeting of governmental experts, but there was agreement that the issue should be kept under review” (paragraph 4.3 of the Annex to RC-1/DG.2, dated 23 April 2003).
- 3.74 Currently, this issue has no major impact on the verification regime under Article VI of the Convention because relatively few DOCs are produced on a large scale solely by biological and biologically mediated processes, and the plants involved are generally not suited to the production of toxic chemicals. However, as developments in biotechnology continue, this may change. Not only will more and more biologically based processes be used to produce DOCs, but as biological processes continue to be developed to produce highly biologically active chemicals (which might have potential for use as chemical weapons), the risk to the Convention posed by such facilities may have to be reassessed.

Summary

- 3.75 All these trends have been ongoing for a number of years and are becoming more visible with time. They were mentioned in papers from the Secretariat as early as 2003, in preparation for the First Review Conference (paragraphs 2.1 to 2.5 of RC-1/DG.2, dated 23 April 2003; and paragraphs 7.30, 7.64, and 7.65 of RC-1/5, dated 9 May 2003), and more recently from the SAB (subparagraphs 8.2(a) to (b) of SAB-9/1, dated 14 February 2007). In comparison to the early 1980s, when the Convention was discussed, the chemical industry has changed from being rather static to being very dynamic. In addition, the main source of chemical production has shifted from global companies to companies all over the globe.

GENERAL OBLIGATIONS AND RELATED DECLARATIONS

General Provisions on Verification

- 3.76 In close cooperation with States Parties, the Secretariat has enhanced the verification regime since the First Review Conference, thus maintaining a robust and credible verification system. While more than 3000 inspections have been carried out successfully since EIF, no investigations of alleged use of chemical weapons or challenge inspections have been conducted.
- 3.77 Considerable efforts have been made to optimise verification procedures with the aim of increasing cost-effectiveness while meeting the stringent verification requirements stipulated in the Convention.
- 3.78 A number of measures have been established that have contributed to significant savings: conducting sequential inspections, refining inspection procedures and focussing on key verification elements, reducing the duration of inspections and size of inspection teams, increasing the use of monitoring and recording equipment at CWDFs, and hiring inspectors that have left the Secretariat on special service contracts. None of these measures could have been implemented without the cooperation and support of the States Parties.
- 3.79 Taking into account the fact that a number of new CWDFs will become operational in the coming years, verification of chemical weapons destruction will continue to take up most of the Secretariat's inspector resources. The Secretariat will continue to carefully assess its verification activities on a regular basis, including the consideration of additional verification tools, to further refine and improve performance in this area.
- 3.80 Although only 20% of inspector days are dedicated to industry verification, the Secretariat has gradually increased the number of industry inspections. This has contributed to the establishment of an effective non-proliferation regime in the chemical industry. In this respect, the Secretariat, in close cooperation with Member States, has initiated the routine use of sampling and analysis to check for the absence of undeclared scheduled chemicals during inspections of Schedule 2 facilities. Thus, this measure significantly contributes to an increase in confidence that States Parties are pursuing chemical activities for peaceful purposes.

- 3.81 Full implementation of the Convention's provisions at the national level is of equal importance for meeting the objectives of the Convention. The OPCW has paid special attention to this important issue and has made substantial progress since the First Review Conference by establishing an action plan on national implementation measures, in accordance with Article VII of the Convention. As part of these efforts, the timely submission of comprehensive and accurate declarations by States Parties remains a key priority and is actively pursued by the Secretariat.
- 3.82 With regard to initial declarations, between 1 January 2003 and 31 December 2007, the Secretariat received an additional 27 initial declarations under Articles III and VI. As at 31 December 2007, 169 States Parties had submitted their initial declarations. Five States Parties, however, submitted incomplete initial declarations. Of these five, four have yet to submit their initial declarations under Article VI, and one has yet to submit under Article III. As at the same date, 13 States Parties had yet to submit any initial declarations.
- 3.83 The Secretariat receives a large quantity of declarations and other verification-related documents from States Parties (about 20,000 pages annually). The majority of declaration-related documents remain classified; thus, in order to ensure continuing compliance with the requirements of confidentiality, all the steps required for processing these documents consume substantial resources. Pending the approval of guidelines regarding the retention of information related to declarations and verification, it is necessary to hold such information indefinitely, regardless of its value and relevance to States Parties or the Secretariat. This has created a number of problems, particularly in relation to the long-term preservation of digital and audio/video material. These problems are currently being addressed by the Secretariat. Considering the relevant findings and recommendations in the report of the First Review Conference (specifically regarding the long-term handling of confidential information) and taking into account the issues identified by an external audit team from the UN in 2006, the Secretariat is seeking to establish a records-management programme that is fully compliant with ISO 15489/2001, the international standard on records management.
- 3.84 By developing and implementing the Verification Information System, the Secretariat has made significant progress regarding the submission of Article VI declarations in electronic format, along with their subsequent processing and analysis. The move by Member States towards electronic declarations will lead to more effective handling of declaration data and contribute to greater quality of the information that is used to select facilities for inspection.
- 3.85 One of the Secretariat's main tasks in coming years will undoubtedly remain the verification of the destruction of the remaining chemical weapons stockpiles. However, careful consideration needs to be given to the role of the OPCW after all chemical weapons have been destroyed. While this will certainly shift the focus of verification measures from disarmament to non-proliferation, the Secretariat will still be required to maintain core capabilities and expertise in the area of chemical weapons destruction and related verification measures.
- 3.86 At the same time, advances in science and technology, combined with changes in the chemical industry, will pose new challenges for the Article VI verification regime.

These developments merit particular attention by the Secretariat and will require continuous adaptation of the verification procedures to meet the demands of the future.

- 3.87 Finally, the Secretariat has to maintain, at all times, its readiness to respond swiftly and effectively to requests for challenge inspections and investigations of the alleged use of chemical weapons. These mechanisms are critical to the ability to address and to resolve the concerns of Member States about compliance and are thus integral elements of the Convention's credible and robust verification regime.

Chemical weapons destruction and elimination of related facilities

- 3.88 Initial declarations under Article III remain the very first requirement to eliminating chemical weapons stockpiles and former CWPFs. Their timely and accurate submission is an important condition for the functioning of the Convention's verification system. Since the First Review Conference, one additional State Party, the Libyan Arab Jamahiriya, has declared the possession of chemical weapons and of former CWPFs.
- 3.89 Completing the destruction of chemical weapons by the established deadlines constitutes a solemn legal obligation for the possessor States Parties. Significant progress towards the achievement of this key objective has been made by the States Parties since the First Review Conference.
- 3.90 Major steps have been taken towards eliminating CWPFs. The last remaining former CWPFs are currently undergoing conversion, one is temporarily used for chemical weapons destruction and will be destroyed thereafter. The verification measures applied by the OPCW are tailored to ensure that these production capacities are either rendered for peaceful purposes or destroyed in accordance with the Convention's requirements. All converted facilities remain under systematic verification. An issue that needs to be addressed is the scope of the verification measures to be applied past the 10-year period after former CWPFs have been certified by the OPCW as converted.
- 3.91 Extensions of the deadline for completing the destruction of Category 1 chemical weapons beyond the original 10-year period of destruction stipulated by the Convention were granted by the Conference at its Eleventh Session for five of the six States Parties that have declared possession of chemical weapons stockpiles. In accordance with paragraph 28 of Part IV(A) of the Verification Annex, these States Parties are required to report to the Council on the progress of their destruction activities "not later than at the end of each 90 days of the extension period". This more stringent declaration regime will allow the Secretariat and the Council to better review and document progress towards the completion of destruction and the complete elimination of chemical weapons stockpiles within the extended deadline stipulated by the Convention (that is, before 29 April 2012). In this regard, the Director General issued a Note to the Council at its Forty-Ninth Session (EC-49/DG.1, dated 8 March 2007) regarding modalities for implementing this obligation.

- 3.92 On 11 July 2007, Albania became the first possessor State Party to have finished the destruction of its chemical weapons stockpile. Chemical weapons continue to be destroyed in four of the current five possessor States Parties. Having declared 24 metric tonnes of Category 1 and 1,414 metric tonnes of Category 2 chemical weapons, the Libyan Arab Jamahiriya has destroyed all of its Category 3 chemical weapons and 39%, of its Category 2 chemical weapons. It has been granted an extension to 31 December 2010 of the deadline for the destruction of all of its Category 1 chemical weapons stockpiles and to 31 December 2011 to complete the destruction of its Category 2 chemical weapons. The Libyan Arab Jamahiriya has submitted to the Secretariat detailed facility information for the Rabta Toxic Chemical Disposal Facility, which has been designated to destroy both the chemical weapons agent and the remaining precursors that this State Party has declared.
- 3.93 According to the destruction plans presented by States Parties, the peak of destruction activities is expected to be reached in 2010. The increasing number of CWDFs represents great challenges (primarily financial and technological) for States Parties, and similarly, since 2002 the OPCW has faced a similar challenge in meeting the corresponding increase in verification requirements.
- 3.94 Some Member States have been assisting the efforts of possessor States Parties in eliminating their chemical weapons stockpiles. Such assistance remains of paramount importance and there is an expectation that it will continue to be forthcoming in the future.
- 3.95 Chemical weapons stockpiles continue to be inspected according to the verification measures applied by the OPCW to confirm declarations and remaining chemical weapons holdings. Past issues related to the identity and quantity of declared agents have been resolved by practical approaches. Since most storage facilities do not cater for sampling and analysis of chemical weapons on a routine basis, the identity of agents is established at the chemical weapons destruction facility. Similarly, precise measurements of chemical weapons quantities are carried out as part of the process of verifying chemical weapons destruction.
- 3.96 Progress in destruction activities has already led to a significant decrease in the number of chemical weapons storage facilities. Improvements in stockpile configuration and enhanced cooperation between the Secretariat and possessor States Parties have led to a more efficient, thus cost-saving conduct of inspections.
- 3.97 As regards old and abandoned chemical weapons, since the First Review Conference, three additional States Parties (Austria, the Russian Federation, and the Solomon Islands) have declared OCWs, thus increasing to 13 the number of States Parties that have declared OCWs. In this regard, one declaration-related issue deserves special attention. It concerns the declaration of new discoveries of OCWs, after the 29 April 2007 deadline, especially those produced between 1925 and 1946. Although all States Parties that have declared OCWs produced between 1925 and 1946 have completed their destruction (with the exception of Italy, which was granted an extension to 29 April 2012), the fact remains that new OCW discoveries are still likely to take place. Noting the expectation that recovery of pre-1946 chemical weapons will continue for decades at varying rates in different regions and that declarations, destruction, and verification procedures have remained unchanged, with

the affected States Parties giving the Secretariat their full support and cooperation, the Secretariat leaves it to the policy-making organs to determine the practicality of whether a deadline for destruction of new recoveries of pre-1946 chemical weapons should be established.

- 3.98 In relation to OCWs, the issue of guidelines to determine the usability of chemical weapons produced between 1925 and 1946 remains outstanding (paragraph 5 of Part IV(B) of the Verification Annex). A facilitator had been assigned to work on this issue until 2004, but consultations on this matter were, in fact, discontinued in 2002. In 2000, pending guidance from States Parties and cognisant of the need to undertake the required verification, the Secretariat issued a paper on “Proposed Verification Measures for Old Chemical Weapons Produced between 1925 and 1946” (S/166/2000, dated 15 February 2000). While this has had no serious practical impact on the verification of declarations and the implementation of destruction to date, an agreement of the States Parties on these guidelines would still be beneficial. In addition, the attribution of costs related to OCW inspections also awaits clarification.
- 3.99 During the Forty-Sixth Session of the Council in July 2006, China and Japan were granted a five-year extension on their obligation to complete the destruction of the ACWs left by Japan in China. Both parties continue to discuss practical preparations for the destruction of ACWs in China. These meetings have produced progress and understanding in the areas of ACW recovery, temporary storage, transport, environmental and public safety, as well as the technical aspects of ACW destruction. These States Parties have also announced a decision to introduce a mobile destruction system to accelerate the destruction of ACWs. Implementation of the ACW destruction programmes will contribute to the goals of the Convention.
- 3.100 Possessor States Parties continue to implement changes/upgrades in their destruction technologies. The OPCW is working closely with these Member States to ensure that CWDFs are constructed and operated in a manner that complies with verification requirements. Complementary to this, the Secretariat constantly seeks to improve its own inspection procedures and equipment by introducing upgrades.
- 3.101 The importance of the comprehensive application of Article IV verification measures remains undiminished. To consolidate the credibility of the entire verification process, all steps in the destruction process need to be monitored by inspectors and/or appropriate technical means, regardless of any set agreements on accountability.
- 3.102 The Secretariat is constantly reviewing its verification approach and, together with possessor States Parties, further optimising activities in the field during the systematic quality-assurance visits. In parallel with this, on Article VI inspections, the introduction of sequential inspections has proven to be a powerful cost-saving tool and, pending agreement with Member States, is increasingly being implemented.

Activities Not Prohibited under the Chemical Weapons Convention

Cooperation of the chemical industry

- 3.103 As a key player in the negotiation phase of the Convention, the involvement and support of the chemical industry was critical in drafting the non-proliferation

provisions of the Convention. This high level of support has continued since EIF and is a major factor in the successful implementation of the Convention. By the end of 2007, over 1300 industry inspections had been conducted in 77 different countries with the full cooperation of the chemical industry.

Declarations under Article VI

Late submissions

- 3.104 Late declarations have a significant impact on the verification activities. Beginning in 2004, the Secretariat began reporting on the status of submissions of annual declarations (most recently in S/662/2007, dated 15 November 2007). The Secretariat's reports have been noted by the Council (EC-44/2, dated 17 March 2006). At its Fifty-First Session the Council adopted a decision in which, *inter alia*, it called upon States Parties that had yet to do so to take the necessary measures to ensure that their declarations were submitted in accordance with the deadlines provided for in the Convention, and requested States Parties that anticipated difficulties in regard to timely submission of their declarations to inform the Secretariat of the circumstances of such difficulties (EC-51/DEC.1, dated 27 November 2007). In accordance with this decision the Secretariat will prepare regular status reports to the Council on the implementation of this decision, the first of which will be submitted to the Council at its Fifty-Third Session. Detailed statistics on submissions from 2002 to 2006 are provided in Annex 1.

Facility and plant-site declarations

- 3.105 The numbers of Schedule 1 facilities and Schedule 2 and 3 plant sites declared have remained relatively constant in the period since the First Review Conference (see Annex 2). The number of OCPFs declared, and the number of States Parties making such declarations, increased steadily after the First Review Conference until 2006 (see Annex 2). The decrease seen in 2007 (based on ADPAs for 2006) was primarily due to several States Parties removing large numbers of OCPFs from their declared lists, following an initiative by the Secretariat to highlight the need for States Parties to review their lists of declared OCPFs and remove those that were no longer declarable.

Establishment of common standards of declaration

- 3.106 Following the First Review Conference, work has continued on establishing common standards of declaration to ensure a "level playing field" in the implementation of Article VI between different States Parties. Decisions have been taken by the Conference, setting out understandings on declarations of the captive-use production of Schedule 1 chemicals (C-10/DEC.12, dated 10 November 2005) and of Schedule 2 and 3 chemicals (C-9/DEC.6, dated 30 November 2004), as well as on clarifying the definition of "production" (C-8/DEC.7, dated 23 October 2003). However, in several areas, no agreement on common standards has been reached, including:
- (a) guidelines on low concentration limits for mixtures containing Schedule 2A and 2A* chemicals;

- (b) declaration of salts of scheduled chemicals (especially of Schedule 1 chemicals); and
 - (c) the scope of the definition of “production by synthesis” under Part IX of the Verification Annex.
- 3.107 Although the impact of some of these outstanding issues on the verification regime is arguably limited, implementation of the Convention will remain uneven without agreement by the policy-making organs on these issues.
- 3.108 Of particular importance is the lack of common standards for declaring aggregate national data (AND), which forms a key element of the data-monitoring component of the verification regime. Data monitoring is the only means available to the Secretariat to verify chemical activities for purposes not prohibited under the Convention in those States Parties that have no inspectable facilities (which at present is over half of all States Parties). The declaration of AND is stipulated in paragraph 1 of Part VII and paragraph 1 of Part VIII of the Verification Annex. The import and export data submitted under these provisions are the sole source of information that the Secretariat can use for monitoring data for States Parties without declarable facilities under Parts VII and VIII of the Verification Annex. They are also the Secretariat’s only source of information in relation to transfers of scheduled chemicals to States not Party. The Secretariat has noted that the information declared by the exporting and importing States Parties often does not match and has reported this issue to the Council (“Declarations of Imports and Exports of Schedule 2/3 chemicals”; EC-XXIII/S.1, dated 12 January 2001).
- 3.109 Although guidelines for reporting AND were agreed upon at the Seventh Session of the Conference (C-7/DEC.14, dated 10 October 2002), the problem remains and during the Thirty-Fourth Session of the Council, the Secretariat distributed a discussion paper on the factors that contribute to discrepancies (EC-34/S/1, dated 3 September 2003; Add.1, dated 3 December 2003; and Corr.1, dated 12 September 2003). The discrepancies between transfers declared by States Parties are of such magnitude (as much as 75% of the import/export data declared in each of the last five years—see Annex 3) that effective data monitoring for non-proliferation purposes is very difficult for the Secretariat to achieve. Hence, the Secretariat believes that this issue should have a high priority.
- 3.110 The issue is currently being discussed during consultations under the cluster of chemical-industry and other Article VI issues. The focus of the consultations is on the development of an understanding on the meaning of the terms “import” and “export” for the purposes of making AND declarations under paragraph 1 of Part VII, and paragraph 1 of Part VIII, of the Verification Annex, and of declaring imports and exports from declared Schedule 2 plant sites (paragraph 8 of Part VII of the Verification Annex). In addition, a Secretariat proposal to adopt new criteria for discrepancies, which would focus on those that are most significant, was discussed in the consultations and was implemented for the evaluation of annual declarations of past activities for the year 2005.
- 3.111 The issue of whether States Parties should be required to inform the Secretariat when Schedule 2 and 3 plant sites stop activities related to Schedule 2 and 3 chemicals was

raised at the First Review Conference. From the point of view of the Secretariat, timely information on plant-site activity, which can affect whether a particular facility is inspectable or not, greatly facilitates inspection planning. The First Session of the Conference urged States Parties to inform the Secretariat, on a voluntary basis, of cases when plants or plant sites that have been declared as undertaking activities in relation to Schedule 2 or Schedule 3 chemicals cease to do so (C-I/DEC.38, dated 16 May 1997). This recommendation was reiterated by the First Review Conference, which also requested the Council to consider whether to make such submissions from States Parties a formal requirement. Although some States Parties are implementing this recommendation, in some cases the Secretariat is left with no clear idea as to whether or not a site is inspectable, resulting in the need for clarification.

Improvements in the submission and handling of declarations

- 3.112 A key advance in the submission and handling of declarations in the period since the First Review Conference has been the implementation of the first phase of the VIS. As at December 2007, the modules for document management of all verification-related information and for analysis of Article VI-related declarations are operational, and work is underway on the module for planning Article VI inspections. Modules dealing with chemical weapons data are currently being planned.
- 3.113 It is anticipated that, by merging the 23 different Microsoft Access databases that were previously used into one centrally managed, easy-to-use system, the VIS will significantly improve the quality and reliability of data held by the Secretariat. The VIS will also greatly enhance the ability of the Secretariat to analyse declarations and carry out data monitoring.
- 3.114 The VIS makes it possible to receive declarations from States Parties in electronic format, which greatly facilitates the work of the Secretariat by eliminating the need for the labour-intensive and error-prone process of manual data entry. Similarly, declaration data stored in the VIS can be provided to States Parties in electronic form, facilitating their own data-analysis processes.
- 3.115 The reduction in the manual handling and processing of Article VI declaration data due to the introduction of the VIS will allow Secretariat personnel to carry out more in-depth analysis of declaration data. It should be noted that although the VIS allows electronic submission of declaration data, it is not expected that all States Parties will use this capability. In addition, amendments to declaration data will still have to be carried out manually. Furthermore, following data entry, all declaration data entered into the VIS will be validated. Consequently, although over time, the overall workload will be reduced with the introduction of electronic Article VI declarations, the Secretariat will have to retain the ability to carry out manual data-entry processes and validation of declarations in all six official languages.
- 3.116 The First Review Conference (subparagraph 7.71(b) of RC-1/5) encouraged the Council to improve the submission and handling of industry declarations (including common criteria and standards, simplified declaration forms, and the submission of declaration data in electronic form). Initial consultations on this issue focussed on preparing an improved version of the Handbook on Chemicals as an aid to States Parties; a new version was released in 2005. In addition to these improvements, there

are a number of minor interpretive issues that could be discussed, with any understandings reached to be reflected in future versions of the Declarations Handbook, thereby leading to greater consistency and accuracy in declarations submitted by States Parties.

- 3.117 The slow pace of clarification of ambiguities in declarations was highlighted at the First Review Conference (paragraph 4.14 of RC-1/DG.1, dated 17 April 2003). This issue was addressed by a decision by the Council at its Thirty-Sixth Session (EC-36/DEC.7, dated 26 March 2004), which urged States Parties to expedite their responses to requests for clarification and recommended that the Secretariat inform the Council in cases where ambiguities in a declaration precluded the Secretariat from determining the inspectability of a facility, with no response within 90 days of transmittal of a request for clarification. The Secretariat has put procedures in place for identifying such cases—and the follow-up action necessary—in time for analysis of the annual declaration of past activities for the year 2005. Since that date, there has been a marked improvement in the time taken for initial responses to such inspectability-related requests for clarification, and in no case has the 90-day deadline for an initial response been exceeded.

Transfers of scheduled chemicals to States not Party

- 3.118 In the period since the First Review Conference, four cases of transfers of Schedule 2 chemicals (amounting to a total of 298 tonnes) to States not Party, in breach of the ban on such transfers, have been brought to the attention of the Secretariat by the States Parties from which the chemicals were exported. The States Parties concerned have indicated that the companies involved have either been prosecuted or are under investigation.
- 3.119 Paragraph 27 of Part VIII of the Verification Annex provides that five years after EIF, the Conference shall consider the need to establish other measures regarding transfers of Schedule 3 chemicals to States not Party to the Convention. The First Review Conference particularly requested the Council to continue working towards an early resolution of this issue and to submit a recommendation to the next regular Session of the Conference (paragraph 7.73 of RC-1/5). At its Forty-Seventh Session, the Council adopted a decision calling upon States Parties to adopt the necessary measures to ensure that Schedule 3 chemicals transferred by them to States not Party are used only for purposes not prohibited by the Convention, and recommending that the Second Review Conference review the implementation of measures regarding such transfers and consider the need to establish other measures (EC-47/DEC.8, dated 8 November 2006). It is anticipated that the issue will be addressed during the Second Review Conference. Statistics on the transfers of Schedule 3 chemicals to States not Party are provided in Annex 4.

Schedule 1 Chemicals and Related Facilities

General provisions of the Convention

- 3.120 Schedule 1 chemicals are considered to pose the highest risk to the object and purpose of the Convention. Chemicals have been selected for inclusion in this list according to three main criteria:

- (a) *history*: used as chemical weapons in the past;
 - (b) *potential for use as chemical weapons*: high toxicity, similar physical properties and/or chemical structure, close precursor to any of the Schedule 1 chemicals used as chemical weapons in the past; and
 - (c) *purpose*: little or no use for purposes not prohibited by the Convention.
- 3.121 Comprehensive, detailed declarations for each Schedule 1 chemical produced, acquired, consumed, or stored (only when such action takes place at facilities producing Schedule 1 chemicals, as declared under paragraphs 10 and 11 of Part VI of the Verification Annex), as well as its transfer(s) are required. The number and the capability of production facilities (as well as quantities produced) are strictly limited based on the assumption that only bigger quantities of chemicals can pose a potential military threat. Frequent, regular monitoring of declared activities and limitation of production capabilities are the main tools for implementation.
- 3.122 The need to produce a chemical listed in Schedule 1 can only be justified by its use for any of the *following purposes*: research, medical, pharmaceutical, or protective. This criterion is further linked to another restriction, which requires that the type and quantities are appropriate for the declared purpose.
- 3.123 An upper annual limit for aggregate amounts of up to 1 tonne of Schedule 1 chemicals per year and per country has been defined (paragraph 2 of Part VI of the Verification Annex). Furthermore, approval by the State Party is required for each facility declared under the provisions of paragraphs 8, 10, and 11 of Part VI of the Verification Annex.
- 3.124 The production capacity is limited by restrictions imposed on the following:
- (a) the number of facilities one State Party can possess: only one single small-scale facility (SSSF) and one other facility for protective purposes (OFPP);
 - (b) the amount that these facilities can produce: one tonne per year for SSSFs (similar to a pilot plant in industry) and 10 kg for other facilities (lab scale);
 - (c) the size of the equipment permitted: in SSSFs the volume of any reaction vessel shall not exceed 100 litres and the total volume of vessels exceeding five litres shall not be more than 500 litres; and
 - (d) the configuration of the equipment: for SSSFs, the reaction vessels shall not be configured for continuous operation.

Risk assessment of Schedule 1 facilities: Background

- 3.125 According to the Convention, all Schedule 1 facilities shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments (paragraphs 22 and 29 of Part VI of the Verification Annex), although the Secretariat has never contemplated the idea of using on-site monitoring instruments because of

the nature of the facilities and the activities carried out there. The Convention further stipulates that the number, intensity, duration, and mode of inspection shall be risk-based, taking into account the *chemicals produced*, the *characteristics of the facility*, and the *nature of the activities carried out there* (paragraphs 23 and 30 of Part VI of the Verification Annex).

- 3.126 The Conference has yet to take a decision on the risk assessment and frequency of inspections for Schedule 1 facilities, as required by paragraphs 23 and 30 of Part VI of the Verification Annex. A draft decision developed by the Preparatory Commission prior to EIF included a set of guidelines that classified Schedule 1 facilities into five risk categories. This served as a basis for consultations shortly after EIF. These guidelines had been provisionally adopted at the Expert Group level but were not considered for final adoption.
- 3.127 Since EIF, through conducting inspections, the Secretariat has gained a wealth of experience in assessing the risk at Schedule 1 facilities and has issued a number of papers that describe the relative risk of Schedule 1 facilities, including a paper issued at the time of the First Review Conference in 2003. The general risk groupings are outlined in the next section.

Characteristics of facilities declared and inspected

- 3.128 There are at present 28 declared and inspectable Schedule 1 facilities in 22 States Parties:
- (a) eight single small-scale facilities (SSSFs);
 - (b) eighteen “other Schedule 1 facilities” (OFPPs), producing for protective purposes; and
 - (c) two “other Schedule 1 facilities for research, medical, or pharmaceutical purposes” (OFRMPHs).
- 3.129 Among the 28 Schedule 1 facilities declared, the eight SSSFs represented greater relevance, and four of these SSSFs were of particular relevance to the object and purpose of the Convention, based on the key risk elements: the relevant chemicals, the characteristics of the facility and the nature of the activities carried out at the facility. The other 20 Schedule 1 facilities were found to present a lower risk to the object and purpose of the Convention, based on the amounts and numbers of different chemicals produced as well as the characteristics and capabilities of the facilities themselves (many of them are producing less than 100g per year of aggregate Schedule 1 chemicals).
- 3.130 Furthermore, an analysis of the Schedule 1 chemicals produced from 1997 to the end of 2006, based on the annual declaration of past activities submitted by the declaring States Parties, indicates that an aggregate amount of only one tonne was produced in all the Schedule 1 facilities of all Member States, of which about 620 kg was produced in SSSFs. In addition, the analysis of the annual declarations on past activities for 2006 shows that almost one-third of these facilities had little (a few grams only) or no production at all. (Actually, three OFPPs have not declared

production of any Schedule 1 chemical since EIF; however, these facilities were subject to systematic verification and have jointly received 17 inspections since EIF.) The overall low level of production at Schedule 1 facilities over an extended period of time (since EIF) is an important factor when refining the assessment of risk related to the nature of their activities.

Implementation experience

- 3.131 All these elements clearly demonstrate that, while before EIF Schedule 1 facilities were perceived to pose the highest risk to the object and purpose of the Convention, the evaluation of the actual risk after 10 years of inspection experience has indicated otherwise. In addition, the strict declaration and verification requirements have allowed the Secretariat to effectively monitor all facilities producing Schedule 1 chemicals.
- 3.132 Through 31 December 2007, 182 Schedule 1 inspections have been undertaken by the Secretariat since EIF. Of this number, 75 have been undertaken since the First Review Conference. Of the current 28 declared facilities, one has been inspected nine times, four have been inspected eight times, and a further six have been inspected seven times since EIF. One facility which was first declared in December 2007 had not been inspected by 31 December 2007.
- 3.133 The results of these inspections indicate that of the 75 inspections that have taken place since the First Review Conference, only five have recorded issues requiring further attention (IRFAs). No “Uncertainty” has ever been reported in Schedule 1 inspections.
- 3.134 The most frequently reported issues are those related to discrepancies between the declared quantities of Schedule 1 chemicals handled by the facility and the verified figures. Other issues have involved changes in the delineation of the facility, removal of equipment without updating the relevant declaration, and undeclared Schedule 1 chemicals.

Future considerations

Frequency of inspections at Schedule 1 facilities

- 3.135 The Convention stipulates that the number, intensity, duration, timing, and mode of Schedule 1 inspections for a particular facility shall be based on the “risk to the object and purpose of this Convention posed by the relevant chemicals, the characteristics of the facility and the nature of activities carried out there” (paragraphs 23 and 30 of Part VI of the Verification Annex). It states that the Conference shall consider and approve guidelines for such risk assessment. In the early years of the OPCW, the Secretariat made a number of proposals for such guidelines (EC-XII/TS.2*, dated 8 October 1998, and EC-XVI/TS.3*, dated 3 September 1999; Rev.1, dated 1 December 1999; and Corr.1, dated 14 September 1999); however, no consensus was reached. The issue was raised again in the context of the First Review Conference, which requested that the Council, assisted by the Secretariat, prepare these guidelines for consideration and adoption as early as possible (paragraph 7.66 of RC-1/5).

- 3.136 Although since 1999, there have been no substantive discussions on the frequency of inspections, the Secretariat has had no difficulties establishing the frequency of inspections, and these are reviewed by the Council and the Conference through the budget process. The Secretariat notes, however, that appropriate guidelines with regard to the number, intensity, duration, timing, and mode of inspections at Schedule 1 facilities have to be considered by the Conference, as required by the Convention (paragraphs 23 and 30 of Part VI of the Verification Annex).

Schedule 2 chemicals and related facilities

General provisions of the Convention

- 3.137 As defined in paragraph 2 of Section A of the Annex on Chemicals, Schedule 2 chemicals are either toxic chemicals possessing lethal or incapacitating toxicity (as well as other properties that could enable them to be used as a chemical weapon) or precursor chemicals at the final stage of the formation of a chemical listed in Schedule 1 or Schedule 2, Part A. Consequently, these chemicals are considered to pose a significant risk to the object and purpose of the Convention.
- 3.138 Furthermore, in accordance with paragraphs 16, 18, and 20 of Section B of Part VII of the Verification Annex, each plant site that produces, processes, or consumes Schedule 2 chemicals above a specific threshold shall receive an initial inspection as soon as possible, but preferably not later than three years after EIF. Those plant sites declared after this period shall be subject to an initial inspection no later than one year after being first declared and to subsequent inspections thereafter, with a frequency and intensity derived from the assessment of the risk posed to the object and purpose of the Convention, taking into account the respective facility agreement as well as the results of the initial and subsequent inspections. The risk to the object and purpose relates to the *relevant chemicals*, the *characteristics of the plant site*, and the *nature of the activities* carried out there. Paragraph 18 of Part VII of the Verification Annex lists the following criteria, which have been further detailed by the Conference in its decision on risk assessment for Schedule 2 facilities (C-I/DEC.32, dated 16 May 1997):
- (a) the *toxicity* of scheduled chemicals and end products produced, if any;
 - (b) the *quantity* of scheduled chemicals typically *stored*;
 - (c) the *quantity of feedstock* chemicals for the scheduled chemical(s);
 - (d) the *production capacity* of the Schedule 2 plants; and
 - (e) the *capability and convertibility* for initiating production, storage, and filling of toxic chemicals at the inspected site.

Risk assessment and selection of facilities for inspection

- 3.139 The Secretariat continued to assess risks and to plan subsequent Schedule 2 inspections during the period that has elapsed since the First Review Conference by using the methodology described in EC-XXII/TS.1, dated 6 October 2000

(Corr.1, dated 19 October 2000; and Corr.2, dated 7 December 2000). This methodology takes into account the nature of the activities carried out at the plant site (production, processing, and/or consumption), the relevant chemicals at the plant site (2A/2A*, or 2B chemicals), and the related quantities, as outlined in the Conference decision (C-I/DEC.32, dated 16 May 1997) in order to assess the risk posed by a Schedule 2 plant site to the object and purpose of the Convention.

- 3.140 Three main groups were identified as follows: **Group 1 (low risk)**: plant sites processing and/or consuming up to 100 tonnes of Schedule B chemicals per year; **Group 2 (medium risk)**: plant sites processing and/or consuming more than 100 tonnes/year and/or producing up to 500 tonnes of Schedule B chemicals per year; and **Group 3 (high risk)**: plant sites producing more than 500 tonnes of Schedule B chemicals per year and/or producing Schedule 2A/ 2A* chemicals.
- 3.141 For the low-risk category (Group 1), a frequency of three inspections (including the initial inspection) over a 10-year period was recommended by the Secretariat in a paper submitted in 2000 (EC-XXII/TS.1, Corr.1, and Corr.2). No recommendation was made for the medium-risk (Group 2) and the high-risk (Group 3) categories, pending further discussion with Member States. In the absence of any agreement between States Parties vis-à-vis the frequency of inspections for the medium- and high-risk categories, the Secretariat has essentially applied the same frequency of inspections it has for Schedule 2 plant sites in the low-risk group (averaging three inspections over 10 years, including the initial inspection) for the medium-risk group and a slightly higher frequency for the high-risk group. This was further constrained by the requirement to make initial inspections a priority and by the number of Schedule 2 inspections approved in the annual OPCW Programme and Budget.

Characteristics of the facilities declared and inspected

- 3.142 The number of inspectable plant sites also varied from 153 in 21 States Parties in 2003 to 165 in 22 States Parties by December 2007.
- 3.143 There are seven States Parties that have 10 or more inspectable plant sites, which comprises 75% of all inspectable plant sites. It should be noted, however, that there has been a significant turnover in Schedule 2 plant sites since EIF, with many of the sites inspected in the years 1997 to 1999 dropping below declaration thresholds, shutting down operations completely, switching to non-scheduled chemicals, or becoming not declarable as a result of the Conference decision on the low concentration limit for Schedule 2B chemicals. Other plant sites from this category, although still declared, remained below verification thresholds after initial inspection and therefore were never subject to subsequent inspections. At the same time, new plants sites have been added that more than make up for the number of sites that have dropped off the inspectable list.
- 3.144 With regard to the characteristics of the Schedule 2 plant sites inspected, the Secretariat has noticed a wide range of equipment configurations. Based on the list of inspectable Schedule 2 plant sites, 60% are multipurpose-batch, 27% are dedicated-batch, and 13% are dedicated-continuous. The equipment in the multipurpose-batch configurations normally have greater flexibility to produce, process, or consume a wider range of chemicals.

- 3.145 A large number of the sites are involved in processing and/or consumption activities involving Schedule 2B4 and 2B13 chemicals. Some of these plant sites have been found to possess similar simple process configurations and basic safety features, while some others have an equipment setup with more flexibility. All these plant sites typically consume or process the Schedule 2B chemicals used as flame retardants for construction materials, paper, and textiles.
- 3.146 There are currently 15 plant sites declared to be involved in activities related to 3-quinuclidinyl benzilate (*) (BZ) and PFIB (Schedule 2A* and 2A chemicals, respectively). These plant sites are considered to pose the highest risk to the object and purpose of the Convention, not necessarily because of their intrinsic characteristics but because of the chemicals involved. The plant sites that produce and consume PFIB typically have dedicated production equipment. PFIB is generated as an unwanted, unavoidable by-product that is incinerated after being produced (either on-site or off-site). BZ is an intermediate chemical in the production of pharmaceutical products. Plant sites that produce and consume BZ have multipurpose-batch equipment arrangements. No plant site producing, processing, or consuming Schedule 2A amiton has ever been declared.

Main Schedule 2 chemicals produced, processed, and consumed

- 3.147 Based on information declared to the Secretariat, trends in the production and consumption of Schedule 2 chemicals have changed since the First Review Conference. The total amount of Schedule 2 chemicals produced and consumed rose steadily after 2003, from 16,500 tonnes to 24,000 tonnes in 2006. This increase was basically caused by four chemicals: PFIB, methylphosphinic acid, butyl methylphosphinate, and methylphosphonous dichloride. The total amount produced for these four chemicals, compared to the total amount of Schedule 2 chemicals produced, increased from 47.6% in 2003 to 59% in 2006, when the production of these four compounds represented 10.4%, 11.1%, 18.7%, and 18.9%, respectively, of the total Schedule 2 chemicals produced. The amounts of dimethyl methylphosphonate and thiodyglycol produced have also increased since 2003, while the amount of diethyl ethylphosphonate has decreased from 1,800 tonnes to 1,000 tonnes. The amounts of the remaining Schedule 2 chemicals produced have basically been constant since 1997.
- 3.148 The total amount of Schedule 2 chemicals consumed follows the same trend as their production, rising from 13,400 tonnes in 2003 to 19,500 tonnes in 2006, with the increase being due to the same four chemicals mentioned above. This represents 81% of the total Schedule 2 chemicals produced each year.
- 3.149 The difference between the amounts produced and consumed corresponds approximately to the quantities processed. The amount processed, however, decreased from 4,700 tonnes (29% of the total amount produced in 2003) to 3,300 tonnes (14% of the total amount produced in 2006).

Implementation experience

- 3.150 A total of 405 Schedule 2 inspections (which includes 244 initial inspections) has been carried out in 22 States Parties since EIF (through December 2007). From the 42 Schedule 2 inspections made in 2007, 16 (or 38%) were initial inspections. This is very similar to the proportion of 35% initial Schedule 2 inspections carried out in 2006, and represents an increase compared to the 7% initial inspections recorded for 2005 and 17% recorded for 2004. The situation presented during the First Review Conference (covering the period from EIF through 2002) was characterised by 92% initial inspections and 8% subsequent inspections, while during the period from 2003 through 2007 (up to the Second Review Conference), the situation was 30% initial and 70% subsequent inspections.
- 3.151 The analysis of the final inspection reports for a total of 207 Schedule 2 inspections, conducted from 2003 until the end of December 2007, indicates that 14 inspections have recorded IRFAs, and in two of them, uncertainties were reported. These IRFAs are mainly related to discrepancies between declared and verified figures for production, processing, consumption, or transfers of Schedule 2 chemicals. The two uncertainties were both related to a lack of sufficient records to allow verification that these chemicals were not diverted for purposes prohibited by the Convention. The situation is substantially different from the period from 1997 to 2002, where, out of a total number of 198 Schedule 2 inspections conducted, 149 recorded IRFAs, with uncertainties identified in 14 of them. This significant decrease in the number of inspections recording IRFAs is due to a variety of reasons. One important point contributing to this reduction is that Member States, as well as the Secretariat, have gained more experience and practice in implementing the requirements of the Schedule 2 regime.
- 3.152 There has been a wealth of experience gained from conducting these inspections, which has reinforced the Secretariat's view that Schedule 2 verification is very comprehensive in nature and is a very effective regime under Article VI of the Convention. The Schedule 2 regime allows the collection, evaluation, and reporting of key information on the site of the declared Schedule 2 plants (including process, equipment configuration, and material-balance record-keeping over a three-year period prior to inspection) in order to ensure compliance with the Convention.

Sampling and analysis

- 3.153 The Convention provides for sampling and analysis as a routine verification tool in Article VI inspections (paragraph 52 of Part II and paragraph 27 of Part VII of the Verification Annex). In December of 2005, the Director-General indicated that the Secretariat would begin a start-up period of one and one-half years, during which sampling and analysis will be used on a limited basis and only in subsequent Schedule 2 inspections, which would provide an additional safeguard in the implementation of the regime. Up to the end of December 2007, sampling and analysis was conducted effectively at 11 plant sites in 11 different countries, with two of the missions being conducted in 2006 and nine missions being conducted in 2007. Although sampling and analysis is still in the start-up period, from the findings gathered, the use of sampling and analysis in Schedule 2 subsequent inspections resulted in additional

confidence with regard to the absence of undeclared scheduled chemicals, in particular, the absence of Schedule 1 production.

Future considerations

Frequency of inspections at Schedule 2 plants

- 3.154 The First Review Conference has already acknowledged the time and effort that have been spent by both States Parties and the Secretariat in developing an acceptable methodology for conducting the risk assessment of Schedule 2 plant sites. While the aim of this methodology is to provide a basis for determining the appropriate frequency of inspections, no consensus has been reached thus far.
- 3.155 As indicated in the Director-General's letter (L/ODG/121431/07, dated 6 February 2007) to the Chairperson of the Council, regarding future industry inspections, the Secretariat has finalised an analysis of inspectable Schedule 2 plant sites that have been subject to an initial inspection. The aim of this analysis was to update the data related to their corresponding risk assessments and to propose a new approach for the resolution of the issue of determining the appropriate frequency of inspections. The results of this analysis, as well as a more detailed explanation of a proposed new statistical method, are included in a paper entitled "Risk assessment for Schedule 2 plant sites and frequency of inspection", dated 28 May 2007. In this paper, the Secretariat proposed a new, simplified algorithm for risk assessment and also recommended the frequency of inspections for the three risk groups. Further discussion with Member States is anticipated as this remains an outstanding issue in the Council and one which has been referred to the Industry Cluster consultations (EC-XVI/INF.3, dated 22 September 1999).

Schedule 3 chemicals and related facilities

General provisions of the Convention

- 3.156 Paragraph 5 of Article VI of the Convention requires each State Party to subject the chemicals listed in Schedule 3 and related facilities specified in Part VIII of the Verification Annex to data monitoring and on-site verification.
- 3.157 Part VIII of the Verification Annex establishes that the initial and annual declarations to be provided by a State Party shall include aggregate national data for the previous calendar year on the quantities produced, imported, and exported of each Schedule 3 chemical. Also required are declarations of plant sites that comprise one or more plants that, during the previous calendar year, have produced more than 30 tonnes of a Schedule 3 chemical, or which are anticipated to produce more than 30 tonnes of a Schedule 3 chemical in the next calendar year.

Selection of Schedule 3 facilities for inspection

- 3.158 According to paragraph 14 of Part VIII of the Verification Annex, the Secretariat shall randomly select Schedule 3 plant sites for inspection by using specially designed computer software on the basis of two weighting factors: (a) equitable geographical distribution of inspections and (b) the information available to the Secretariat related

to the relevant chemical, the characteristics of the plant site, and the nature of activities carried out there. Two additional constraints have to be observed by the Secretariat when selecting Schedule 3 plant sites for inspection: first, that no plant site will receive more than two inspections per year, under the provisions of paragraph 15 of Part VIII of the Verification Annex, and second, that the combined number of inspections that a State Party can receive per calendar year, under Part VIII and Part IX of the Verification Annex, shall not exceed three plus 5% of the total number of sites declared under both Part VIII and Part IX—or 20 inspections—whichever of these two figures is lower (paragraph 16 of Part VIII of the Verification Annex).

- 3.159 The Council considered and approved a mechanism to be applied in the selection of Schedule 3 plant sites (EC-XVII/DEC.7, dated 1 December 1999). This decision put in place a selection methodology that is based on a two-step random-selection process. In the first step, the State Party is selected according to the probability of its being inspected, calculated with a formula that takes into account the total number of Schedule 3 plant sites that are verifiable in that State Party. In the second step, a plant site within the selected State Party is selected by using the weighting factors detailed in subparagraph 14(b) of Part VIII of the Verification Annex.

Characteristics of the facilities declared and inspected

- 3.160 In most cases, the plants producing Schedule 3 chemicals are dedicated and are usually in continuous operation. The majority of them produce large volumes of chemicals. For example, the annual production for phosgene plants normally ranges from 10,000 to 100,000 tonnes/year, and even higher in some cases. Only five of the 57 plants producing phosgene that have been inspected have declared a smaller range of production. Similarly, for hydrogen cyanide production, between 10,000 and 100,000 tonnes per year have been declared by 25 inspected plant sites out of the 39 sites that are still inspectable. Phosgene and hydrogen cyanide plants are normally integrated with other process streams involved in the production of other organic chemicals that are the final products of the plant site. Triethanolamine is another Schedule 3 chemical typically produced in large quantities: between 1,000 and 10,000 tonnes per year, but higher in some cases. Phosphorus trichloride is also produced in large quantities and is one of the most widely used chlorinating agents in the chemical industry worldwide. The remaining 13 Schedule 3 chemicals are typically produced in lower annual volumes.
- 3.161 Given the large production capacities involved and the fact that most of the Schedule 3 plants are dedicated to the production of these chemicals, the analysis of the inspection results indicates that the Schedule 3 plants lack flexibility in terms of their ability to be converted to the production of other scheduled chemicals.
- 3.162 Schedule 3 inspections were initiated late in 1998, more than one year after EIF. This was influenced by the need to satisfy other, more stringent, requirements of the Convention, such as the need to conclude a facility agreement for each declared Schedule 1 facility within 180 days after EIF (paragraphs 25 and 31 of Part VI of the Verification Annex) and to inspect all verifiable Schedule 2 plant sites “preferably not later than three years after entry into force” (paragraph 16 of Part VII of the Verification Annex). Between 31 December 2002 and 31 December 2007, the Secretariat conducted 118 Schedule 3 inspections in 34 States Parties, of which five

were subsequent Schedule 3 inspections. These latter inspections were initiated in 2004 with one re-inspection being carried out each year since then, except for 2005 when two such inspections were conducted. The distribution of Schedule 3 inspections among the regional groups compared to the number of Schedule 3 inspectable plant sites is depicted in the two tables below.

**TABLE 1: DISTRIBUTION OF SCHEDULE 3 INSPECTIONS
(2003 THROUGH 31 DECEMBER 2007)**

Region	Inspections
Asia	62
Africa	0
Eastern Europe	8
GRULAC	7
WEOG	41

TABLE 2: DISTRIBUTION OF SCHEDULE 3 INSPECTABLE SITES

Region	Inspectable Sites
Asia	300
Africa	1
Eastern Europe	20
GRULAC	10
WEOG	103

Note: Data as at 31 December 2007.

Implementation experience

- 3.163 This analysis shows that the methodology approved by the Council in 1999 for the selection of Schedule 3 plant sites has appropriately ensured the equitable geographical distribution of inspections (as specified in paragraph 14(a) of Part VII of the Verification Annex). Moreover, it confirms that the weighting factors used in the selection of Schedule 3 plant sites (i.e., the relevant chemicals, their number, and the nature of activities carried out at the inspected plant sites) have also had the desired result. As an example, plant sites that are producing the four toxic Schedule 3 chemicals (phosgene, cyanogen chloride, hydrogen cyanide, and chloropicrin) account for more than 65% of all inspected plant sites, compared with the rest of the Schedule 3 chemicals that are listed as precursors.
- 3.164 The results of the Schedule 3 inspections carried out prior to the First Review Conference indicate a significant number of inspections recording IRFAs (32 out of 113 inspections) and one that had recorded an “Uncertainty”.
- 3.165 By comparison, the results of the Schedule 3 inspections carried out between the First and the Second Review Conference show that only IRFAs have been recorded—in just two inspections. One inspection recorded an issue related to the inspectability of the site, while the second one recorded an issue related to the delineation of the plant site. However, discrepancies between declared and verified information have been identified in a significant number of inspections. These discrepancies were in relation to the name, address, owner/operator of the plant site, number of plants, the

product-group codes describing the main activities of the plant site, the product-group codes describing the purpose of production, and the range of production.

Other chemical production facilities

General provisions of the Convention

- 3.166 Discrete organic chemicals (DOCs), as defined in Part I of the Verification Annex, include “any chemical belonging to the class of chemical compounds consisting of all compounds of carbon except for its oxides, sulfides and metal carbonates, identifiable by chemical name, by structural formula, if known, and by Chemical Abstracts Service registry number, if assigned” (paragraph 4 of Part I of the Verification Annex). A further understanding of this definition was adopted by the First Session of the Conference (see C-I/DEC.39, dated 16 May 1997 for details). DOCs, either toxic or non-toxic, have legitimate applications in many parts of the chemical industry. The Convention does not restrict their production in OCPFs, and the States Parties have the right to develop, produce, acquire, retain, transfer, and use these chemicals for purposes not prohibited under the Convention (paragraph 1 of Article VI). The verification of these activities is done through on-site inspections as set out in Part IX of the Verification Annex.
- 3.167 According to Part IX of the Verification Annex, those facilities that, in a calendar year, produce by synthesis in excess of an aggregate of 200 tonnes of unscheduled DOCs, or that have at least one plant producing in excess of 30 tonnes of a DOC containing phosphorus, sulphur, or fluorine (PSF chemicals) shall be included in the initial declaration provided by each State Party. (Plant sites that exclusively produce explosives or hydrocarbons are not required to be included in the initial declaration.) Annual updates of the information related to these declared plant sites shall be provided no later than 90 days after the beginning of each year. No annual declaration of anticipated activities is required for OCPFs.
- 3.168 The information for each OCPF shall include the name of the plant site and the owner (operator), the precise location, its main activities, the approximate number of plants producing DOCs (including PSF chemicals), and the number of plants producing PSF chemicals (including data on their aggregate production, expressed in ranges), as well as the aggregate production of DOCs for the entire plant site, expressed in ranges.
- 3.169 During the initial three years after EIF (1997–2000), OCPFs were subject to declarations only. The implementation of on-site inspections started at the beginning of the fourth year after EIF (May 2000) as per the provisions of paragraph 22 of Part IX of the Verification Annex.

Selection of OCPFs for inspection

- 3.170 The selection of OCPFs for on-site inspections shall be done randomly using specially designed computer software on the basis of the weighting factors defined in paragraph 11 of Part IX of the Verification Annex: (a) equitable geographical distribution of inspections and (b) information on the listed plant sites available to the Secretariat, related to the characteristics of the plant site, and activities carried out

there, and (c) proposals by States Parties on a basis to be agreed upon by the Conference.

3.171 In selecting OCPFs for inspection, the Secretariat has to observe two specific limitations, as stated in Part IX of the Verification Annex:

- (a) No plant site shall receive more than two inspections per year under paragraph 12 of Part IX of the Verification Annex; and
- (b) The combined number of inspections to be received by a State Party per calendar year shall not exceed three plus 5% of the total number of plant sites declared by a State Party as Schedule 3 and OCPF, or 20 inspections, whichever of these two figures is lower (paragraph 13).

Characteristics of the OCPFs declared and inspected: General remarks

3.172 Although scheduled chemicals are not generally handled in OCPFs, many of these facilities have the capability to produce and handle highly toxic chemicals. The convertibility of their processing equipment, coupled with their production, were used to define selection algorithms and to assess the effectiveness of the on-site verification process.

3.173 In the following section, the technical characteristics of the OCPFs inspected between 2000 and 2006 are presented. (Unless otherwise indicated, the statistics used in this section are based on inspections carried out by the Secretariat during this time.) It is worth mentioning that, out of the 390 plant sites inspected, 24 were found not to be inspectable for various reasons, leading to 366 inspections for this period.

3.174 Two main criteria have been used for qualitative evaluation of OCPFs: (a) the types of chemicals produced and (b) their characteristics in relation to the processes and equipment used.

Characterisation of OCPFs in relation to the chemical(s) produced

3.175 The category of PSF plant sites includes all the OCPFs that contain at least one declarable PSF plant. They can be further classified as follows:

- (a) high-relevance plant sites: plant sites producing pesticides, herbicides, fungicides, and pharmaceuticals;
- (b) medium-relevance plant sites: plant sites producing PSF chemicals, such as dyes, pigments, and flotation agents for the mining industry; and
- (c) low-relevance plant sites: plant sites producing linear alkyl benzene sulfonates (LABS) or other tensioactive agents containing sulphur and/or phosphorus.

3.176 Based on these criteria, the distribution of PSF plant sites inspected is summarised in Table 3 (from inspection data beginning in April 2000 through 31 December 2006).

TABLE 3: DISTRIBUTION OF PSF FACILITIES ACCORDING TO THE CHEMICALS PRODUCED

Category of PSFs	No of facilities	%
Pesticides/Herbicides/Pharmaceuticals (high relevance)	111	51
General PSFs (medium relevance)	89	41
Detergents (LABS) (low relevance)	18	8
Total	218	100

3.177 The category of non-PSF plant sites includes all the OCPFs that do not contain any declarable PSF plant. They can be further classified as follows:

- (a) high-relevance plant sites: pharmaceuticals and food ingredients;
- (b) medium-relevance plant sites: other DOC production sites; and
- (c) low-relevance plant sites: bulk chemicals (such as methanol, urea, formaldehyde, vinyl chloride, and methyl tertiary-butyl ether (MTBE)).

3.178 Table 4 summarises the distribution of non-PSF plant sites inspected in relation to the chemicals produced (from inspection data beginning in April 2000 through 31 December 2006).

TABLE 4: DISTRIBUTION OF NON-PSF DOC FACILITIES ACCORDING TO THE CHEMICALS PRODUCED

Category of non-PSF DOCs	No of facilities	%
Pharmaceuticals and food ingredients (high relevance)	18	12
Other DOCs (medium relevance)	54	37
High-volume bulk chemicals (urea, methanol, MTBE, formaldehydes)	76	51
Total	148	100

Characterisation of OCPF plant sites in relation to process characteristics and hardware

3.179 Two main criteria, based on the type of process (batch or continuous) and on the flexibility of the technology (dedicated or multipurpose) can be used for subdividing the OCPFs further:

- (a) high-relevance plant sites: batch and multipurpose. Several chemicals can be obtained on the same production line in these plant sites. They possess at least one plant operating in the batch mode. Sometimes the equipment and connections are flexible, allowing several configurations. They use corrosion-resistant equipment and are capable of switching rapidly between different products;
- (b) medium-relevance plant sites: batch and dedicated or continuous and multipurpose. Examples of batch and dedicated sites are plant sites producing

high volumes of pharmaceuticals or biologically active chemicals. An example of continuous and multipurpose production would be the production of organic esters (such as butyl acetate and iso-butyl acetate) in the same continuous plant; and

- (c) low-relevance plant sites: continuous and dedicated. A single product is produced in a continuous mode, often in high-capacity plants. Typical examples are urea, methanol, formaldehyde, or MTBE plants.

3.180 Again using the criteria presented above, and the two main sub-divisions of OCPFs (producing PSF or non-PSF DOCs), the inspections can be summarised as presented in Tables 5 and 6 below (from inspection data beginning in April 2000 through 31 December 2006):

TABLE 5: DISTRIBUTION OF PSF FACILITIES ACCORDING TO THEIR ENGINEERING FEATURES

Category of PSFs	No. of facilities	%
Batch/Multipurpose (high relevance)	128	59
Dedicated/Batch and multipurpose/continuous (medium relevance)	59	27
Dedicated continuous (low relevance)	31	14
Total	218	100

TABLE 6: DISTRIBUTION OF NON-PSF DOC FACILITIES ACCORDING TO THEIR ENGINEERING FEATURES

Category of non-PSF DOCs	No. of facilities	%
Batch/Multipurpose (high relevance)	21	14
Dedicated/Batch and multipurpose/continuous (medium relevance)	45	31
Dedicated continuous (low relevance)	82	55
Total	148	100

Implementation experience

- 3.181 In the first two years of on-site OCPF inspections (2000 and 2001), a two-step selection methodology was applied (EC-XIX/DEC/CRP.11, dated 4 April 2000). In the first step, the State Party was selected. In the second step, the plant site within the State Party was selected, based on its range of production (irrespective of whether it contained PSF plants or not) and whether it had already been inspected in the past. During the first year of implementation, the State Party was selected with a probability proportional to the cube root of the number of its declared inspectable facilities. From November 2001 onward, the Secretariat attempted to broaden the geographic distribution of inspections by selecting with equal probability the States Parties to be inspected.
- 3.182 This selection methodology led to broader geographical distribution, but it also resulted in the selection of a large proportion of sites that were deemed to be of low relevance to the object and purpose of the Convention. That was mainly due to the fact that the highest probability of being selected was assigned to plant sites declaring

the highest range of production (a declaration of a production range code of B 33, which is equivalent to more than 10,000 tonnes/year of DOC being produced by synthesis). As a consequence, more than 50% of the plant sites inspected in this period of time were found to involve dedicated production of large volumes of bulk chemicals, such as formaldehyde, methanol, and urea, with little flexibility in their engineering features and equipment-train capabilities.

- 3.183 In order to increase the effectiveness of the verification process, the Secretariat later developed a new selection algorithm (the so-called “A14 method”), which was meant to increase the probability of selecting OCPFs of greater relevance to the object and purpose of the Convention. Based on the information provided in declarations, the A14 method is similar to the previous algorithm. It takes into account the number of DOC plants, the production range (with a higher probability attributed to medium-range production facilities), the presence of PSF plants, and the standard international trade classification (SITC) product-group codes. Using these characteristics, the A14 algorithm assigns a numerical value that quantifies the relevance of individual plant sites.
- 3.184 This methodology was recognised by the Council as an improvement over the previously used selection mechanism, and the Council commended the Secretariat for its ongoing efforts to improve and refine the selection process. The relevance of selected plant sites improved considerably because the new algorithm resulted in a proportional increase in the number of selected plant sites with advanced engineering features and process capabilities.
- 3.185 However, the selection mechanism still incorporated a strong probability for equal selection of States Parties. This had a significant side effect: 17 States Parties with relatively small chemical industries had 100% of their inspectable OCPFs inspected as of 31 December 2006. An additional 19 States Parties had at least 50% of their inspectable OCPFs inspected. Cumulatively, 36 States Parties (49%) out of 73 with inspectable facilities have had at least 50% of their declared chemical industries inspected under this regime, even though these countries have declared fewer than 4% of the total number of inspectable sites. In contrast, the five countries with the largest number of inspectable OCPFs, representing about 67% of the total worldwide number of inspectable OCPF sites (as at December 2006), have had only 1.1% of their plant sites inspected.
- 3.186 The methodology for the random selection of OCPF plant sites and the weighting factors used were subjected to extensive examination and discussion in the Industry Cluster. There has been emerging consensus on how to implement the provisions of subparagraphs 11(a) and 11(b) of Part IX of the Verification Annex. While nearly all Member States agree that the OCPF selection methodology has to be modified in order to ensure more equitable geographic distribution and to increase the effectiveness of the verification process, the implementation of subparagraph 11(c) is still an ongoing issue, with divergent views among Member States.
- 3.187 As directed by the Director-General, a number of OCPF inspections (calculated as 5% of the total number budgeted for each year) shall take place at previously inspected plant sites as a means of ensuring a reasonable level of confidence that activities

prohibited by the Convention do not occur in previously inspected OCPFs. This practice was started in 2005 and is ongoing.

Future considerations

- 3.188 Considering the significant number of declared OCPFs, there is a need to improve the selection process to target the more relevant plant sites. This can be accomplished in two steps: by improving geographical distribution and by improving targeting to select more-relevant plant sites.

Improve equitable geographical distribution

- 3.189 The Director-General has informed the States Parties about his initiative to modify the methodology for selecting OCPF plant sites for inspection (see S/641/2007, dated 25 May, 2007 and Corr.1, dated 4 June 2007). The modification does not introduce a new criterion for selection, but it helps make the selection of sites more equitable and ensures that inspections are adequately focussed. In following this methodology, the Secretariat will of course ensure that the total number of OCPF inspections received by a State Party stays within the maximum set by Part IX of the Verification Annex. The modified methodology is being used for selecting the plant sites that are subject to inspection since 1 January 2008.

Improve targeting to select more-relevant plant sites

- 3.190 The second step is further improvement in targeting so that more-relevant plant sites are selected: fine-tuning the A14 algorithm could focus the inspection of OCPF plant sites more on what are considered to be the most relevant facilities. However, considering that the existing algorithm is already using the key plant-site information provided in declarations, the impact of these changes will be limited. States Parties would have to agree on the need to submit more specific information on declared plant sites so that this could be worked into the selection methodology.
- 3.191 There have been extensive consultations in the Industry Cluster on the methodology for selecting OCPF sites; however, no decision has yet been taken with respect to subparagraph 11(c) of Part IX of the Verification Annex, which covers proposals from States Parties on the process of selecting OCPF plant sites. Consultations on this issue are expected to continue, but the resolution is overdue and should be addressed by the Second Review Conference.

NATIONAL IMPLEMENTATION

- 3.192 One of the core objectives of the OPCW, as elucidated in the Programme and Budget for 2007 is “the full, effective and non-discriminatory implementation of all the provisions of the Convention”. Subparagraph 38(e) of Article VIII of the Convention requires the Secretariat to “[p]rovide technical assistance and technical evaluation to States Parties in the implementation of the provisions of this Convention, including evaluation of scheduled and unscheduled chemicals”.
- 3.193 The OPCW’s programmes for supporting implementation draw upon specialised resources from several Divisions in the Secretariat—and expertise from outside, as

appropriate—to provide the most relevant and effective assistance to Member States, upon request, in fulfilling their Article VII obligations. The programmes are intended to help Member States in developing their national capacity for full and effective implementation of the Convention. At the First Review Conference, the OPCW was directed to develop a plan of action based on a recommendation from the Council regarding the implementation of Article VII obligations, with the objective of fostering full and effective implementation of the Convention by all States Parties. This Plan of Action Regarding the Implementation of Article VII Obligations was adopted by the Conference at its Eighth Session in October 2003, and the Conference took subsequent decisions regarding its follow-up actions.

- 3.194 The implementation-support programmes are need-based and focus on areas in which Member States have indicated difficulty or have requested assistance. In addition, these programmes are designed to create awareness about practical implementation-related issues and to provide training to personnel from National Authorities to implement the Convention in their countries.
- 3.195 The Office of the Legal Adviser records the progress achieved by Member States and provides an analysis of the national implementation efforts made by Member States to fulfil their Article VII obligations. This information is kept current in a progress report available to States Parties on the external server of the OPCW. Brief summaries of new developments and comprehensive progress reports are provided to the Council at periodic intervals and in accordance with the requests made by the policy-making organs.
- 3.196 The implementation-support programmes offered by the Secretariat include bilateral technical-assistance visits to facilitate national implementation. They also facilitate implementation by creating an awareness among stakeholders through technical regional and subregional meetings on practical issues related to implementation, training courses for personnel from National Authorities, annual regional meetings of National Authorities (and the annual National Authorities meeting in The Hague) to foster regional networking and cooperation, the development of electronic tools to assist Member States with national implementation, informative publications and packages for use by National Authorities for domestic outreach, and the National Implementation Profiles System containing comprehensive information about each State Party's national implementation.
- 3.197 The Secretariat's approach to implementation support continues to evolve as a result of interactions with National Authorities and the progress achieved by States Parties in fulfilling their obligations under the Convention. From the time of the First Review Conference, the Secretariat's approach has been transformed from rendering start-up support for designating or establishing a National Authority towards drafting and adopting measures necessary on both the legislative and administrative level and towards promoting the enforcement of national implementation—thus enhancing the long-term capacity of National Authorities. However, the Secretariat continues to offer start-up support, as appropriate and when requested.
- 3.198 Since the adoption of the Plan of Action Regarding the Implementation of Article VII Obligations (C-8/DEC.16, dated 24 October 2003), significant progress has been made by States Parties in implementing their Article VII obligations: 50 additional

States Parties have established or designated their National Authority, leaving only seven States Parties not having fulfilled this requirement, and 31 additional States Parties have made their first Article VII(5) submissions (as at 4 March 2008).

- 3.199 The following table shows how the status of the establishment or designation of National Authorities and the adoption of legislative and administrative measures by States Parties have evolved since the adoption of the plan of action.

TABLE 7: STATUS OF IMPLEMENTATION OF ARTICLE VII OBLIGATIONS

Obligations	As of October 2003 CSP-8 (154 States Parties)	As at 21 November 2007 (182 States Parties)
National Authority designated or established	126 (82%)	176 (96%)
Article VII(5) submission received	94 (61%)	125 (68%)
Legislation covering all key areas	51 (33%)	81 (44%)
Text of adopted measures provided	63 (41%)	110 (60%)
Confirmation regarding Article XI(2e) review	39 (25%)	59 (32%)

- 3.200 The Secretariat receives voluntary contributions from States Parties and regional organisations, such as the European Union, in support of the OPCW's implementation support programmes. These voluntary contributions complement the regular budget funds and permit the Secretariat to widen as well as deepen the scope of its efforts to facilitate assistance. Under the EU Joint Action, funds have also been provided as grants to National Authorities to help them undertake domestic implementation efforts. This is in addition to the financial support that the EU provides through the Joint Action for the Secretariat's bilateral technical-assistance visits, subregional legal workshops, and regional and subregional thematic meetings to sensitise Parliamentarians and to create an awareness regarding the non-proliferation requirements of the Convention. Annex 5 provides an overview of the funding made available by Member States for the OPCW implementation-support programmes.

Programmes

Bilateral technical-assistance visits

- 3.201 Bilateral technical-assistance visits are an important element of the Secretariat's programme delivery and are undertaken by the Secretariat upon the specific written request of a State Party. Such bilateral visits facilitate focussed assistance to the requesting Member State. Typically, during a bilateral assistance visit, drafting sessions are held to develop national implementing legislation and/or to consider amendments to existing legislation; a number of Member States have drawn up internal plans for implementation, with specific deadlines, during such a visit. Awareness workshops to sensitise relevant stakeholders to the requirements of the Convention, as well as information and advice on the establishment and effective functioning of a National Authority, are also provided during these visits. Since the adoption of the plan of action regarding the implementation of Article VII obligations

in 2003, bilateral technical-assistance visits have focussed on providing direct support to the fulfilment of Article VII obligations.

- 3.202 Several bilateral technical-assistance visits have been jointly undertaken by the Secretariat and a Member State. Efforts to initiate cooperation among States Parties through bilateral technical-assistance visits have also been made with the inclusion of experts from States Parties in the Secretariat-led team.
- 3.203 The overall benefit of bilateral technical-assistance visits has been to provide focussed assistance to the National Authority in creating domestic awareness of the object and purpose of the Convention, particularly among the stakeholders. These visits also benefit the Secretariat by reaching out to a wider domestic audience. Bilateral technical-assistance visits usually lead to greater participation in the training programmes and capacity-building activities offered by the Secretariat, contributing to greater awareness and capacity in National Authorities in regard to implementing the Convention.

Thematic/technical meetings

- 3.204 Thematic/technical meetings organised by the Secretariat can be categorised into two groups.
- 3.205 Subregional meetings/workshops: the Secretariat has been organising subregional meetings and workshops with a single theme, such as the Legal Workshops. One of the purposes for such meetings/workshops is to follow up on bilateral technical visits that might have taken place earlier. Through such workshops, the legislative drafters are provided an opportunity to consult with representatives from the Office of the Legal Adviser on national implementing legislation and regulations to enforce the legislation. For States Parties that might not have received bilateral technical-assistance visits, attendance at such workshops provides an opportunity to create contacts with the Secretariat for implementation-related purposes. These meetings also provide States Parties and the Secretariat the opportunity to focus on specific but important issues, which are of particular complexity. Such workshops provide several Divisions in the Secretariat the possibility of interacting with key National Authority personnel on other implementation-related issues. The Secretariat interacts with representatives from the National Authorities to assess each participating States Party's requirements for future assistance.
- 3.206 Thematic workshops: the Secretariat has also been organising thematic workshops, both at the regional and subregional levels. The focus of these thematic workshops is to provide an opportunity for States Parties to discuss specific implementation-related issues. States Parties have faced challenges in implementing the provisions of the Convention in a number of areas. Initially, through such workshops, the Secretariat, by ensuring close cooperation of all the Branches and Divisions concerned, sought to create an awareness of the difficulties encountered in implementing specific provisions of the Convention. Such workshops have been held each year since 2002, and since 2005, they have been organised at the subregional level in Africa, Asia, Eastern Europe, and GRULAC.

- 3.207 Over time, the workshops have led to a better understanding and awareness of the challenges faced by Member States in implementing specific provisions of the Convention. The workshops have also contributed to (a) Member States and the Secretariat working together to find ways to overcome these challenges through the development of specific initiatives for consideration by the policy-making organs of the OPCW, (b) liaising with other international organisations through training and cooperation to improve national capacities, and (c) creating necessary awareness among relevant stakeholders in the National Authorities to address the issues effectively.
- 3.208 The results of such a multi-layered approach have been encouraging, with the creation of greater awareness about the issues in National Authorities, closer cooperation with relevant international organisations to improve the ability of National Authorities to tackle specific implementation-related matters, and increased national capacity through training programmes (conducted by either the OPCW or offered by relevant international organisations).

Regional and subregional meetings of National Authorities

- 3.209 Since 2002, the Secretariat has organised, on a regular basis, regional and subregional meetings for National Authorities in Africa, Asia, Central Asia, Eastern Europe, and GRULAC. The purpose of such meetings is to foster regional cooperation and improve regional networking with the objective of States Parties assisting each other in the implementation of the Convention. The first regional meeting for GRULAC was held in 2000.
- 3.210 Regional meetings have offered valuable opportunities for the Secretariat to interact with National Authority representatives on practical implementation-related matters. At regional meetings, implementation issues that are relevant to the region are also taken up for discussion. Since the adoption of the Article VII action plan, the Secretariat has also used regional meetings as a venue for bilateral consultations with National Authority representatives to offer assistance and receive feedback on the progress achieved by States Parties in fulfilling their Article VII obligations.
- 3.211 The participation of National Authorities in regional meetings has increased consistently, and the feedback received from participants has been positive.

Annual Meeting of National Authorities

- 3.212 Each year, the Secretariat organises an annual meeting of National Authorities at the OPCW. The meeting is held immediately prior to the annual Conference, which enables a number of developing countries to be represented at it as well. At the annual meeting, participating National Authority representatives provide information about the activities undertaken by them during the year. The purpose of the meeting is to provide a platform for representatives of National Authorities to interact and discuss implementation-related matters. It also provides a valuable opportunity for the regional groups to meet and discuss issues of common interest.
- 3.213 Since the adoption of the Article VII action plan, the presence of a large number of National Authority representatives has provided an opportunity for the Secretariat to

conduct bilateral consultations on implementation-related issues. This has proven useful in determining the nature and scope of the assistance to be provided in the following year. Since 2004, at each of the annual meetings of National Authorities, the Secretariat has been able to hold between 80 and 100 bilateral consultations with National Authority representatives.

- 3.214 The annual National Authorities Meeting also has a different thematic focus each year, which enables an in-depth discussion on specific implementation issues to take place (such as raising awareness among Parliamentarians and senior policy-making officials).

Basic and advanced training courses for personnel from National Authorities

- 3.215 Frequent turnover of staff in National Authorities increases the challenges that National Authorities face in implementing the Convention. In order to mitigate the effects of this frequent turnover, the Secretariat organises basic and advanced training courses for National Authority personnel on an annual basis. The training courses provide the participants with in-depth knowledge of the provisions and requirements of the Convention, with the intention of equipping them with the necessary information and expertise to perform their role in the National Authorities. Such training courses have been held at the OPCW, and since 2005, they have been organised, prepared, and conducted in cooperation with different States Parties. The training courses have sought to increase national capacity in order to ensure full and effective implementation of the Convention.
- 3.216 Annex 6 provides an overview of the number of technical-assistance visits, National Authority meetings and training courses for National Authorities, regional and subregional meetings of National Authorities, and thematic/technical workshops conducted by the Secretariat every year since the First Review Conference in May 2003.

Electronic tools for national implementation

- 3.217 The Secretariat has developed electronic tools to assist National Authorities in providing domestic outreach and training to their National Authority personnel on a regular basis and without the physical presence of Secretariat staff during such activities. Two information packages have been prepared by the Secretariat, which contain all relevant information, including training materials for use by the National Authorities. The information packages have been prepared in all official languages and are available to all States Parties on request.
- 3.218 The Secretariat has also developed an Electronic Self-Learning Tool (ESLT) with the stated aim of providing electronic tools that National Authorities can use to train personnel involved with the implementation of the Convention. The ESLT is being prepared in all official languages of the Convention and provides training material for the National Authority to use in promoting awareness about the Convention.
- 3.219 A DVD package, with videos of presentations that Secretariat staff make during national-awareness workshops, has also been prepared. The DVD package is part of

the Secretariat's efforts to design "train-the-trainer" packages for use by National Authorities in conducting domestic training programmes.

Printed information packages for domestic outreach

- 3.220 As part of its efforts to support the National Authorities in developing domestic awareness among relevant stakeholders and decision-makers, and in collaboration with the Media and Public Affairs Branch, the Secretariat prepares printed material for distribution. A Handbook for use by Parliamentarians has been prepared in English and Spanish, with translation into other official languages of the OPCW contemplated. Other publications prepared by the Media and Public Affairs Branch are distributed by the Secretariat during the visits, meetings, and workshops it organises.
- 3.221 The Secretariat has prepared booklets on national implementation for distribution at meetings of relevant international organisations at which the OPCW is present, such as the Inter-Parliamentary Union (IPU).

National Implementation Profiles System

- 3.222 With increasing interaction with representatives of National Authorities and stakeholder Ministries/Departments and institutions, the Secretariat has initiated a National Implementation Profiles System (NIPS) that provides comprehensive information about each State Party's implementation profile as well as other relevant information relating to implementation of the Convention, such as information on trends and progress achieved regionally and subregionally. NIPS data are currently up to date, and efforts are presently underway to standardise data entry in relevant branches in the Secretariat, as well as to check the accuracy of the data input.

CONSULTATION, COOPERATION, AND FACT-FINDING

Bilateral consultations

- 3.223 Article IX provides for consultations among States Parties to clarify and resolve concerns about compliance. The Secretariat is not party to these consultations and is consequently not aware to what extent States Parties have used this mechanism.

Clarification through the Council

- 3.224 Since the First Review Conference (and also since EIF), no States Parties have used the clarification mechanisms under the purview of the Council as provided for in paragraphs 3 to 7 of Article IX.

Challenge inspections

- 3.225 The First Review Conference reaffirmed the right of each State Party to request an on-site challenge inspection for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the provisions of the Convention, although no request for a challenge inspection has been submitted to the OPCW since EIF.

- 3.226 The OPCW needs to be ready at all times to carry out a challenge inspection in order to contribute to the resolution of any concerns about possible non-compliance. The Secretariat maintains its readiness to conduct a challenge inspection, and since the First Review Conference, a number of actions have been taken to improve its readiness.
- 3.227 As one of the measures to enhance the Secretariat's readiness to conduct a challenge inspection, careful consideration was given to the creation of a comprehensive training programme. In this respect, a mid-term training plan was established to train a core group of inspectors that have been identified as having the specific experience and competencies required to carry out a challenge inspection. As part of this training programme, regular refresher training and specific specialty training have also been initiated, allowing a cost-effective training approach while maintaining the high level of expertise required for this type of inspection.
- 3.228 The Secretariat has carried out a number of field exercises since the First Review Conference (see the table below) and has also conducted table-top exercises to test various aspects of the Secretariat's readiness to respond to a request for a challenge inspection. These exercises have been an invaluable opportunity for the Secretariat to test its preparedness. However, the active involvement of the policy-making organs should be considered in future exercises in order to reflect their critical role in the response to a request for a challenge inspection.

TABLE 8: EXERCISES CONDUCTED SINCE THE FIRST REVIEW CONFERENCE

Type of Exercise	Date and Location
Field exercise (small scale)	September 2004, United Kingdom of Great Britain and Northern Ireland
Field exercise	November 2004, Switzerland
Table-top exercise	February 2005, OPCW headquarters
Field exercise (small scale)	November 2005, United Kingdom of Great Britain and Northern Ireland
Field exercise	March 2006, Germany
Field exercise (small scale)	April 2006, United Kingdom of Great Britain and Northern Ireland
Table-top and field exercise (small scale)	March 2007, the Netherlands
Exercise in procedures and logistics	May 2007, OPCW headquarters
Field exercise	September 2007, the Netherlands

- 3.229 There is also a need for the OPCW to closely monitor new developments and trends in the chemical industry, as well as chemical-weapon production technologies, in order to retain its ability to execute a challenge inspection. In this context, the conduct of exercises on a wider geographical basis, using a variety of different scenarios (including challenge inspections in cases of alleged use of chemical weapons), merits special consideration.
- 3.230 The Secretariat has made various preparations for the availability of inspection equipment on short notice and has established related logistical arrangements for the

quick deployment of an inspection team with its equipment. In spite of the large number of missions, a sufficient number of inspectors and inspection assistants are available to allow the rapid deployment of a qualified inspection team. Most procedures regarding the conduct of challenge inspections are regularly reviewed following the exercise.

- 3.231 There are some areas that require the attention of the States Parties: a number of States Parties have not provided the Secretariat with important operational information, such as radio frequencies that could be used during inspections, declarations on points of entry, and standing diplomatic clearance numbers that might be needed for over-flight and landing clearance if the inspection team were to make use of a non-scheduled chartered aircraft. The continued non-submission of this information could adversely affect the Secretariat's ability to carry out a challenge inspection.
- 3.232 Another issue that warrants careful consideration is the increasing difficulty of maintaining valid visas for inspectors because of recent UN regulations that limit the period of validity of a UN *laissez-passer* (UNLP) for fixed-term staff members. As the Secretariat does not maintain visas for all inspectors for all States Parties, problems in obtaining visas might well delay the launch of a challenge inspection. The Secretariat has thus suggested that each State Party that does not generally accept UNLPs without a visa might consider accepting them in the event of a challenge inspection.
- 3.233 The Secretariat will continue to maintain a high level of readiness to conduct a challenge inspection. It continues to rely on the support of Member States in providing opportunities for exercises and training in this key area. The Secretariat appreciates the excellent cooperation that Member States have extended thus far, and fully expects that it will continue.

Investigations of alleged use of chemical weapons

- 3.234 The Secretariat has not received a request from a State Party for an investigation of alleged use of chemical weapons since EIF. The OPCW continues to maintain and further develop its readiness for such a non-routine mission.
- 3.235 In this respect, the Secretariat has improved its capability since the First Review Conference in a number of fields. Lessons learned from the one field exercise carried out since the First Review Conference (Joint Assistance 2005/Ukraine) provided an invaluable opportunity to enhance the Secretariat's capabilities and resulted in the implementation of a core-group training programme for inspectors, the development of a comprehensive qualified-experts concept, and the establishment of further operational procedures.
- 3.236 However, some areas need further consideration to ensure that the Secretariat is ready at all times to fulfil its mandate. Putting in place such things as a capability to analyse biomedical samples is considered crucial for responding efficiently to a range of possible investigation scenarios. In the report of its Ninth Session (SAB-9/1, dated 14 February 2007), the SAB recommended that a confidence-building exercise be held as a first step towards the establishment of an OPCW capability to analyse

biomedical samples. This confidence-building exercise, tentatively planned for 2008, would also be an initial step for the Secretariat in preparing a general proposal to be considered by the Council for the establishment of such capability. The OPCW Laboratory, with the assistance of experts from States Parties, is compiling details of analytical methods, along with synthetic methods and commercial sources of analytical standards, in preparation for the confidence-building exercise. In this respect and based on the recommendations made by the SAB, the Secretariat will assess techniques for analysing biomedical samples with the equipment in currently designated laboratories. Improvements in the OPCW's capacity to analyse biomedical samples depend on the availability of budgetary resources in the future.

- 3.237 The Secretariat should be able to respond to a request under a range of different scenarios, which means that preparations for conducting investigations in remote environments and under adverse conditions are also needed. Consequently, the procurement of small, light, state-of-the art equipment, requiring minimum maintenance, merits further consideration.
- 3.238 In addition to exercises conducted on a wide geographical basis, future exercises (conducted in cooperation with a variety of national and international actors) should combine both investigative and assistance-related activities. They should focus not only on activities at the field level, but should also test Secretariat headquarters procedures and look at the coordination with other international organisations and States Parties.
- 3.239 The Secretariat will continue to maintain its readiness to conduct an investigation of alleged use. Support by States Parties in a number of areas (such as the provision of specialised training, nomination of qualified experts to augment the team with expertise not available within the Secretariat, or putting in place facilities for analysis of biomedical samples) is crucial in this respect. The Secretariat relies on continued cooperation with Member States in order to fulfil its mandate.

ASSISTANCE AND PROTECTION AGAINST CHEMICAL WEAPONS

Protection against chemical weapons: Capacity building at the national, regional, and international level

- 3.240 The Secretariat has changed its approach in regard to providing expert advice to States Parties that wish to establish or further develop their emergency response capacity. There is now more focus on regions or subregions, where training of so-called core teams or a train-the-trainer approach is applied. This has proven to be effective and transparent, and allows the Secretariat to satisfy more requesting States Parties, while remaining within the limits of the budget and available human resources. In addition to this, the Secretariat has gratefully accepted offers from a number of States Parties to host international workshops and training sessions, which allowed representatives of States Parties to familiarise themselves with different types of equipment and procedures, while also allowing experts to exchange information in the field of protection against chemical weapons.
- 3.241 At its First Session, the Conference adopted a decision requesting the Secretariat to establish and maintain a data bank containing freely available information concerning

various means of protection against chemical weapons (C-I/DEC.53, dated 16 May 1997). In July 2004, the Secretariat appointed a database developer to develop such a data bank, and in 2006, pursuant to paragraph 5 of Article X, the Secretariat established the protection data bank, containing the following categories of information: national protection programmes, voluntary contributions for emergency assistance, bilateral agreements with States Parties, unilateral offers of assistance, events related to assistance and protection (such as workshops), a roster of experts in assistance and protection, and other sources of information in this area. The information it contains is now on the OPCW intranet, which is available to delegates present in The Hague. At the end of 2007, the data bank has been made available on the internet with password-protected access to all States Parties. Future efforts will focus on improvements in the quantity and quality of information, as well as access to the data bank by States Parties.

- 3.242 A Protection Network consisting of highly qualified individuals with expertise in the protection against chemical warfare agents was established in 1999 with the aim of providing expert advice to States Parties upon demand. After the last meeting of its members in 2004, the Protection Network will hold another meeting in 2008 with the objective of finalising the Network's terms of reference, as well as providing advice regarding future improvement of the protection data bank.
- 3.243 To enhance transparency, the Convention contains a requirement that information on national programmes for protection against chemical weapons be submitted annually to the OPCW. In 2004, the Ninth Session of the Conference adopted a format for providing such information (C-9/DEC.10, dated 30 November 2004). All Member States are obligated by the Convention either to declare having no such programmes or to submit annual information on their programmes, using the adopted format. Since 2004, the number of submissions has increased considerably. However, while recognising the progress made in this area, it is noted with concern that a large number of Member States have never submitted this information to the OPCW.

Assistance in case of use or of threat of use of chemical weapons

- 3.244 Since the First Review Conference (and also since EIF), the OPCW has not received any requests from States Parties for assistance under paragraph 8 of Article X.
- 3.245 The OPCW has established its Assistance Response System, which will facilitate responses to requests for assistance and protection, and, contributing further to this, the Joint Assistance 2005 exercise provided valuable lessons and experience. Regular training events are organised for the Secretariat's ACAT, with support from the United Kingdom of Great Britain and Northern Ireland. In addition, Secretariat staff members have participated in several field exercises with different international organisations, mainly with the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA). The Secretariat took part in the TRIPLEX 2006 exercise held in Kankaanpää, Finland, in a scenario that involved natural disasters and complex emergencies, which tested its readiness to deal with such complex situations. Participation in future exercises is important if the Secretariat is to maintain and improve its readiness to coordinate its response activities in close cooperation with States Parties and other international organisations.

- 3.246 The role of the OPCW in an assistance operation could differ considerably, depending on the circumstances and nature of the assistance request, the region where assistance needs might arise, the involvement of other participants (both regional and international), and the position adopted by the requesting State Party with regard to the role of contributors in the delivery of assistance.
- 3.247 Given the UN's pre-eminence in the field of disaster response and its broad-based mandate, UN OCHA should be considered by the Secretariat as the prime partner for future cooperation. This would allow the OPCW to play a complementary role to that of the UN OCHA while focussing on its own core competencies. The UN-OPCW relationship agreement, which provides for a mutually beneficial relationship and the avoidance of unnecessary duplication of activities, could serve as a basis for such future cooperation. In this respect, there is a common understanding between the OPCW and the UN OCHA about the division of tasks during field operations.
- 3.248 In an assistance operation, the Secretariat's tasks would involve, first, facilitating coordination between the requesting and offering States Parties and, second, conducting an assessment to determine the nature and scope of assistance required by the requesting State Party—and possibly carrying out coordination activities on site. Whereas the success of the first activity depends primarily on the States Parties providing adequate offers in a timely fashion, the Secretariat's ACAT could make a valuable contribution to the on-site coordination efforts by bringing in its chemical weapons expertise.
- 3.249 The Convention's provisions for assistance in the case of the use or threat of use of chemical weapons are important safeguards for the Member States. To be able to implement these provisions, the OPCW relies largely on capacities that the States Parties will make available in response to a call for assistance. To that end, they should declare the kind of assistance they may provide in case of such an appeal by the OPCW (EC 48/DG.13, dated 6 March 2007; Corr.1, dated 8 March 2007; and Add.1, dated 7 May 2007); however, as of 31 December 2007, only 73 Member States have fulfilled this requirement. Contributions to the Voluntary Fund and unilateral offers of assistance still remain low (40 and 44, respectively), and only one State Party has concluded a bilateral agreement on provision of assistance. The Tenth Session of the Conference adopted a format to facilitate the provision of information on unilateral offers (C-10/DEC.8, dated 10 November 2005). Member States that have yet to declare the kind of assistance they might provide through the OPCW in case of such a request, are urged to do so without delay.
- 3.250 Current offers of assistance made to the OPCW by Member States show an imbalance in the geographical distribution of unilateral offers: almost 70% come from European States Parties. Moreover, most of the equipment offered will soon come to the end of its shelf life and will thus need to be replaced with new equipment. Taking into account the financial burden involved in replacing old unilateral offers with new ones, States Parties are re-evaluating their offers and providing contributions to the Voluntary Fund for assistance.
- 3.251 In order to ensure the serviceability of assistance offers, the Secretariat is conducting inspection visits, in accordance with subparagraph 39(b) of Article VIII, with the financial support from the EU. The biggest challenge with regard to unilateral offers

lies in ensuring rapid dispatch to the requesting State Party. Currently, only a small number of States Parties can ensure transport of their offers by their own means.

- 3.252 Furthermore, careful consideration needs to be given to such issues as the readiness of the pledges made, the inter-operability of the equipment offered, or whether the same offers have been made to other organisations whose own priorities might have an impact on their ability to respond to an assistance request from the OPCW.
- 3.253 The Secretariat has made progress in establishing its own limited stockpile to meet rapid emergency demands of a small nature. The limited OPCW stockpile consists of protective equipment for 1000 individuals and is ready for immediate delivery as soon as such a need arises.
- 3.254 On 1 May 2007, in an internal memorandum, the Director-General approved a concept paper on qualified experts, which clearly identifies the fields of expertise required by the Secretariat. In addition, this concept paper provides detailed proposals regarding operational, administrative, and logistical issues concerning qualified experts for an investigation of alleged use and for the delivery of assistance. To this end, a Note by the Secretariat (S/648/2007, dated 6 July 2007) calling for nominations of qualified personnel from the States Parties was published on the OPCW website.
- 3.255 Although the OPCW has not received a request for assistance and protection under Article X of the Convention since EIF, the Secretariat has established itself as a recognised provider in the field of training, capacity building, and protection against chemical weapons, and it maintains its readiness to respond to a request for assistance and protection. It is of utmost importance to further strengthen national capabilities by providing targeted training and by increasing cooperation at the regional level in order to ensure a swift and efficient response in an assistance operation. This stands as one of the Secretariat's key priorities in this area.
- 3.256 The OPCW has been developing its working relationship with the 1540 Committee of the UN Security Council in order to improve interactions within the framework of the Security Council's efforts to counter the proliferation of weapons of mass destruction, in particular to prevent access by terrorists to such weapons.
- 3.257 In 2001, the Council set out the OPCW's contribution to global anti-terrorist efforts (EC-XXVII/DEC.5, dated 7 December 2001), stressing that among other things, the contribution to global anti-terrorism should focus on the "ability of the OPCW to respond to the assistance and protection provisions under Article X". The Council also established an open-ended working group to further examine the OPCW's contribution to global anti-terrorism. This working group will also provide guidance on the effective use of the OPCW's ability to respond to the assistance and protection provisions under Article X of the Convention for this purpose.

ECONOMIC AND TECHNOLOGICAL DEVELOPMENT

First Review Conference

- 3.258 Discussions on the full implementation of the provisions of Article XI of the Convention have continued among Member States. The First Review Conference

reaffirmed the commitment of the Member States to fostering international cooperation for peaceful purposes in the field of chemical activities. It also called upon Member States to fully implement the provisions of Article XI, and urged the Council to continue its efforts to facilitate an early agreement on this issue.

- 3.259 This position was endorsed by the Conference in its decision on the full implementation of Article XI (C-10/DEC.14, dated 11 November 2005).
- 3.260 The international-cooperation programmes implemented by the Secretariat are aimed at facilitating capacity building and skills enhancement in areas related to the peaceful application of chemistry. These programmes include support for internships, research projects, the strengthening of analytical skills and technical capabilities in laboratories, and the exchange of scientific and technical information. Since national capacity building and economic and technological development are closely interrelated, support for such activities would help to achieve the goals set out in Article XI of the Convention.
- 3.261 All the principles and criteria outlined in the decision of the Conference (C-10/DEC.14, dated 11 November 2005) are being addressed through current international-cooperation programmes. Internal feedback is provided by participants through short questionnaires and reports completed at the end of each course. This feedback is analysed and is used to improve the delivery and quality of each of the programmes in the future.
- 3.262 The delivery of programmes offered by the Secretariat in the area of international cooperation and assistance has more than quadrupled in the last five years. New activities have been added and some of the existing programmes have been expanded. Furthermore, wider geographical coverage is being ensured, with most of the benefits flowing to the African region. Appropriate quality-assurance tools need to be put in place to monitor various activities in order to evaluate the impact of the programmes and improve their quality.
- 3.263 There is scope for the existing international-cooperation programmes to be enhanced through the development of new initiatives. If the growth in programme delivery is to be maintained through a process of monitoring and evaluation, as mandated by the results-based-budgeting (RBB) approach, the Secretariat considers it indispensable that additional financial and human resources be made available to this end.

Developments since the First Review Conference

- 3.264 Following the First Review Conference, the Member States resumed consultations on the full implementation of Article XI. All Member States took full account of the report of the First Review Conference along with the Note circulated by the Secretariat on the implementation of international-cooperation programmes under Article XI (S/502/2005, dated 14 June 2005).

Objectives of the international-cooperation programmes

- 3.265 The objectives of the international-cooperation programmes, initially were as follows:

- (a) operating an information service;
- (b) assisting National Authorities in fulfilling their obligations and exercising their rights under the Convention;
- (c) finding ways to establish appropriate programmes to promote international cooperation in partnership with other relevant international organisations;
- (d) assisting scientists from developing countries in participating in international symposia, seminars, workshops, and courses; and
- (e) promoting other forms of international cooperation in chemistry.

3.266 Following instructions agreed upon by the First Review Conference and subsequent decisions taken by the Conference at each of its regular sessions regarding the core objectives of the OPCW, the main focus of the activities related to Article XI of the Convention is now on facilitating the building of skills and capabilities in areas related to the peaceful application of chemistry. This is being achieved through the exchange of scientific and technical information (in the form of internships, research projects, and the strengthening of analytical skills and technical capabilities in laboratories). These aspects are reflected in the relevant Programme and Budget documents under the objective relating to economic and technological development.

Growth of the international-cooperation programmes

3.267 To ensure the implementation of the Convention, various international-cooperation projects were introduced in the period between 2000 and 2007:

- (a) The Internship-Support Programme was introduced in 1999 to fund internships lasting an average of three months. In 2003 the OPCW Laboratory launched a special six-month internship initiative under the Internship-Support Programme. The OPCW Laboratory Internship proved to be highly popular and was repeated in 2004 and 2005 to satisfy the high demand.
- (b) In 2000, the Associate Programme was launched on a pilot basis with 12 participants. The Programme currently accommodates 24 participants.
- (c) Under the Laboratory-Assistance Programme, an average of four laboratories have been assisted annually since 1997.
- (d) Offers to host internships were also received from the Spiez Laboratory in Switzerland, and the Finnish Institute for Verification of the Chemical Weapons Convention (VERIFIN). The Secretariat distributed calls for nominations to all Member States for internships hosted by both these institutions. The OPCW, in cooperation with both these institutions, has been supporting these internships since 2000.
- (e) The Analytical-Skills Development Course was introduced in 2004 and has been added to the portfolio of programmes that the Secretariat regularly offers.

- (f) In 2005, two new projects were launched under the European Union Joint Action with voluntary financial assistance from the EU. The two new projects taken up for implementation were (i) the Project on Equipment Support for National Authorities, under which new desktop computers were supplied to National Authorities and (ii) the Project on Laboratory Assistance, under which key analytical equipment was supplied to laboratories in selected Member States. A large number of applications were received for both projects, leading to the renewal of voluntary financial assistance for their continuation. In 2006 the EU provided funds for key analytical equipment.
- (g) A further project introduced on a pilot basis in 2005 was the two-week higher-level Laboratory Skills Enhancement Course designed primarily for personnel in technical laboratories seeking OPCW designation through the OPCW proficiency tests. This course is conducted by VERIFIN, and the participants are fully sponsored by the OPCW. Each of these courses has focussed on the use of analytical techniques, gas chromatography-mass spectrometry (GC-MS), and/or liquid chromatography-mass spectrometry (LC-MS). The pilot project has since been regularised as an annual course offered through the International Cooperation Branch by VERIFIN and is partly funded by the Secretariat.
- (h) In 2006, three more annual internships were initiated in collaboration with the Technical University of Delft with voluntary financial assistance from the Netherlands. These internships were repeated in 2007.

Brief description of the programmes

- 3.268 Annex 7 provides a brief description of the various international-cooperation programmes. Detailed guidelines on the programmes (which have been circulated to Member States), together with the relevant application forms, are available on the OPCW website.

Status of programme delivery

- 3.269 Reports on the implementation status of Article XI are submitted annually to the Member States. These reports contain, *inter alia*, details of the international-cooperation activities undertaken during the reporting period, as well as a review of existing regulations in Member States in regard to the trade in chemicals. The latest such report (EC-52/DG.4, dated 7 February 2008 and Corr.1, dated 19 February 2008) was circulated in February 2008.
- 3.270 Annex 8 provides a breakdown, by geographic region, of the distribution of the International Cooperation Branch (ICB) budget for all the international-cooperation programmes from 1997 to 2007. The figures reflect only those activities that form part of the current mandate of the ICB. Annex 9 provides a breakdown of participation in the programmes by region.
- (a) The projects have been implemented over as wide a geographical distribution as possible and on a non-discriminatory basis. The budgetary shares by region

are as follows: Africa (36%), Asia (21%), GRULAC (18%), Eastern Europe (14%), and WEOG (11%) (Annex 8).

- (b) Between EIF and 31 December 2007, the ICB supported a total of 663 projects, 164 of which were under the auspices of the Conference-Support Programme, 315 under the Programme for Support of Research Projects, 59 under the Internship-Support Programme, 46 under the Laboratory-Assistance Programme, 64 under the Equipment-Exchange Programme, 8 under the Associate Programme, and 7 under Analytical-Skills Development.
- (c) The corresponding total amount spent during the period was EUR 11,086,805, of which 26.50% was spent on the Conference-Support Programme, 26.58% on the Associate Programme, 16.67% on the Laboratory-Assistance Programme, 12.87% on the Programme for Support of Research Projects, 11.80% on the Analytical-Skills Development Course, 4.73% on the Internship-Support Programme, and 0.86% on the Equipment-Exchange Programme.
- (d) Due to Member States' awareness of (and therefore demand for) the various programmes, programme delivery (in EURO-value terms) has shown an upward trend each year, with a particularly sharp increase after 2002—nearly three times from a total EUR 560,234 in 2002 to EUR 1,554,286 in 2007, as shown in Table 9, below. This includes the amounts received from voluntary contributions.

**TABLE 9: EXPENDITURES UNDER ICB PROGRAMMES, BY YEAR
1997 – 2007 (IN EUROS)**

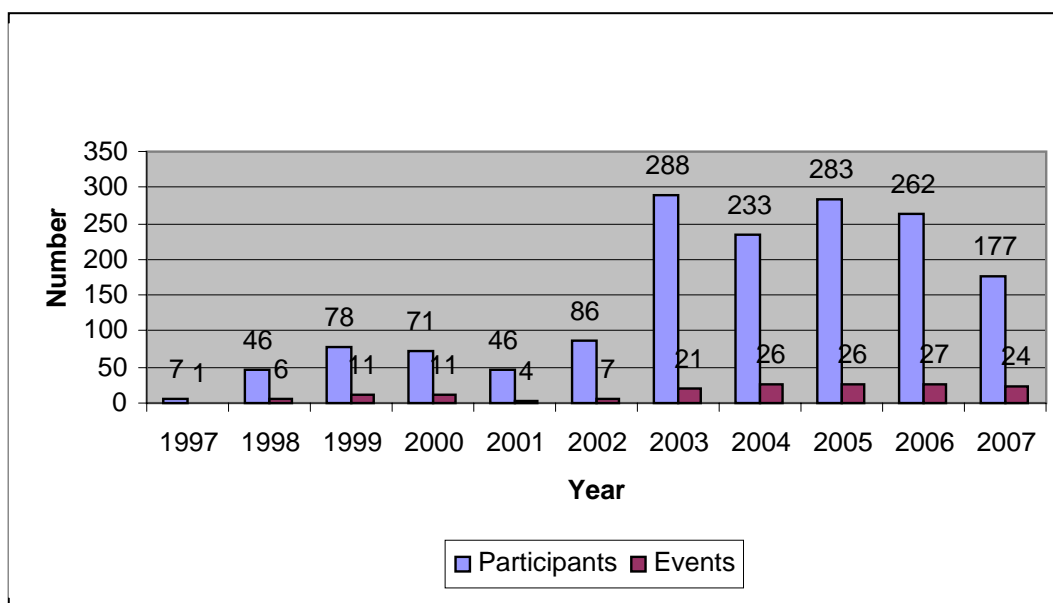
	Conference Support	Research projects	Internship Support	Laboratory Assistance	Equipment Exchange	Associate Programme	Analytical Skills Training	Total in Euros
1997	7,442			12,833				20,275
1998	70,356	83,621		3,347	4,764			162,088
1999	200,903	167,377	25,556	9,549	417			403,802
2000	130,673	31,233	49,227	22,517		229,664		463,314
2001	83,009	91,278	15,405		1,361	235,411		426,464
2002	127,922	168,939	14,818	1,606		246,949		560,234
2003	563,859	245,967	71,719	3,241	9,187	396,075		1,290,048
2004	409,292	164,407	80,248	57,468	2,723	460,923	174,793	1,349,854
2005	499,562	174,685	77,614	978,944	76,548	467,442	195,183	2,469,978
2006	511,481	225,066	71,873	739,757	0	457,875	380,409	2,386,461
2007	333,779	74,592	117,662	18,452	0	452,000	557,800	1,554,285
Total	2,938,279	1,427,165	524,122	1,847,714	95,000	2,946,341	1,308,185	11,086,805

- (e) In the eight Associate Programmes that had been conducted by the end of September 2007, a total of 154 participants from 78 developing countries had undergone training. The largest number of participants in the Programme were from Africa (58), followed by Asia (42), the Eastern European Group (23), GRULAC (28), and WEOG (3). Seventy-nine chemical companies have extended support to the Programme, some more than once. Canada, Japan, and the United Kingdom of Great Britain and Northern Ireland

have extended voluntary financial assistance to the Programme at different times.

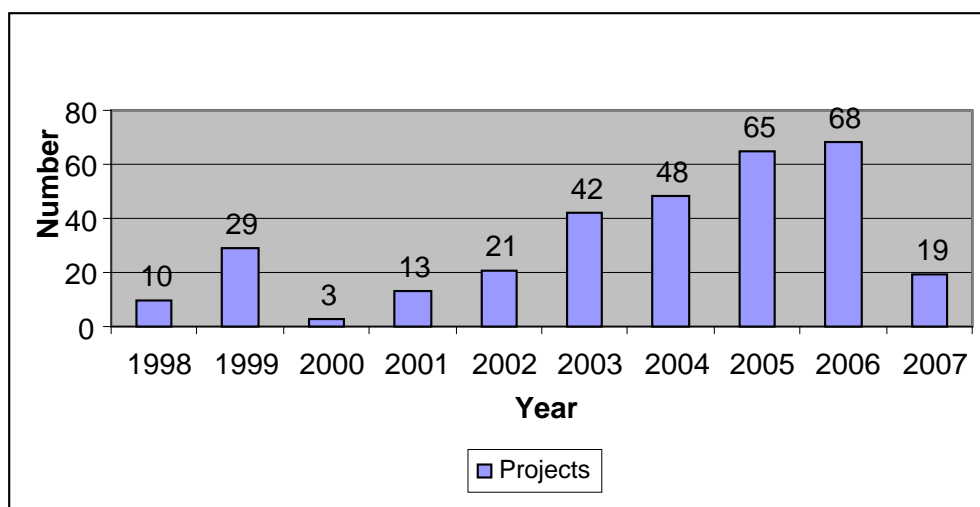
- (f) The Conference-Support Programme has been highly popular, so far benefiting 1,577 participants from 140 Member States by providing an opportunity to exchange scientific and technical information in the area of the peaceful application of chemistry (see Chart 1 below). The thematic areas covered by the conferences have included analytical chemistry, toxic chemicals, the chemistry of natural products, chemical and biological medical treatment, environmental chemistry, the sound management of chemicals, protection under hot and hazardous conditions, toxicology, the chemistry of medical plants, demilitarisation, the destruction of chemical weapons, risk assessment, the harnessing of science and technology for development, and chemical and biological terrorism.

CHART 1: CONFERENCE-SUPPORT PROGRAMME



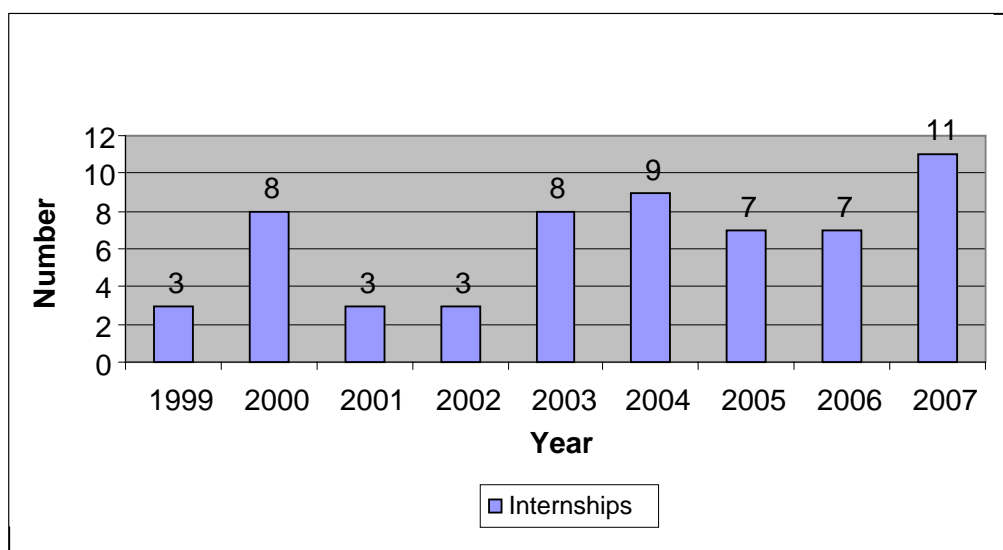
- (g) The Programme for Support of Research Projects has been another of the more successful ICB programmes. Of the 315 projects supported so far, 111 have been in the GRULAC region, 108 in the African region, 91 in the Asian region, two in the Eastern European region, and three in the WEOG region. Chart 2 provides an indication of the trends in the number of sponsored research projects, including projects that have been jointly funded by the International Foundation for Science (IFS) in Sweden, and illustrates the number of projects sponsored each year. A large majority of research projects have in fact been co-sponsored with IFS. Very few research projects are directly funded by the OPCW due to a lack of awareness of the programmes among potentially eligible institutions and researchers in Member States. Since OPCW-IFS collaboration began in 1998, the OPCW has been able to take full advantage of the well-established reputation and status of IFS to receive research proposals of the highest quality for potential funding, and of its well-developed and robust project proposal review mechanism.

CHART 2: SUPPORT FOR RESEARCH PROJECTS



- (h) The projects have been focussed in areas including natural-product chemistry, environmental pollution, toxicology, bio-pesticides, medicinal plants, antidotes for toxic chemicals (such as saxitoxin), and the development of bacterial toxin markers associated with saxitoxin production.
- (i) The specific projects for which internships were funded have included studies in areas related to environmental chemistry, natural-product chemistry, and the evaluation of protective equipment for nuclear, biological, and chemical exposure. A few internships were hosted at the OPCW Laboratory, but the majority took place in institutions in industrialised countries, as well as in some developing countries. Chart 3 illustrates the level of participation in the Internship Programme as at 31 December 2007.

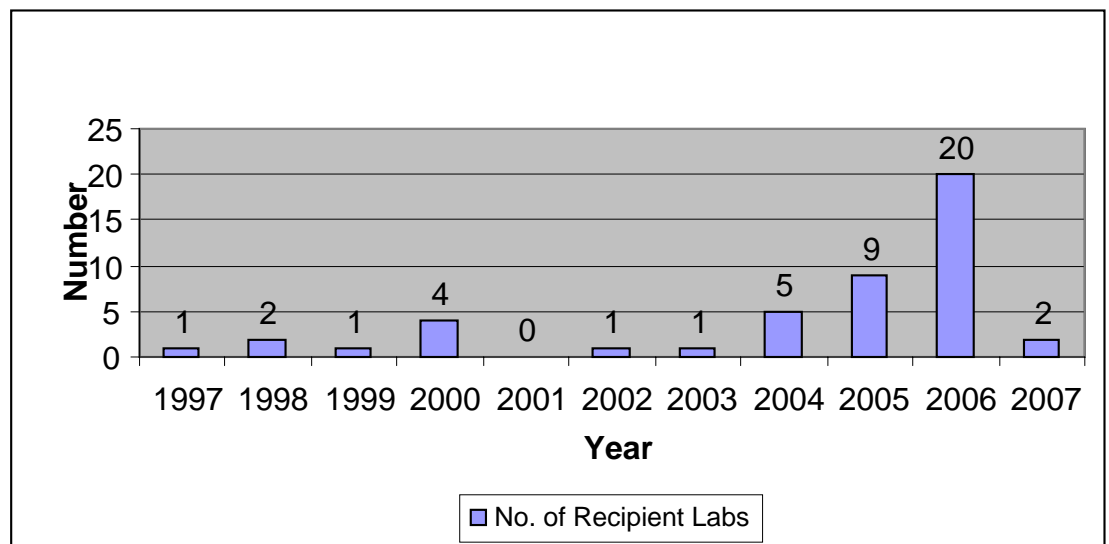
CHART 3: INTERNSHIP-SUPPORT PROGRAMME



- (j) Assistance to laboratories of Member States was provided in the form of technical audits, visits by experts to advanced laboratories, visits by experts from designated laboratories, training in specialised areas, method

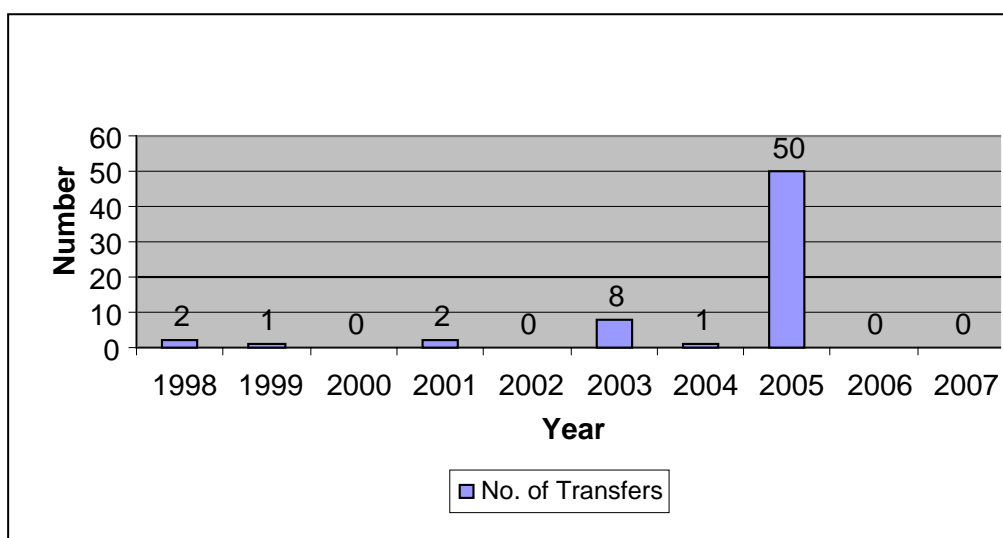
development and validation of analyses, and the establishment of an integrated programme to improve technical capabilities. Chart 4 shows the trends in this programme. The EU-funded Project on Laboratory Assistance, under the EU Joint Actions in 2005 and 2006, was a major activity implemented within the broad framework of this programme. The EU Joint Actions provided for key analytical equipment to 13 publicly funded laboratories in the Africa, Asia, and GRULAC regions.

CHART 4: LABORATORY-ASSISTANCE PROGRAMME



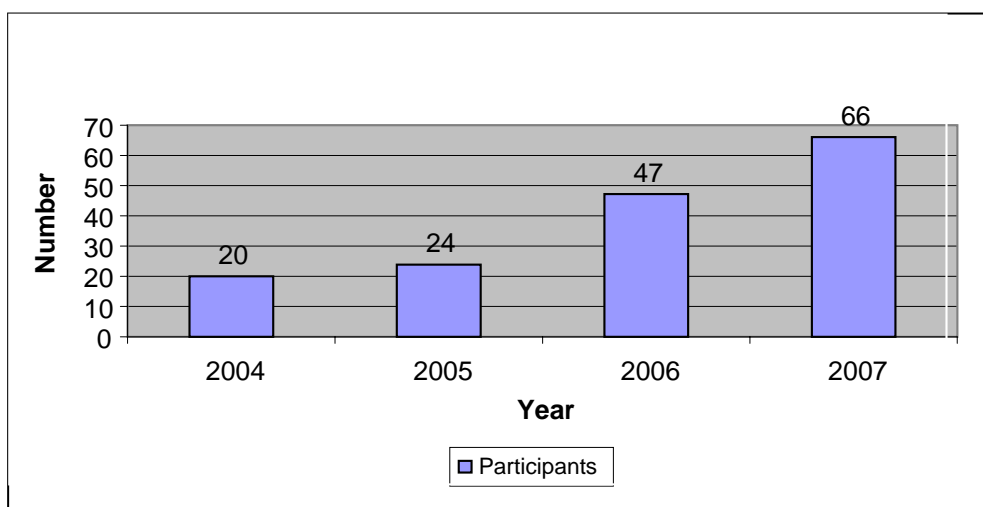
- (k) Under the Equipment-Exchange Programme, transfers of a variety of laboratory equipment to recipient countries were facilitated, with most going to countries in Africa. The equipment included instruments for analytical chemistry, electrical measuring instruments, quality-control equipment, computers, laptops, and protection equipment. The EU-funded Project on Equipment Support for National Authorities was an activity that was closely related to this programme. In 2005, under a European Union Joint Action supported by voluntary financial assistance from the EU, a project on Equipment Support for National Authorities was undertaken. This involved the supply of new desktop computers to National Authorities to assist with national implementation of the Convention and accounts for the anomalous peak in 2005 under the Equipment-Exchange Programme (see Chart 5). The generally low uptake among Member States for this programme has been due to an imbalance between the high volume of requests for laboratory equipment among potential beneficiary Member States and the serious lack of forthcoming donors from the Member States. In order to address this situation, the Secretariat will take measures to encourage offers of equipment donation.

CHART 5: EQUIPMENT-EXCHANGE PROGRAMME



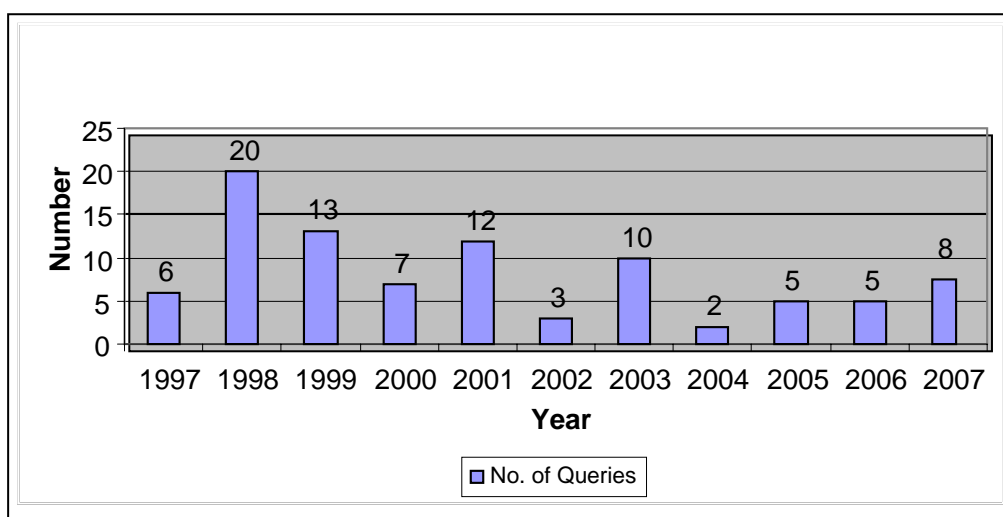
- (l) In the four sessions of the Analytical-Skills Development Course and the three sessions of the Laboratory Skills-Enhancement Course that had been held by the end of 2007, 157 analytical chemists were provided with valuable training in the analysis of various chemicals related to the Convention. Chart 6 illustrates the increasing trend in programme uptake.

CHART 6: ANALYTICAL-SKILLS COURSES



- (m) The inquiries handled by the Secretariat's Information Service have been mostly related to the suppliers and producers of chemicals, chemical technology, information on scheduled chemicals, health and safety issues, the properties of industrial by-products, and substitutes for toxic chemicals in manufacturing operations. Chart 7 indicates the trend in queries. The request for information has fallen in consecutive years, from a peak of 20 requests in 1998 to only 8 in 2007. This trend might be due to a lack of awareness among Member States of the information service provided by the Secretariat.

CHART 7: INFORMATION SERVICE SUPPORT



QUALITY ASSURANCE THROUGH MONITORING AND EVALUATION

- 3.271 Since the introduction of results-based budgeting in 2005, results in respect of the core objective (Objective 4) have had to be assessed in terms of the volume, quality, and results of the cooperation in areas related to the peaceful uses of chemistry. Furthermore, the rate and quality of the responses to requests received in accordance with the approved programme have had to be assessed.
- 3.272 The key outcomes identified for the international-cooperation programmes have generally been limited to internal evaluations provided primarily by participants and, in a few cases, by sponsors through questionnaires. The monitoring and evaluation procedures for the range of programmes offered by the International Cooperation Branch are given below:
- (a) Monitoring for the Associate Programme is a continuous process that begins at the stage when applicants are selected and runs through to a post-implementation evaluation. The preliminary screening of applicants is conducted through telephone interviews by a panel of technical experts. The short-listed participants are subsequently approved by the Director-General. At the end of each segment of the Programme, participants are required to fill out evaluation questionnaires. Following the university segment of the Programme, a debriefing meeting is held in the presence of representatives from both the university faculty and the Secretariat. The performance of each of the participants is also evaluated by the supervisors from their subsequent chemical industry placement. At the end of the Programme, the Secretariat organises individual assessments for each participant with a panel headed by the Director of the International Cooperation and Assistance Division. The post-implementation evaluation is carried out in two stages: the first phase consists of a meeting involving a group of external technical experts and representatives of the Member States that have made voluntary financial contributions to the Associate Programme; the Secretariat subsequently follows up with both the relevant National Authorities and former Associates to obtain feedback on the contributions they have made in their own countries since completion of the Programme.

- (b) The post-implementation evaluation has shown that most Associates remain in contact with their National Authorities to assist in the implementation of the Convention. The fact that many of the participants come from academia has greatly accelerated the transfer of acquired knowledge through teaching to a wider audience. The academic network is therefore an important network for promoting the objectives of the Convention. The continuation of the highly successful Associate Programme has been made possible through the generous and sustained voluntary contributions of a number of industrialised Member States.
- (c) A similar internal evaluation procedure is also applied to the Analytical-Skills Development Course. In addition to evaluations carried out by the participants and technical experts, the participants are required to sit for assessment tests covering the range of skills taught on the course. To date, all the participants have successfully passed the Analytical-Skills tests.
- (d) Selection for the Conference-Support and Internship-Support Programmes requires prior recommendation by the relevant National Authority or Permanent Delegation to the OPCW. The financial assistance offered to successful applicants of both programmes is disbursed in phased instalments. The final instalment is only released upon submission of a satisfactory report. In the case of the Internship Programme, the supervisors at the host institutions are requested to provide a report of the research undertaken by the applicant to assess the value of the research carried out during the internship.
- (e) The selection procedure for the Programme for Support of Research Projects involves a Review Committee (consisting of two members of the SAB and technical experts from the Secretariat) that assesses the merits of the research proposals submitted for OPCW support. The Review Committee also evaluates the final reports submitted upon completion of the research project. In line with standard procedures, funding for research projects is released in instalments. An initial 50% of the grant money per project is disbursed at the start of the research. Further instalments (30% and then 20%) are released, depending upon the progress and submission of both interim and final reports. To date, OPCW-sponsored researchers have published some 55 papers in peer-reviewed journals. The Ron G. Manley library at the OPCW has recently started to acquire copies of these reports and journal articles.
- (f) For research projects jointly funded with the IFS in Sweden, the Review Committee considers project proposals that have already undergone a rigorous screening process by a network of IFS-associated international experts. The financial support for successful research proposals is released in instalments. An initial 70% of the grant money is disbursed at the start of the research. The remaining balance of 30% is disbursed after approval of the final report by the Review Committee.
- (g) Both the Laboratory-Assistance Programme and the Equipment-Exchange Programme follow standard internal review procedures based upon the submission of detailed application forms. When necessary, expert visits to the

laboratories are undertaken prior to the phased release of funding by the OPCW to the beneficiary institution.

- 3.273 The Secretariat recognises that, with the exception of the Associate Programme, programme appraisals tend to be internally based, and there is a need to strengthen evaluation mechanisms through periodic external assessments across the range of programmes. To this end, the Secretariat has recruited a full-time professional staff member to enhance monitoring and evaluation tools for all the programmes offered by the International Cooperation Branch.

Future approach

- 3.274 There is broad consensus among the Member States on the various international-cooperation programmes that are currently implemented by the Secretariat. Both the Expert Group on Technical Cooperation and Assistance (which was set up during the period of the Preparatory Commission) and the subsequent annual discussions undertaken by Member States on the Programme and Budget have laid a solid foundation for the international-cooperation programmes. The programmes have also met the principles and criteria set out by the Conference, at its Tenth Session, on the full implementation of Article XI (C-10/DEC.14, dated 11 November 2005). The Secretariat, however, has identified the need to address shortfalls within existing programmes by means of a gap-analysis exercise. The Secretariat considers that effective measures to address any shortfalls play an indispensable part in the continuous process of refining the programmes to keep up with the individual needs of Member States.
- 3.275 The gap-analysis exercises undertaken to remedy existing shortfalls may also precipitate the need to devise new programmes that would better address the requirements of Member States. This flexible mechanism is important to ensure that all Member States can take full advantage of having ratified the Convention.
- 3.276 In addition to addressing programme shortfalls, the profile and awareness of the international-cooperation programmes must be raised, in cooperation with National Authorities, to ensure that full benefits are accrued to all Member States.
- 3.277 Since EIF, new programmes, such as the Associate Programme, the Analytical-Skills Development Course, and the Laboratory Skills-Enhancement Course, have been introduced to enable Member States to address their aspirations of economic and technological development, while at the same time fulfilling their obligations as States Parties to the Convention. This is consistent with the flexibility of Member States to design, develop, enhance, and implement international-cooperation programmes (C-10/DEC.14). Proposals for new initiatives from Member States are appreciated by the Secretariat and should be encouraged further.
- 3.278 Two new projects within the broad framework of ongoing international-cooperation programmes (the Equipment-Exchange and the Laboratory-Assistance Programmes) have been implemented through voluntary financial contributions from the EU. The project under the Laboratory-Assistance Programme involved the highly successful transfer of hardware to analytical laboratories in Member States with developing economies. Since further EU funding of this project is not envisaged, it might be

possible for the OPCW to adopt this project for regular implementation and to support it out of the regular OPCW budget. If Member States accept this concept in principle, a suitable proposal for supplying key analytical equipment to Member States with developing economies could be considered for inclusion in the 2009 Programme and Budget.

- 3.279 A further initiative for consideration, subject to agreement among the Member States, relates to the promotion of financial and technical collaboration in producing, processing, or using chemicals for purposes not prohibited under the Convention. More specifically, both the Laboratory-Assistance and Equipment-Exchange Programmes could benefit considerably from the creation and maintenance of a database on specific requests related to technical know-how, equipment, and trade. Disseminating such information to interested Member States would facilitate meetings and seminars where contacts between the relevant enterprises/institutions could be made. Closer collaboration with other international organisations and chemical-industry associations could assist in matching up demand and supply.
- 3.280 Within the framework of the decision adopted by the Conference at its Tenth Session (C-10/DEC.13, dated 10 November 2005) on the establishment of an OPCW Office in Africa, and pending a decision by the States Parties, the Director-General has developed a Programme for Africa, in consultation with the African Group of States Parties to the Convention. The Programme involves (a) spreading the benefits of the international-cooperation programmes to more Member States in the African region, (b) promoting greater South-South cooperation by involving leading institutions in the African region (as well as in other developing countries) in hosting internships and arranging relevant training programmes, and (c) exploring the feasibility of expanding the Associate Programme further—from 24 to 36 participants—so as to accommodate more candidates from Africa. Voluntary contributions from Member States to strengthen the Programme for Africa would be sought to finance these proposals.
- 3.281 Both the volume of international-cooperation programmes and the number of requests received for each programme from Member States have been increasing each year. The exceptions to this general trend have been the Information Service and Equipment-Exchange Programme, for which explanations have been provided above. The need to process and respond appropriately to the increasing demands has considerably increased the Secretariat's workload. Since RBB requires regular monitoring and evaluation of the programmes/projects to be carried out, it has become increasingly difficult to manage the growing volume of work—let alone start new programmes—with the existing capacity of professional and general staff. If the expectations for growth and improvement in programme implementation are to be realised, greater human and financial resources need to be made available to the Secretariat.

ARTICLES XII TO XV AND FINAL CLAUSES

- 3.282 The implementation of Articles XII to XV and the final clauses of the Convention has not given rise to any issues of significance in the period since the First Review Conference. In the view of the Secretariat, these provisions remain valid and continue to allow for effective implementation of the Convention.

FUNCTIONING OF THE OPCW

Policy-making organs

- 3.283 The First Review Conference underlined the fact that the effectiveness of the work of the policy-making organs is essential to the involvement of all States Parties in the work of the OPCW. It called upon all States Parties to participate fully in the activities of the OPCW's policy-making organs (paragraph 7.121 of RC-1/5, dated 9 May 2003). Facilitating their activities is one of the primary tasks of the Secretariat, and a cooperative and proactive relationship between the policy-making organs and the Secretariat is indispensable for the smooth functioning of the OPCW as a whole. Since the First Review Conference, the policy-making organs have developed a sustainable and predictable pattern of work.
- 3.284 The Conference holds its regular sessions in either November or December. Holding regular sessions of the Conference at the end of the year, together with an early submission by the Director-General of the Draft Programme and Budget for the coming year and the drawing up of the provisional agenda for the Conference at the June Session of the Council, provides sufficient time for Member States to prepare for the Conference.
- 3.285 The Council holds four regular sessions per year. If required, the Secretariat facilitates additional Meetings of the Council so that it can finalise its work prior to each Session of the Conference.
- 3.286 The First Review Conference noted how important it was for the Chairperson and Vice-Chairpersons of the Council to be engaged with the work of the facilitation groups (paragraph 7.122 of RC-1/5). Under the supervision of the Vice-Chairpersons, intersessional consultations are carried out by the facilitators, which allows for focussed discussions on key issues in an informal setting. The absence of facilitators for some issues has led to delays in their resolution. In some cases, such difficulties have been caused by a routine rotation of delegates, which affects the continuity of the facilitation process. The Bureau of the Council, although not a formal body, meets on a regular basis in order to coordinate the activities of the Council, particularly the preparation of the agendas for the sessions and meetings of the Council, as well as for the facilitation of various issues on its agenda.
- 3.287 The Open-ended Working Group on Terrorism, established by the Council in 2001, continues its work.
- 3.288 The Working Group on the Relations with the Host Country, established in 2005, was replaced by the Committee on Relations with the Host Country, which was established by a decision at Conference at its Eleventh Session (C-11/DEC.9, dated 7 December 2006).
- 3.289 The First Review Conference expressed concern over delays in the Council's implementation of Conference decisions regarding unresolved issues, and urged it to conclude all unresolved issues as soon as possible (paragraph 7.123 of RC-1/5). During the period under review here, the Council succeeded in resolving some of the issues identified in the Paris Resolution (Legal Series PC-OPCW 1 and addenda 1-3)

and some of those inherited from the Preparatory Commission (PC-XVI/37, dated 15 April 1997), as well as some of those emanating from the First Review Conference. However, the list of unresolved issues remains long and still includes issues that have a direct bearing on the operation of the Convention. Additional efforts are therefore required for resolving them, and the Director-General stands ready to assist the Council in this endeavour.

- 3.290 It is noteworthy that during the period under review, all decisions and recommendations were adopted by the Conference and the Council through consensus. Consensus-based decision-making built around the commonality of views has become a feature of the OPCW.
- 3.291 The First Review Conference recommended greater involvement of Member States in the activities of the Council, and this has been noted over recent years. In addition to the high attendance by, and very active participation of, those delegations seated on the Council, an average of 27 delegations attends each session of the Council as observers and also take an active part in inter-sessional consultations.
- 3.292 The Secretariat continues to provide the policy-making organs with documentation, as required by the relevant Rules of Procedure and according to the deadlines established by the decisions of the policy-making organs.

Subsidiary bodies

- 3.293 Although the Commission for the Settlement of Disputes Related to Confidentiality (Confidentiality Commission) has not been called upon to settle any disputes related to confidentiality since EIF, its members have met on a regular basis to participate in dispute-settlement exercises and to review their operating procedures. In December 2006, at its Eleventh Session, the Conference elected new members of the Confidentiality Commission for a term of two years beginning on 1 January 2007 (paragraph 20.4 of C-11/5, dated 8 December 2006).
- 3.294 The SAB has continued to enable the Director-General, in the performance of his functions, to render specialised advice to the Conference, to the Council, and to States Parties in areas of science and technology relevant to the Convention.
- 3.295 Based on a proposal by the Director-General (EC-38/DG.18, dated 16 September 2004) the Conference decided at its Ninth Session (C-9/DEC.13, dated 2 December 2004) to add five seats to the SAB, increasing its membership from 20 to 25. This decision took into account the need for a comprehensive spread of relevant fields of scientific and technological expertise, as well as a fair distribution of appointments from the regions.
- 3.296 Experience has shown that the SAB needs to meet more than once a year and that holding just one session annually makes it difficult for the SAB to provide timely and well-researched scientific and technical advice. It has also become apparent that the effectiveness and quality of the work of the SAB may suffer because certain members of the temporary groups who are not funded by their own institutions or governments are not able to attend group meetings. Therefore, in April 2006, the Director-General established a new trust fund—the Trust Fund for the Scientific Advisory Board—the

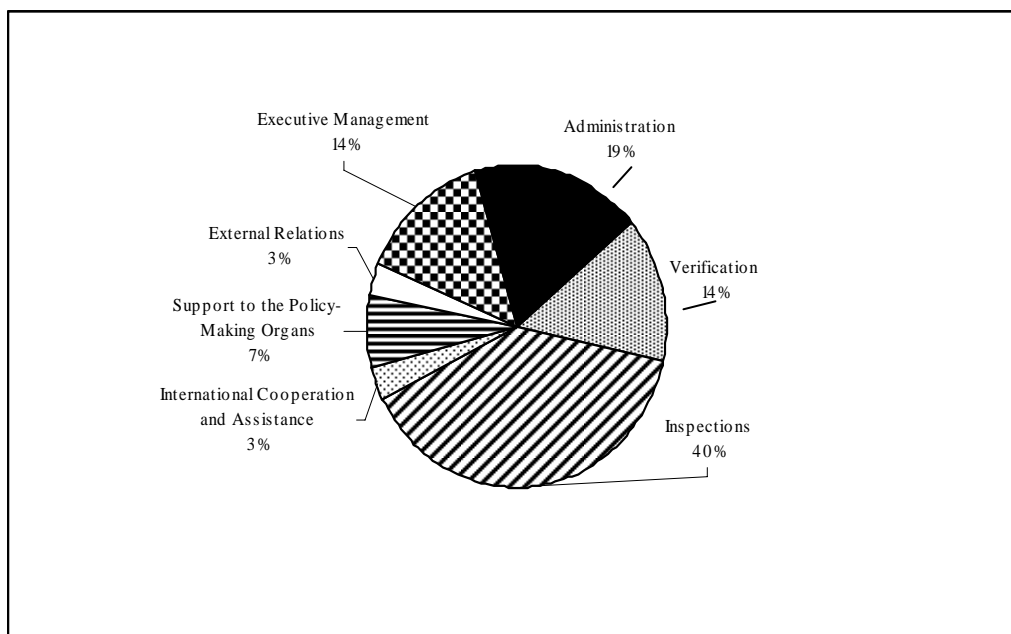
purpose of which is to support those activities of the SAB for which no funding is allocated in the Programme and Budget, such as the SAB's temporary working groups and an additional meeting of the Board. In 2007, eight Member States (Japan, Nigeria, Saint Lucia, Spain, Switzerland, Saudi Arabia, the United Kingdom of Great Britain and Northern Ireland, and the United States of America), contributed to the Trust Fund.

- 3.297 The Trust Fund allowed for the funding of two temporary working groups in February 2007, as well as an additional session of the SAB in May 2007. The Trust Fund also helped support the convening of a meeting of the Sampling and Analysis Temporary Working Group in December 2007 in Madrid, Spain. These meetings were specifically organised to prepare the Preliminary Report of the SAB for the Second Review Conference on Developments in Science and Technology (RC-2/DG.1 dated 28 February 2008 and Corr.1 dated 5 March 2008).
- 3.298 The Advisory Board for Administrative and Financial Matters (ABAF) has continued to provide valuable technical advice on financial and other administrative matters.

Functioning of the Secretariat

- 3.299 The OPCW is a non-career organisation, with most professional staff having a maximum tenure of seven years. Approximately 40 professional staff members subject to tenure are separated from the OPCW each year as a result of the tenure policy. Annex 10.1 provides an historical overview of the turnover of staff subject to tenure policy from 2003 to 2006. Annex 10.2 provides an overview of the recruitment of staff for the same period. At its Eleventh Session, the Conference adopted a decision to authorise the Director-General to grant contract extensions or renewals beyond the seven-year length of service up to 29 April 2012 (C-11/DEC.7, dated 7 December 2006).
- 3.300 A new Performance Appraisal Management System (PMAS) has proven effective since its introduction in 2006. The Human Resources Branch has continued streamlining its processes to reduce the recruitment period (by using web-based applications, for example). OPCW human resources activities are guided by a strategy for managing human resources, which includes revising administrative directives and preparing new ones.
- 3.301 Close cooperation with the International Civil Service Commission has assisted the OPCW in aligning its procedures and entitlements with those of the United Nations system. Potential revisions of the OPCW Staff Regulations and interim Staff Rules are under consideration. Two issues from the First Review Conference remain unresolved: Regulation 2 (classification of posts) and Regulation 3.3 (national taxation).
- 3.302 Fifty-four per cent (279) of overall fixed-term staff are funded through the OPCW's Chapter 1 appropriations, including 173 fixed-term positions for inspectors. The distribution of these positions by programme is shown in Chart 8.

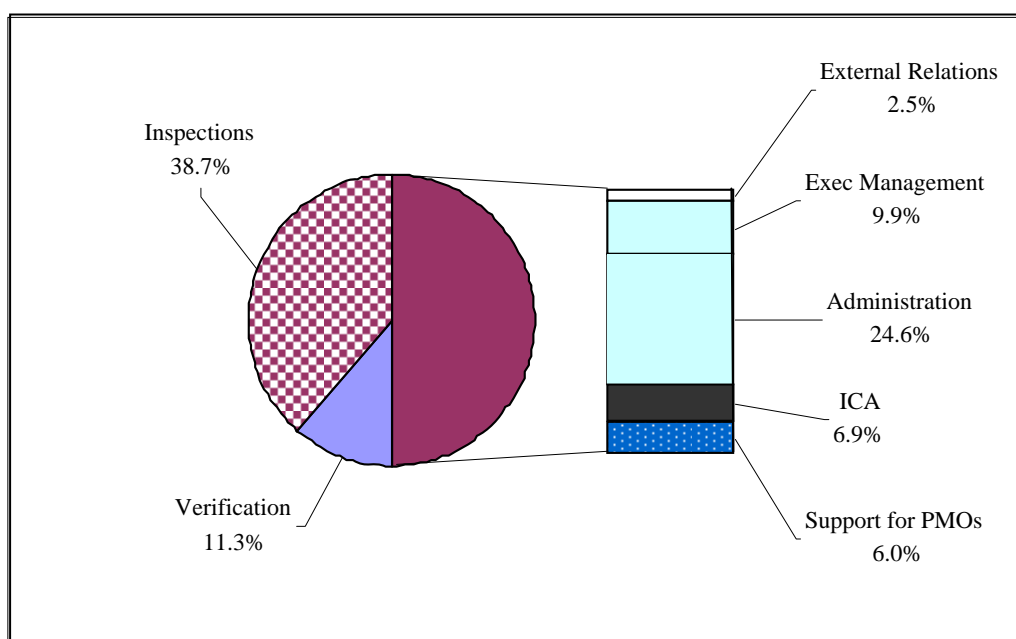
CHART 8: FIXED-TERM STAFFING FOR 2007 BY FUNDING PROGRAMME (PROPORTION OF TOTAL)



3.303 Since 2005, Programmes and Budgets have incorporated elements of RBB. Future Programmes and Budgets will refine the objectives of this approach in order to measure results more precisely for reporting purposes.

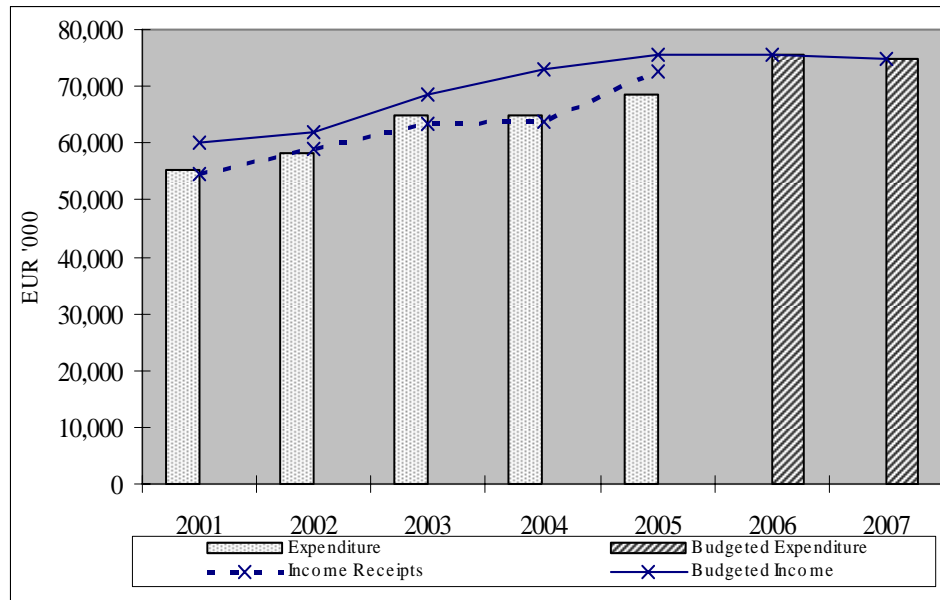
3.304 Expenditures across the Secretariat are divided among seven broad funding lines of programme activity. Chart 9 illustrates the division of expenditures for 2007, based on budget estimates for each funding programme.

CHART 9: REGULAR BUDGET EXPENDITURE FOR 2007 BY FUNDING PROGRAMME (PROPORTION OF TOTAL)



- 3.305 Chart 10 shows the OPCW's historical expenditure levels, including the impact of funding actually provided for the regular budget in recent years (that is, income received by the end of the year for which it was due). Estimates for 2006 and 2007 are based on the agreed budget appropriated for each year.

CHART 10: REGULAR LEVELS OF BUDGET EXPENDITURES, 2001–2007



- 3.306 The UN intends to implement International Public Sector Accounting Standards (IPSAS) by the year 2010. The adoption of IPSAS will have an impact on (a) the Financial Regulations and Rules, (b) budget preparation, presentation, and monitoring, and (c) accounting and reporting in relation to fixed assets (requiring an improved inventory and reporting system), employee benefits (requiring improving HR and payroll systems), timing of income and expenditure recognition, structure and content of financial reports and related disclosures, and the chart of accounts. It might be necessary to make modifications to the enterprise resource planning system (*SMARTStream*) and reporting tools used by the Secretariat. Planning for IPSAS is underway, including estimating costs.
- 3.307 Since the First Review Conference, there have been major advances in information technology within the OPCW. The implementation of a relational database for the VIS has been completed and has been operational since 2007. A major benefit is the capability of receiving electronic submissions of declarations from States Parties. The OCAD has been redesigned, enhancing data integrity and the security of the system. The OPCW extranet has been further enhanced to facilitate official document searches, and historical publications are being incorporated. The OPCW Intranet Port@l is now fully operational, promoting knowledge sharing among all organisational units in the Secretariat. The human resources, financial, and procurement modules of *SMARTStream* have been expanded, providing extensive management information to the Secretariat. The information technology (IT) infrastructure has been substantially modernised, with the global replacement of all desktop computers and upgrades of the local area network, desktop, and back-office software to meet state-of-the art technology standards. In addition, the internet has recently been made accessible from the desktop, which has improved the productivity

of the Secretariat's work. Finally, with the introduction of industry best-practices in IT service management (including the Information Technology Infrastructure Library, ITIL) and the implementation of the issue-tracker system, the quality of service delivery has also been improved.

- 3.308 Through the TDB, the Committee for Training, which was established in 2006, oversees the strategy and policies on training and staff development. In 2007, funds for training were decentralised, thereby giving respective programme managers more accountability. The OPCW places the highest priority on the maintenance and improvement of the technical proficiency of its main operations (i.e., skills related to inspection and verification), although it also continues to improve managerial and administrative skills at all levels through various training programmes. With the seven-year tenure policy in place, risk management and knowledge transfer are core training issues. The library, also administered by the TDB, continues to acquire new volumes on Convention-related subjects, while adding out-of-print publications to its collection. It is recognised as one of the best resource centres on the Convention. In the future, the library catalogue will be available on the OPCW extranet.

Privileges and immunities

- 3.309 In accordance with paragraph 50 of Article VIII of the Convention, the legal capacity, privileges, and immunities referred to in Article VIII are to be defined in agreements between the Organisation and States Parties, to be considered and approved by the Conference. These agreements are meant to detail the legal capacity, privileges, and immunities of the Organisation, the Delegates of States Parties, the Director-General, and the staff of the Organisation, as are necessary for the independent exercise of their functions in the territory and in any other place under the jurisdiction or control of a State Party.
- 3.310 At its First Session, the Conference did not reach consensus on a single multilateral agreement on the privileges and immunities of the Organisation. Consequently, the Organisation must enter into an individual agreement with each State Party in order to fulfil the obligation in paragraph 50 of Article VIII. In negotiating these bilateral agreements on privileges and immunities on behalf of the Organisation, the Secretariat makes every effort to achieve consistency, bearing in mind the principle of equal implementation of the Convention.
- 3.311 As of this date, 33 Privileges and Immunities Agreements have been concluded by the Council, and several Agreements between the Secretariat and the concerned States Parties are under negotiation. The entry into force of the Privileges and Immunities Agreements is an essential component of Convention's implementation; therefore, the Secretariat urges the States Parties that have not yet done so to communicate with the Office of the Legal Adviser with a view to negotiating a Privileges and Immunities Agreement on the basis of the model Agreement on the privileges and immunities of the OPCW. Copies of the revised draft agreement are available upon request from the Secretariat.

Protection of confidential information

Confidentiality policy and procedural guidance

- 3.312 Since the First Review Conference in 2003, the Secretariat has made significant progress in further improving the strict implementation of the OPCW's confidentiality procedures. During this time, the Secretariat has developed an information security-management system in line with ISO 27001, which now incorporates the controls formerly found in ISO 17799. As part of this process, the Secretariat finalised an information security policy—to complement the OPCW Policy on Confidentiality (OPOC)—primarily on issues related to the security of information technology not covered in detail by the OPOC. In addition, the Secretariat is in the process of completing 10 related standards based on the ISO-recommended structure.
- 3.313 The Secretariat also finalised another key component of ISO 27001 implementation: a business-continuity plan. Intended to improve the preparedness of the Secretariat by minimising the impact that any potential contingencies might have on operational capabilities, this plan was tested during two table-top exercises held in 2006. The creation of an Information Security Forum the same year has assisted in keeping divisional business-continuity plans up to date and enhancing coordination within the Secretariat on issues related to information security in general.
- 3.314 In accordance with a recommendation of the Council at its Twenty-Fifth Meeting (EC-M-25/DEC.3, dated 9 November 2005), the Conference, at its Tenth Session, considered and adopted amendments to the OPOC (C-10/5, dated 11 November 2005; C-10/DEC.9, dated 10 November 2005). To maintain the stringency of the confidentiality regime and to ensure that its internal procedures for the protection of confidential information comply with the OPOC amendments, the Secretariat also completed an extensive revision of its Manual of Confidentiality Procedures, which was promulgated in mid-2007.
- 3.315 These latest amendments and revisions for the protection of confidential information have been incorporated into an enhanced confidentiality training programme for all Secretariat staff members. Similarly, in line with a recommendation by the Confidentiality Commission (CC-6/2, dated 2 November 2004), the Secretariat has also commenced confidentiality-related training for “members of National Authorities responsible for the classification of information submitted to the OPCW”.

States Parties' procedures for handling confidential information

- 3.316 Each year the Secretariat requests States Parties to provide details on the handling of information provided to them by the OPCW (as required by paragraph 4 of the Confidentiality Annex to the Convention). The First Review Conference “urged States Parties to provide [this] information expeditiously” (paragraph 7.115 of RC-1/5). At the end of the first half of 2007, a total of 88 States Parties had provided such information—an increase of 44 from the total at the time of the First Review Conference. While this is a significant increase since 2003, 95 States Parties have yet to provide this information to the Secretariat.

Classification of confidential documents received from States Parties

- 3.317 The First Review Conference also “encouraged the Secretariat and the States Parties to review their respective practices in assigning levels of classification to [confidential] information, and if possible, and in accordance with the State Party’s confidentiality procedures, to reduce the classification level they assign to such information, in order to increase work efficiency and ensure the smooth functioning of the system to protect confidentiality” (paragraph 7.116 of RC-1/5).
- 3.318 In 2005, a non-paper drafted by the Office of Confidentiality and Security on this issue was provided to States Parties participating in informal consultations on confidentiality-related issues. This formed the basis for discussion at several further meetings in 2005 and 2006. As a result, at its Forty-Fifth Session, the Council “requested the Secretariat to include, as an Annex to the Declarations Handbook, a Confidentiality Supplement, to provide an introduction to the OPCW Policy on Confidentiality for National Authority personnel regarding the appropriate handling and protection of confidential material” (paragraph 11.12 of EC-45/2, dated 19 May 2006). In mid-2006, the requested Confidentiality Supplement was completed and scheduled to be issued along with the next version of the OPCW Declarations Handbook.

Long-term handling of confidential information

- 3.319 The First Review Conference noted that “current confidentiality guidelines provide neither for the destruction of confidential documents and other data, including those kept on the Secretariat’s SCN (security-critical network), nor for the downgrading of their classification levels over the long term” and therefore “encouraged the OPCW to take steps to reach agreement on developing and implementing guidelines regarding the long-term handling of confidential information” (paragraph 7.118 of RC-1/5).
- 3.320 To assist States Parties during the informal consultations held on confidentiality issues from 2004 to 2006, the Secretariat issued three non-papers addressing the legal, technical, and confidentiality-related aspects of the long-term handling of confidential information. The last informal consultation was held on 18 October 2006 but no agreement or draft decision has yet been realised on this issue.

Processing confidential information in electronic form

- 3.321 Since 2003, the SCN has continued to operate in accordance with all established security requirements, and various elements of the network have been the subject, at least in part, of no less than nine Security Audit Team IV (SAT-IV) audits. The development of the industry component of the VIS made significant progress during this time, with SAT-IV concluding in July 2007 “that the VIS-Industry development and implementation had successfully been completed”. As a result, SAT-IV “fully endorsed the promotion of VIS-Industry to . . . the SCN” (Annex to EC-50/DG.4, 16 August 2007). This positive development directly addressed the request by the First Review Conference for the Secretariat “to ensure that the conditions in relation to the protection of confidentiality of information are met when the OPCW proceeds to the submission of declarations in electronic form” (paragraph 7.119 of RC-1/5).

Annexes:

- Annex 1: Submission of Declarations
 - Annex 1.1: Late Submissions of Article VI Declarations
 - Annex 1.2: Submissions of Annual Declaration on Past Activities (ADPA)
- Annex 2: Declared and Inspectable Facilities, 2002 to 2007
 - Annex 2.1: Numbers of Declared and Inspectable Facilities from 2002 to 2007
 - Annex 2.2: Declared and Inspectable OCPFs from 2002 to 2007
- Annex 3: Transfers of Scheduled Chemicals
 - Annex 3.1: Schedule 2 Transfers, 2002 through 2006
 - Annex 3.2: Schedule 2 Discrepancies, 2002 through 2006
 - Annex 3.3: Schedule 3 Transfers, 2002 through 2006
 - Annex 3.4: Schedule 3 Discrepancies, 2002 through 2006
- Annex 4: Transfers of Scheduled Chemicals to States not Party, 2002 through 2006
- Annex 5: Funding Made Available by Member States for OPCW Implementation-Support Programmes, 2003 to 2007
- Annex 6: Implementation-Support Projects Carried Out since the First Review Conference
- Annex 7: International-Cooperation Programmes
- Annex 8: Regional Breakdown of the ICB Programme Budget, 1997 – 2006 (In Euros)
- Annex 9: Regional Breakdown of Participation in ICB Programmes
- Annex 10: Historical Overview of Staffing
 - Annex 10.1: Historical Overview: Turnover of Staff Subject to Tenure Policy, 2003 through 2007
 - Annex 10.2: Historical Overview: Recruitment of Staff, 2003 through 2007

Annex 1**SUBMISSION OF DECLARATIONS**

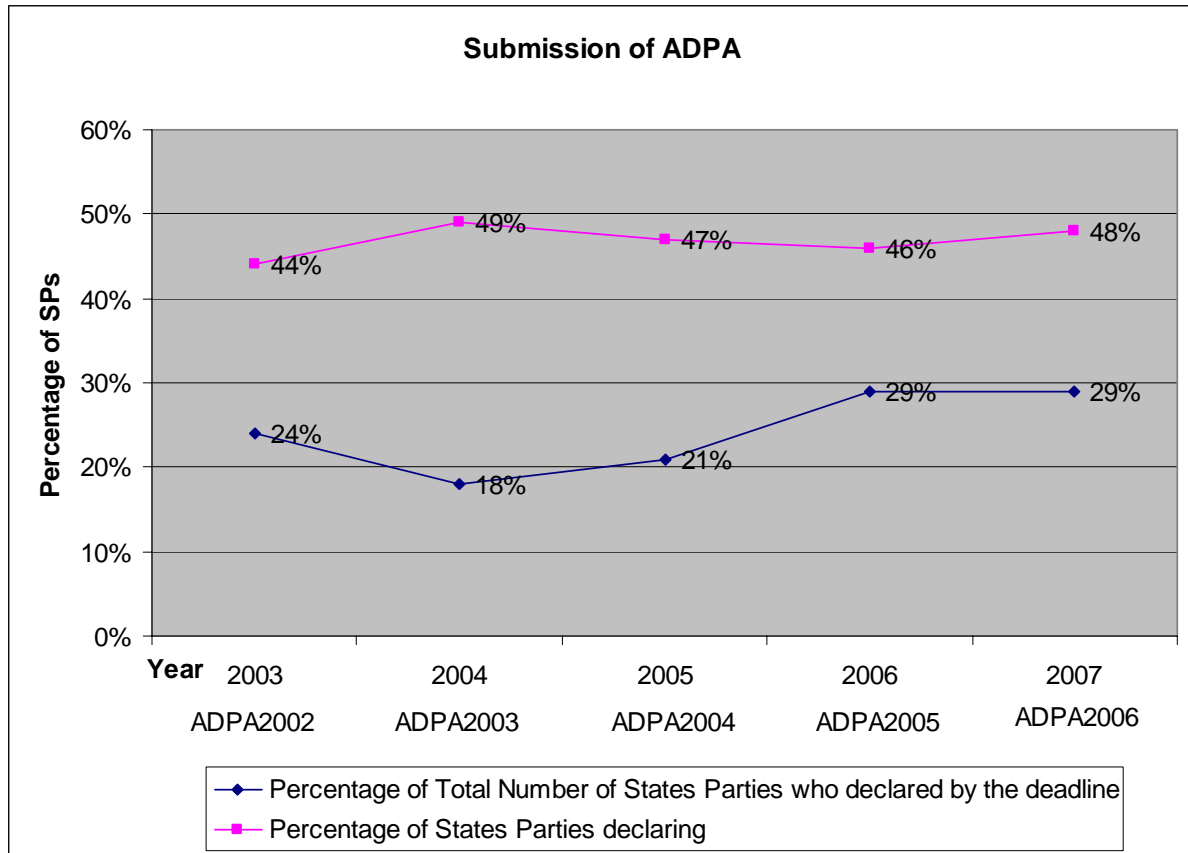
To illustrate the issue of late submissions, figures for the numbers of States Parties providing annual declarations of past activities for the years 2002 to 2006 are provided below.

ANNEX 1.1: LATE SUBMISSION OF ARTICLE VI DECLARATIONS

	Annual Declarations of Past Activities for the Year				
	2002	2003	2004	2005	2006
Total number of States Parties (at end of year)	147	158	167	175	181
Number of States Parties declaring	64	77	79	81	87
Percentage of States Parties declaring	44%	49%	47%	46%	48%
Number of States Parties declaring by the deadline	36	28	35	51	52
Percentage of States Parties declaring by the deadline	56%	36%	44%	63%	60%
Percentage of total number of States Parties who declared by the deadline	24%	18%	21%	29%	29%

Note: Information on submissions of annual declarations of past activities for the year 2002 was not available by the cut-off date (31 December 2002) for the Consolidated Unclassified Verification Implementation Report provided to the First Review Conference (RC-1/S/6, dated 25 April 2003), and hence is reported here. Information on submissions of the annual declarations of past activities for the year 2007 is not yet available, as the deadline for submission is 30 March 2008.

Annex 1.2: SUBMISSIONS OF ANNUAL DECLARATION ON PAST ACTIVITIES (ADPA)



Annex 2**DECLARED AND INSPECTABLE FACILITIES, 2002 TO 2007****Annex 2.1: NUMBERS OF DECLARED AND INSPECTABLE FACILITIES FROM 2002 TO 2007**

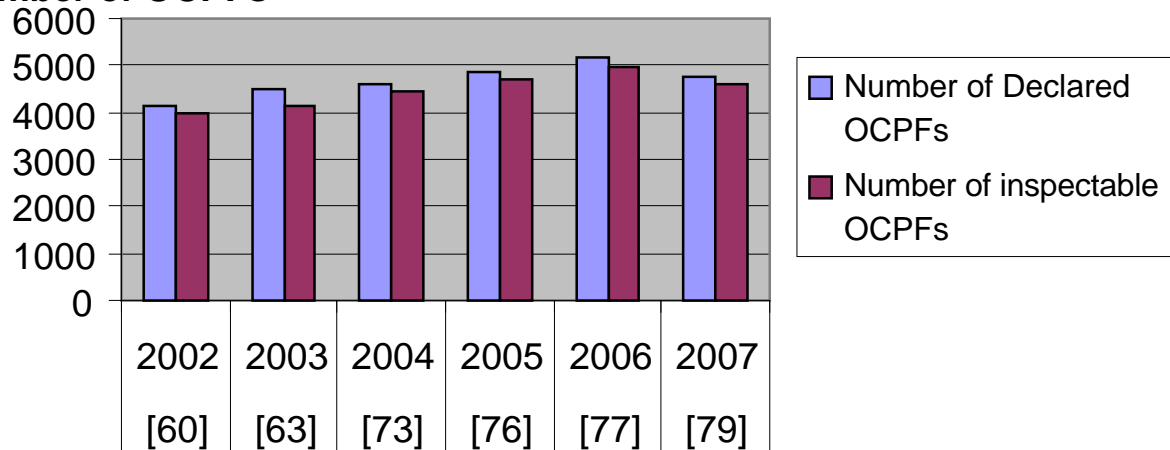
	Year					
	2002	2003	2004	2005	2006	2007
Schedule 1						
Number of States Parties Declaring	21	21	21	21	21	22
Number of Declared (and Inspectable) Facilities	26	27	27	27	27	28
Schedule 2						
Number of States Parties Declaring	33	35	36	36	37	37
Number of Declared Plant Sites	438	432	433	452	471	475
Number of Inspectable Plant Sites	156	153	155	153	161	165
Schedule 3						
Number of States Parties Declaring	34	35	34	35	34	34
Number of Declared Plant Sites	497	511	508	504	504	514
Number of Inspectable Plant Sites	437	426	425	426	430	434
Other Chemical Production Facilities (OCPFs)						
Number of States Parties Declaring	60	63	73	76	77	79
Number of Declared OCPFs	4117	4496	4607	4887	5147	4717
Number of Inspectable OCPFs	3990	4161	4427	4702	4947	4533

Note: Figures have been taken from the respective full-year Verification Implementation Reports (VIRs) and include all information received by 31 December for the respective year. Figures for 2007 include all information received as at 30 June 2007.

The diagram below shows the steady increase in the number of declared OCPFs from 2002 to 2007.

Annex 2.2: DECLARED AND INSPECTABLE OCPFS FROM 2002 TO 2007

Number of OCPFs



Year
[Number of States Parties
Declaring]

Annex 3

TRANSFERS OF SCHEDULED CHEMICALS

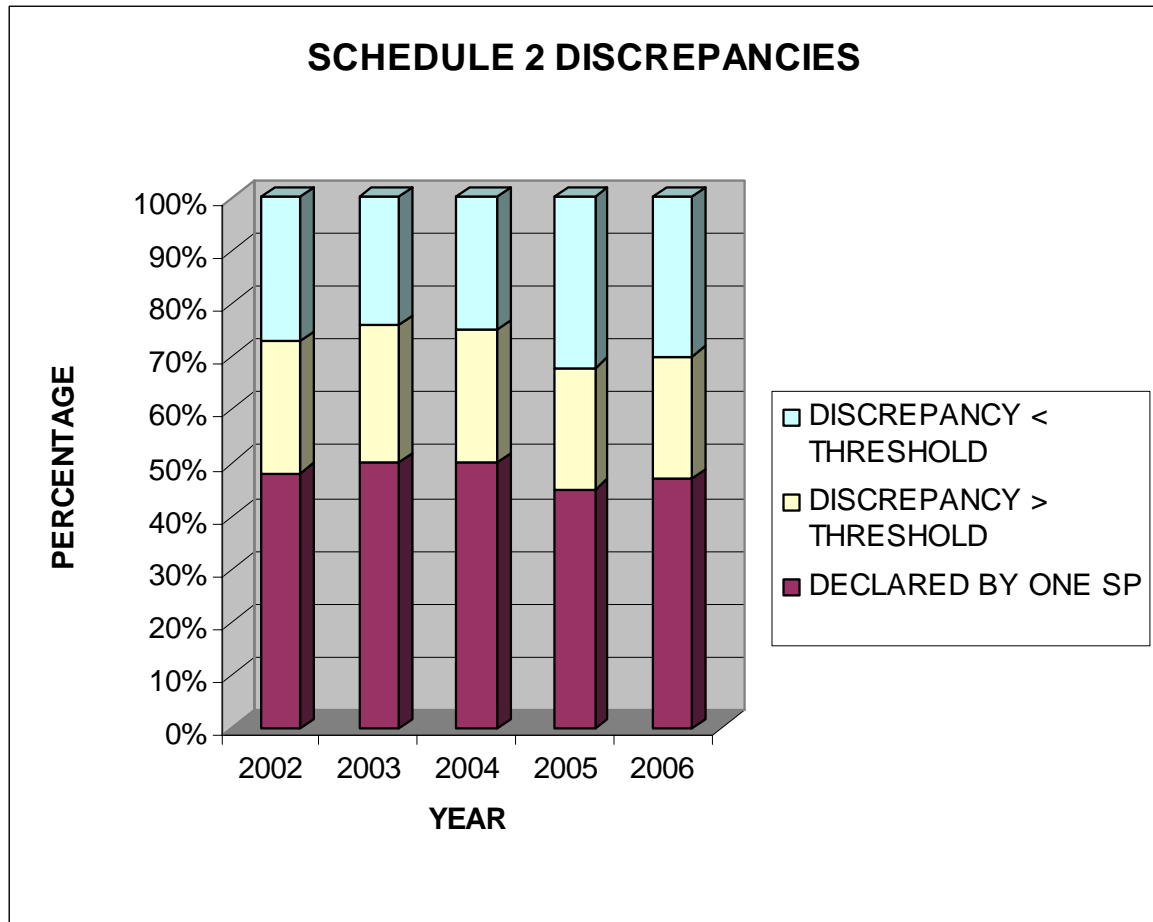
Annex 3.1: SCHEDULE 2 TRANSFERS, 2002 THROUGH 2006

Year	States Parties Involved	Total Amount Transferred (Metric tonnes)	Number of Transfers Above the Declaration Threshold	Percentage of Discrepancies
2002	44	5200	195	72%
2003	47	4700	192	76%
2004	43	5500	189	75%
2005	45	4800	191	69%
2006	45	5700	201	70%

Note: Information on transfers in the year 2002 was not available by the cut-off date (31 December 2002) for the Consolidated Unclassified Verification Implementation Report provided to the First Review Conference (RC-1/S/6, dated 25 April 2003), and hence is reported here. Information on transfers in 2007 will only become available after receipt of annual declarations for the year 2007 (due by 30 March 2008); hence no information on transfers for the year 2007 are presented in this report.

For transfers above the declaration threshold, Annex 3.2 shows the percentage of Schedule 2 transfers declared by only one of the two States Parties involved, and for transfers declared by both the importing and exporting States, the percentage of cases in which the data matches (that is, where the difference involved was less than the relevant declaration threshold), and the percentage in which the data did not match, for this time period.

Annex 3.2: SCHEDULE 2 DISCREPANCIES, 2002 THROUGH 2006



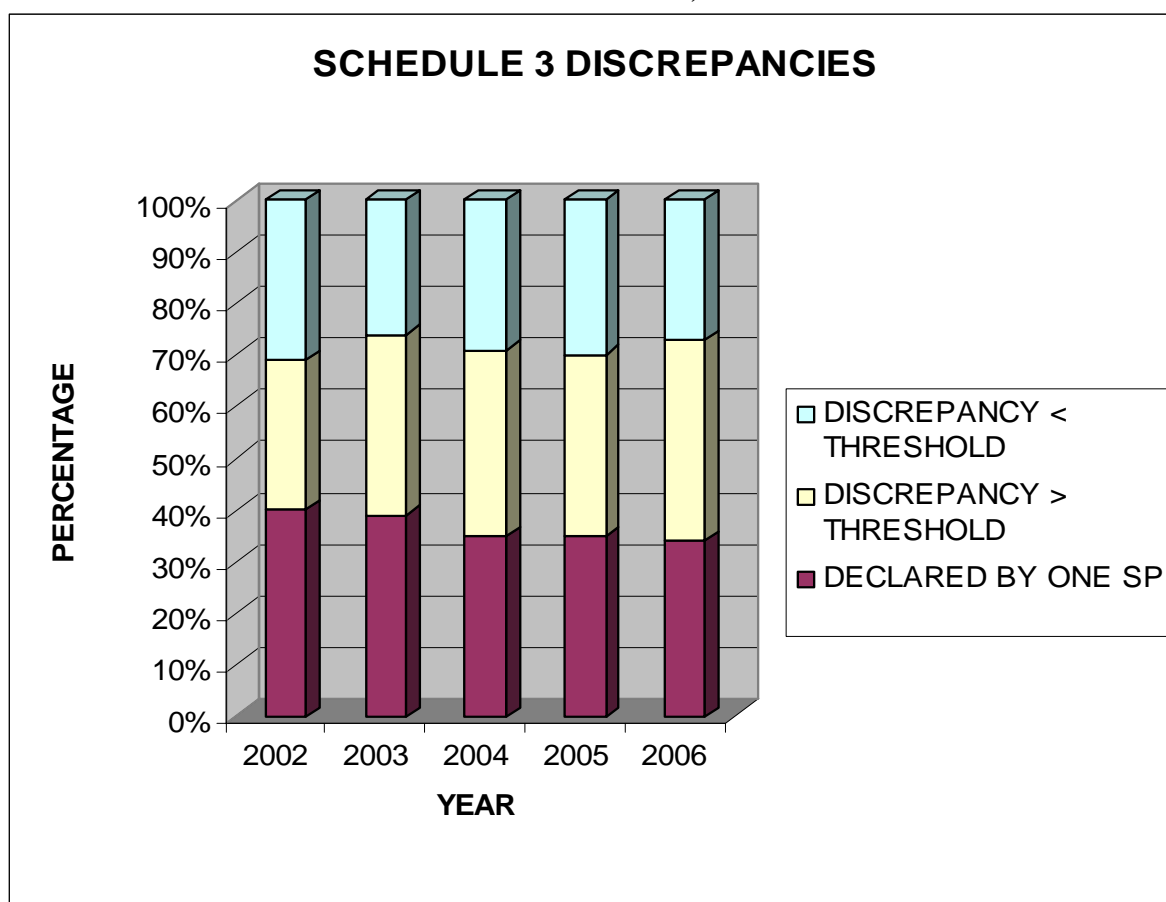
Annex 3.3: SCHEDULE 3 TRANSFERS, 2002 THROUGH 2006

Year	States Parties Involved	Total Amount Transferred (Metric tonnes)	Number of Transfers Above the Declaration Threshold	Percentage of Discrepancies
2002	98	247000	454	69%
2003	104	550000	492	74%
2004	110	438000	472	71%
2005	114	495000	471	71%
2006	118	304000	463	73%

Note: Information on transfers in the year 2002 was not available by the cut-off date (31 December 2002) for the Consolidated Unclassified Verification Implementation Report provided to the First Review Conference (RC-1/S/6, dated 25 April 2003), and hence is reported here. Information on transfers in 2007 will only become available after receipt of annual declarations for the year 2007 (due by 30 March 2008); hence no information on transfers for the year 2007 are presented in this report.

For transfers above the declaration threshold, Annex 3.4 shows the percentage of Schedule 3 transfers declared by only one of the two States Parties involved, and for transfers declared by both the importing and exporting States, the percentage of cases in which the data matches (that is, where the difference involved was less than the relevant declaration threshold), and the percentage in which the data did not match, for this time period.

Annex 3.4: SCHEDULE 3 DISCREPANCIES, 2002 THROUGH 2006



Annex 4

**TRANSFERS OF SCHEDULED CHEMICALS TO STATES NOT PARTY,
2002 THROUGH 2006**

Year	Number of States not Party Involved	Total Amount of Schedule 2 Chemicals Transferred (Metric tonnes)	Total Amount of Schedule 3 Chemicals Transferred (Metric tonnes)	Total Transfers (Metric tonnes)
2002	3	0	2643	2643
2003	3	0	2560	2560
2004	4	184	3478	3662
2005	7	114	3088	3202
2006	5	0	2469	2469

Note: Information on transfers in the year 2002 was not available by the cut-off date (31 December 2002) for the Consolidated Unclassified Verification Implementation Report provided to the First Review Conference (RC-1/S/6, dated 25 April 2003), and hence is reported here. Information on transfers in 2007 will only become available after receipt of annual declarations for the year 2007, (due by 30 March 2008); hence no information on transfers for the year 2007 are presented in this report.

Annex 5

FUNDING MADE AVAILABLE BY MEMBER STATES FOR OPCW IMPLEMENTATION-SUPPORT PROGRAMMES, 2003 TO 2007

		Voluntary contributions						
		Regional Seminars	Support for National Authorities			Article VII		Support to National Implementation
Year	Regular budget	Republic of Korea	Japan	Republic of Korea	Norway	Japan	The Netherlands	United States of America
2003	€688,000.00		€10,000.00		€15,000.00			€110,727.00
2004	€833,500.00		€10,000.00					€6,345.00
2005	€833,500.00	€30,698.00			€77,719.00	€15,000.00	€300,000.00	€12,113.00
2006	€868,507.00	€43,261.00				€20,000.00	€60,500.00	
2007	€909,261.00			€50,000.00*		€55,683.00		
Total	€4,132,768.00	€73,959.00	€20,000.00	€50,000.00	€92,719.00	€90,683.00	€360,500.00	€129,185.00

* Allocation between national implementation and universality to be determined by the State Party.

Annex 6

**IMPLEMENTATION-SUPPORT PROJECTS
CARRIED OUT SINCE THE FIRST REVIEW CONFERENCE**

Year	Technical Assistance Visits	National Authority Meetings and Training Courses for National Authority Personnel	Regional Events	Sub-regional Events	Thematic/ Technical Meetings
May–Dec 2003	5	4	6	1	4
2004	26	3	4	3	2
2005	22	5	4	9	12
2006	32	7	4	5	11
2007	21	4	5	6	7
Total	106	23	23	24	36

Annex 7

INTERNATIONAL-COOPERATION PROGRAMMES

Programme Name	Programme Objective	Level of Participation up to Dec. 2007	Technical Secretariat Note Reference
Associate Programme	<p>To facilitate capacity building and national implementation of the Convention;</p> <p>To promote trade through the adoption of good practices in the area of chemical manufacturing and safety; and</p> <p>To broaden the pool of human resources from which the National Authorities and the OPCW can draw in the future.</p>	154 associates supported	S/601/2006, dated 14 November 2006
Conference-Support Programme	<p>To provide financial support for conferences, workshops, and seminars on topics relevant to the Convention; and</p> <p>To facilitate participation in such events by scientists and other technical personnel from countries whose economies are developing or in transition.</p>	164 events and 1,577 participants sponsored	S/172/2000, dated 13 March 2000
Internship-Support Programme	<p>To help scientists and engineers from countries whose economies are developing to gain experience by working for a limited time in advanced research laboratories and facilities in industrialised countries;</p> <p>To facilitate the exchange of scientific and technical information; and</p>	59 interns supported	S/289/2002, dated 14 January 2002

Programme Name	Programme Objective	Level of Participation up to Dec. 2007	Technical Secretariat Note Reference
	To strengthen institutions in the targeted countries through capacity building.		
Laboratory-Assistance Programme	<p>To support analytical laboratories in developing countries in improving their technical capabilities;</p> <p>To assist laboratories seeking OPCW designation, or those involved in chemical analysis; and</p> <p>To assist laboratories that already have an adequate infrastructure but which could benefit from an increased level of technical competence.</p>	33 laboratories assisted	S/328/2002, dated 19 December 2002
Programme for Support of Research Projects	To provide support for small-scale research projects for the development and promotion of scientific and technical knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical, or other peaceful purposes that are relevant to the Convention.	315 projects supported	S/228/2000, dated 5 December 2000
Equipment-Exchange Programme	To provide support for the voluntary transfer of laboratory equipment, which is in good working condition, from institutions in developed countries to institutions in less developed countries.	14 transfers/assistance	S/307/2002, dated 17 May 2002
Analytical-Skills Development Course	<p>To facilitate the analysis of chemicals related to national implementation of the Convention;</p> <p>To enhance national capacities in areas related to</p>	157 analytical chemists in seven sessions	S/457/2005, dated 17 January 2005

Programme Name	Programme Objective	Level of Participation up to Dec. 2007	Technical Secretariat Note Reference
	<p>analytical chemistry;</p> <p>To facilitate the adoption of good laboratory practices; and</p> <p>To broaden the pool of human resources from which the National Authorities and the Technical Secretariat can draw in the future.</p>		
Project on Equipment Support for National Authorities	<p>To facilitate the capacity-building of National Authorities in Member States to enable the latter to implement the Convention;</p> <p>To engage in the development and application of chemistry for peaceful purposes.</p>	50 desktop computers (EU funded)	S/459/2005, dated 21 January 2005
Project on Laboratory Assistance	<p>To develop the capacities of publicly funded analytical laboratories; and</p> <p>To improve technical competence.</p>	<p>8 laboratories assisted</p> <p>5 laboratories assisted</p>	<p>S/458/2005, dated 19 January 2005</p> <p>S/556/2006, dated 21 March 2006</p>
Information Service	To provide information to Member States on the hazardous properties of chemicals and chemical products, possible substitutes for hazardous chemicals, suppliers of specific chemicals and chemical technologies, and other related information.	91 inquiries	

Annex 8

REGIONAL BREAKDOWN OF THE ICB PROGRAMME BUDGET, 1997–2007 (IN EUROS)

Programme	Regional breakdown (% share of Regions)											
	African Group		Asian Group		Eastern Group	European	GRULAC		WEOG		Total	
	Euros	% share	Euros	% share	Euros	% share	Euros	% share	Euros	% share	Euros	% share
Conference Support	683,549	23.26%	472,786	16.09%	562,802	19.15%	172,949	5.89%	1,046,193	35.61%	2,938,279	26.50%
Research projects	409,727	28.71%	344,932	24.17%	11,414	0.80%	606,342	42.49%	54,750	3.84%	1,427,165	12.87%
Internship Support	235,545	44.94%	167,535	31.96%	50,242	9.59%	65,484	12.49%	5,316	1.01%	524,122	4.73%
Laboratory Assistance	933,472	50.52%	347,654	18.82%	273,546	14.80%	287,367	15.55%	5,675	0.31%	1,847,714	16.67%
Equipment Exchange	36,222	38.13%	12,665	13.33%	15,966	16.81%	28,871	30.39%	1,277	1.34%	95,001	0.86%
Associate Programme	1,118,143	37.95%	803,840	27.28%	442,210	15.01%	527,089	17.89%	55,058	1.87%	2,946,340	26.58%
Analytical-Skills Courses	524,150	40.07%	309,216	23.64%	158,636	12.13%	283,052	21.64%	33,130	2.53%	1,308,184	11.80%
Total	3,940,808	35.54	2,458,628	22.18	1,514,816	13.66	1,971,154	17.78	1,201,399	10.84	11,086,805	100.00%

Annex 9

REGIONAL BREAKDOWN OF PARTICIPATION IN ICB PROGRAMMES

Year	African Group	Asian Group	Eastern European Group	GRULAC	WEOG	Total
ASSOCIATE PROGRAMME PARTICIPATION						
2000	3	3	2	4	0	12
2001	7	1	2	2	0	12
2002	4	5	3	0	0	12
2003	7	7	3	6	1	24
2004	9	6	4	5	0	24
2005	6	7	5	5	1	24
2006	11	7	2	3	1	24
2007	11	6	2	3	0	22
TOTAL	58	42	23	28	3	154
<i>Note: In 2001, one participant did not complete the course.</i>						
CONFERENCE-SUPPORT PROGRAMME PARTICIPATION						
1997	0	0	1	0	6	7
1998	13	8	10	9	6	46
1999	29	10	8	13	18	78
2000	17	18	26	2	8	71
2001	17	18	9	2	0	46
2002	41	15	17	11	2	86
2003	90	49	74	45	30	288
2004	44	42	68	51	28	233
2005	55	90	55	23	60	283
2006	91	53	47	32	39	262
2007	43	41	21	16	55	176
TOTAL	440	344	336	204	252	1,576

SUPPORT FOR RESEARCH PROJECTS						
1998	3	1	0	6	0	10
1999	13	4	0	12	0	29
2000	0	0	0	3	0	3
2001	6	3	0	4	0	13
2002	7	7	0	6	1	21
2003	9	13	0	20	0	42
2004	17	12	1	17	1	48
2005	22	20	1	21	1	65
2006	22	28	0	18	0	68
2007	9	3	0	7	0	19
TOTAL	108	91	2	111	3	315
INTERNSHIP SUPPORT PROGRAMME						
1999	1	2	0	0	0	3
2000	6	1	1	0	0	8
2001	1	0	2	0	0	3
2002	2	0	0	0	1	3
2003	2	5	1	0	0	8
2004	4	1	0	4	0	9
2005	3	1	2	1	0	7
2006	2	3	1	1	0	7
2007	5	4	0	2	0	11
TOTAL	26	17	7	8	1	59
LABORATORY ASSISTANCE PROGRAMME						
1997	0	1	0	0	0	1
1998	1	0	0	1	0	2
1999	0	1	0	0	0	1
2000	0	2	1	0	1	4
2001	0	0	0	0	0	0
2002	0	1	0	0	0	1
2003	0	0	1	0	0	1
2004	3	1	1	0	0	5
2005	6	1	1	1	0	9
2006	2	7	1	10	0	20
2007	0	2	0	0	0	2
TOTAL	12	16	5	12	1	46

EQUIPMENT-EXCHANGE PROGRAMME						
1998	2	0	0	0	0	2
1999	0	1	0	0	0	1
2000	0	0	0	0	0	0
2001	2	0	0	0	0	2
2002	0	0	0	0	0	0
2003	3	0	3	1	1	8
2004	1	0	0	0	0	1
2005	15	8	9	18	0	50
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
TOTAL	23	9	12	19	1	64
ANALYTICAL SKILLS COURSE PARTICIPANTS						
2004	6	5	5	4	0	20
2005	9	2	5	7	1	24
2006	20	12	5	9	1	47
2007	27	17	3	18	1	66
TOTAL	62	36	18	38	3	157

Annex 10

HISTORICAL OVERVIEW OF STAFFING

Annex 10.1: HISTORICAL OVERVIEW: TURNOVER OF STAFF SUBJECT TO TENURE POLICY, 2003 THROUGH 2007

Separation Year	Total number of separated staff under tenure policy	Number of separated staff who did not have their contracts renewed because of the tenure policy	Number of staff who separated as a result of natural attrition*
2003	35	17	18
2004	49	17	32
2005	39	9	30
2006	41	25	16
2007	60	36	24
TOTAL	224	104	120

*Natural attrition refers to staff separating due to reaching retirement age, going on to an SSA as a CWDF inspector, resigning, experiencing disability, or a re-definition of post.

Annex 10.2: HISTORICAL OVERVIEW: RECRUITMENT OF STAFF, 2003 THROUGH 2007

Recruitment Year	Total no. of fixed-term staff (as at 31 December)	Number of new fixed-term appointments
2003	Professional: 296 General Services: 141 Total: 437	Professional: 14 General Services: 26 Total: 40
2004	Professional: 301 General Services: 137 Total: 438	Professional: 49 General Services: 16 Total: 65
2005	Professional: 315 General Services: 148 Total: 463	Professional: 55 General Services: 46 Total: 101
2006	Professional: 318 General Services: 172 Total: 490	Professional: 41 General Services: 42 Total: 83
2007	Professional: 306 General Services: 178 Total: 484	Professional: 51 General Services: 27 Total: 78