



Verification Division  
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**NOTE BY THE DIRECTOR-GENERAL**

**REPORT ON CHALLENGE INSPECTION EXERCISE  
DELFT, THE NETHERLANDS  
10 – 14 SEPTEMBER 2007**

**Introduction**

1. The First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention requested the Technical Secretariat (hereinafter "the Secretariat") "to continue maintaining a high standard of readiness to conduct a challenge inspection in accordance with the provisions of the Convention, to keep the Council informed about its readiness, and to report any problems that may arise in relation to maintaining the necessary levels of readiness to conduct a challenge inspection" (paragraph 7.91 of RC-1/5, dated 9 May 2003).
2. Accordingly, the Secretariat has kept Member States regularly informed and has submitted to the Executive Council (hereinafter "the Council") four Notes providing updates on its readiness to conduct a challenge inspection (EC-36/DG.5/Rev.1, dated 17 February 2004; EC-41/DG.10, dated 2 June 2005; EC-46/DG.6, dated 26 June 2006; and EC-49/DG.11, dated 1 June 2007).
3. Field exercises play an important role in the Secretariat's efforts to maintain its readiness to conduct such an inspection. Accordingly, in 2007, the Secretariat was pleased to hold a challenge-inspection field exercise hosted by the Netherlands.
4. This opportunity had many advantages for the Secretariat. Firstly, it allowed the Secretariat to conduct a mock challenge inspection in an industrial environment. Previous challenge-inspection exercises, with the notable exception of the exercise in Brazil in 1999, were conducted at military installations. Secondly, the proximity of the exercise location to OPCW headquarters meant that it was economically feasible for the Secretariat to field a large team, thus enabling many more individuals to profit from this experience than would have been possible had the exercise taken place elsewhere. This in turn allowed the Secretariat to conduct perimeter monitoring, an aspect of challenge inspection that has rarely been exercised. The proximity of the exercise location to The Hague also meant that it was easily accessible to representatives of the members of the Council, many of whom took the opportunity to observe the challenge-inspection exercise. The Netherlands, for its part, organised an informative programme for visitors who were primarily from the Council. The



number of Member States that were able to observe the exercise was therefore much higher and more diverse than had been the case at previous challenge-inspection exercises.

### **Overview of exercise**

5. The exercise was held from 10 to 14 September 2007 and was directed by a joint team comprised of representatives from the Dutch Government, the inspected facility, and the Secretariat. The Secretariat planning team was made up of staff from the Inspectorate and Verification Divisions.
6. The Secretariat fielded an inspection team of 26 personnel. Two tons of inspection equipment, which included a mobile laboratory, were deployed. The equipment was dispatched from The Hague and arrived at the point of entry on the morning of 10 September 2007. A five-person evaluation team from the Secretariat was assigned to observe the activities of the inspection team.
7. The Netherlands invited those States Parties that are currently members of the Council to send one representative each to attend certain parts of the exercise; in addition, non-Council members were, given certain practical restrictions, also able to avail themselves of this opportunity. A total of 38 Member States attended. In addition, the Netherlands Government invited observers from six States Parties and a representative from the Provisional Technical Secretariat for the Comprehensive Nuclear Test Ban Treaty Organisation to follow the entire exercise.

### **Exercise activities**

8. The exercise began when, in accordance with the Chemical Weapons Convention (hereinafter “the Convention”), a challenge-inspection request was received by the Director-General. This triggered the Secretariat's procedure for the planning, launching, supporting, and controlling of a challenge inspection. A mission-support group served as the OPCW headquarters focal point for the inspection. This group continued to perform this role during the course of the exercise and was in regular contact with the inspection team.
9. While the inspection team itself was at the headquarters building, the inspection-team leader became part of the mission-support group, thus ensuring a close liaison between the work of the mission-support group and the preparations by the inspection team.
10. The preparatory stage—from 5 to 7 September 2007—was conducted at OPCW headquarters; the outgoing inspection team was briefed on a number of issues (for example, on the technical aspects of the inspection, health and safety considerations, logistics and operations, background information on the States Parties involved, media issues, and relevant policy issues).
11. The inspection team, after carefully reviewing the challenge-inspection request and other relevant documentation, developed a tentative inspection plan; the team then organised itself into smaller subteams. The preparatory phase concluded with a

briefing, during which the inspection-team leader provided the mission-support group with an overview of the planning for the inspection.

12. The challenge-inspection request stated that, in violation of the Convention, chemical-warfare agents were being produced at a plant site in the Netherlands. In particular, the request contained allegations that individuals at the plant site had produced the Schedule 2 chemical BZ and its precursor benzilic acid. A stock of BZ was said to have been sold on or about 23 August 2007, and it was said that additional quantities were being stored on site for transfer at a later date. Finally, the challenge-inspection request stated that there was evidence to assume that an accident had occurred at the site when a container with BZ slurry was being transferred. The accident was quickly cleaned up, but may have resulted in some personnel being exposed to dangerous chemicals. The plant site where these activities were alleged to have occurred was located in Delft in the Netherlands.
13. Field activities began with the arrival of the inspection team on 10 September 2007 at a location near the plant site (which was considered the point of entry for purposes of the exercise). The inspection team handed over the mandate to officials from the State Party that was being inspected; thereafter, pre-inspection activities were conducted at the point of entry in the presence of the observer from the requesting State Party. After a short health-and-safety briefing by a plant-site representative, part of the inspection team, together with representatives from the escort team, was dispatched for the equipment check. The remainder of the team remained at the point of entry for the pre-inspection briefing (which included presentations by representatives from the Netherlands Permanent Representation to the OPCW, the Netherlands National Authority, and the inspected facility) and also for perimeter and exit monitoring negotiations between the inspection-team leader and representatives from the inspected State Party. In the course of the latter discussions, the requested perimeter was established as the final perimeter. Since the requested perimeter included certain private property outside the fence line of the plant, it was agreed that the inspection team would conduct perimeter monitoring along the fence line of the facility (that is, inside the perimeter) and would also have access to all areas within the perimeter for purposes of the inspection. At this time, the inspection-team leader also met with the observer from the requesting State Party.
14. The inspection itself began with a tour of the site to be inspected on 10 September at 13:00. After the tour and discussions with the observer from the requesting State Party, the inspection team finalised its preliminary inspection plan, which was updated during the course of the inspection.
15. In general, the inspection team worked in five subteams. The responsibilities of subteam 1, which included the inspection-team leader and the deputy team leader, involved the following: command and control, negotiations with the inspected State Party, discussions with the observer from the requesting State Party, administration, interviews, and report writing. Subteam 2 was in charge of sampling and analysis. Subteams 3 and 4 were responsible for physical inspection and records review. Finally, subteam 5 conducted monitoring of the perimeter.

16. Subteam 5 was deployed very early on in the inspection. It took over perimeter-control activities from the Netherlands military guards detachment deployed early that morning, and began perimeter monitoring and exit control on 10 September at 13:10, continued with these activities the next day, and completed this task at 17:00 on 12 September. At that point, the perimeter-monitoring element of the exercise was completed. For practical reasons, perimeter-monitoring activities were limited to office hours.
17. The perimeter-monitoring subteam was divided into four units. One subteam was mobile, and three were deployed to various exits. All other exits from the site were sealed, and these seals were periodically checked by the perimeter-monitoring subteam. On 12 September 2007, one unit was redeployed to the weigh bridge—a location where trucks entering and leaving the facility are stopped and checked, which provided an excellent location to monitor traffic leaving the plant site.
18. The physical inspection commenced at 15:30 on 10 September and continued until 12:00 on 13 September 2007. The subteams conducting the physical inspection were charged with investigating the allegations contained in the challenge-inspection request in relation to the production and storage of BZ and its precursors. These subteams initially focused on the particular areas of concern identified both in the request and by the observer from the requesting State Party. Subsequently, other areas and buildings that potentially could be used for the manufacture or storage of chemicals were also inspected. A total of 34 buildings, structures, and areas/zones were inspected. The team did not inspect structures that were clearly not relevant (for example, high-voltage transformers, boilers, smoking sheds, and so on), but did inspect the outside features of such structures to determine whether they were consistent with their reported functions.
19. During the physical inspection, the subteams considered whether sample analysis would be helpful in addressing the concerns expressed in the challenge-inspection request, and identified potential sampling points. As discussed below (see paragraph 21), a total of four samples was analysed.
20. Finally, the physical-inspection subteams discussed with plant-site personnel the types of records that were kept by the facility. On the basis of these discussions, as well as other information, the inspection-team leader requested that the inspected State Party provide a number of records, including the following:
  - (a) records tracking the usage of reactors in the plants identified in the challenge-inspection request;
  - (b) maintenance records;
  - (c) records on the treatment of waste, including wastewater treatment records;
  - (d) inventory-management records; and
  - (e) security and medical records.
21. Subteam 2 was responsible for sampling and analysis. At the beginning of the exercise, this subteam set up the on-site laboratory and conducted the necessary performance tests and calibration. Samples were collected on 11 and 12 September. Four samples were analysed:

- (a) a wipe sample taken from 10 of 27 reactors in the production building of concern. These samples were combined and analysed together;
  - (b) a sample taken from the spent-solvent tank from this building;
  - (c) a wastewater sample collected from another building causing concern; and
  - (d) wipe samples taken from the floor of a building that had been identified by the observer from the requesting State Party as having possibly been used for the storage of contaminated protective clothing.
22. As agreed with the inspected State Party, analysis of these samples was conducted in open mode using the OPCW Central Analytical Database (OCAD). The analysis of the samples did not indicate the presence of any chemicals listed in the OCAD.
23. A special subteam (made up of individuals from subteam 1) was tasked with investigating the spill that had allegedly taken place (see paragraph 11 above). During the course of this investigation, the subteam examined the area where the spill had supposedly occurred, questioned persons who would have knowledge of such a spill, and examined a number of records relating to, *inter alia*, accidents reported at the site, access to the plant site during the timeframe of the alleged spill, and medical treatment.
24. The drafting of the preliminary report on factual findings was initiated early in the inspection and continued until the end of the day on 13 September 2007. This report detailed the inspection team's activities on-site and addressed the allegations that had been made in the challenge-inspection request. The report demonstrated that the team had not found any facts to support the allegations. The State Party that had been inspected and personnel from the plant site were provided with a copy of the draft report. After a few points had been clarified, the report was formally handed to the inspected State Party on 14 September 2007, thus officially closing this challenge inspection.
25. The last day of the exercise was devoted primarily to a review of the conduct of the exercise. All groups involved in the challenge inspection—the inspection team, the inspected State Party, plant-site staff, visitors, and observers—were at this time given an opportunity to present their views during a plenary session.

### **Evaluation**

26. The Secretariat places a great deal of emphasis on the proper evaluation and follow-up of exercises. As noted earlier, a five-person team was charged with observing the inspection team's activities and reporting on them. The main results of the evaluation and planned follow-up are set out below.
27. The aim of the exercise, from the standpoint of the Secretariat, was to test its procedures and capabilities to carry out a challenge inspection. The Secretariat particularly wished to concentrate on the following inspection activities: command and control of a large team, perimeter monitoring, sampling and analysis at an industrial facility, and report writing.

28. The evaluation concluded that the exercise met all of these aims: the main procedures and capabilities required for a challenge inspection were tested and invaluable lessons were learned in all requisite areas.
29. The evaluation team conducted a detailed analysis of the activities undertaken in response to the challenge-inspection request, and concluded that the Secretariat was well able to perform all of the tasks that it would be expected to carry out during such an inspection. It further concluded that, not surprisingly, the inspection team was at its most effective with respect to activities that inspectors had had the opportunity to practice frequently in the past, either during routine inspections or during training. The evaluation team identified a number of technical improvements that would allow the Secretariat to achieve an even higher standard. In addition, the evaluators recommended that the Secretariat carry out significant additional in-house training on perimeter monitoring, to be followed by an exercise where such monitoring is conducted on a 24-hour basis.
30. The follow-up analysis of the results of the challenge-inspection exercise has just commenced. The Secretariat will develop a work plan for achieving the required improvements and will report on its progress at a later date.

### **Conclusion**

31. The challenge inspection exercise in Delft, the Netherlands, provided the Secretariat with an excellent opportunity to practice its procedures and skills in an industrial environment, and also enabled the inspection team to demonstrate to delegations in The Hague its competence in conducting a challenge inspection.
32. An exercise of this scope required the investment of considerable resources, both by the Secretariat and the Netherlands, as well as on the part of plant-site staff and the management of the company. The Director-General wishes to register his particular gratitude to the Netherlands for its invaluable support and assistance in making this exercise possible, and he looks forward to other cooperative endeavours in the future.