Technical Secretariat



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NOTE BY THE DIRECTOR-GENERAL

EVALUATION OF THE RESULTS OF THE FORTY-SIXTH OFFICIAL OPCW PROFICIENCY TEST

- 1. The Director-General wishes to inform the Member States of the results of the Forty-Sixth Official OPCW Proficiency Test, which was conducted by the Technical Secretariat (hereinafter "the Secretariat") from October 2019 to March 2020. The OPCW Laboratory is accredited by the Raad voor Accreditatie (RvA), the Netherlands, to conduct proficiency testing in compliance with the criteria laid down in International Organization for Standardization/International Electrotechnical Commission standard ISO/IEC 17043. The test was conducted according to the following quality management system documents:
 - (a) "Standard Operating Procedure for the Organisation of OPCW Proficiency Tests" (QDOC/LAB/SOP/PT01 (Issue 3, Revision 2, dated 11 March 2019));
 - (b) "Work Instruction for the Preparation of Samples for OPCW Proficiency Tests" (QDOC/LAB/WI/PT02 (Issue 3, Revision 2, dated 11 March 2019));
 - (c) "Work Instruction for the Evaluation of the Results of OPCW Proficiency Tests" (QDOC/LAB/WI/PT03 (Issue 3, Revision 4, dated 11 March 2019)); and
 - (d) "Work Instruction for the Reporting of the Results of the OPCW Proficiency Tests" (QDOC/LAB/WI/PT04 (Issue 3, Revision 0, dated 11 March 2019)).
- 2. In order to retain their designation, designated laboratories must demonstrate once per calendar year that they have maintained their capabilities in a proficiency test organised by the Secretariat, unless the additional guidelines in decision C-20/DEC.4 (dated 2 December 2015) are applicable.
- 3. TNO Defence, Safety and Security, the Netherlands, prepared the test samples and the Defence Science and Technology Laboratory (Dstl), the United Kingdom of Great Britain and Northern Ireland, evaluated the results of the Forty-Sixth Proficiency Test.
- 4. Twenty-two laboratories nominated from 18 Member States, including the two assisting laboratories, participated in the test. One laboratory opted to participate in this test on a trial basis.

- 5. The preliminary evaluation report was discussed at a meeting between Secretariat staff and the test participants on 12 February 2020. The participants were given two weeks to comment on the results and to inform the Secretariat whether they accepted their performance evaluation.
- 6. The evaluating laboratory submitted its final evaluation report to the Secretariat on 25 March 2020.
- 7. The principal results of the Forty-Sixth Official OPCW Proficiency Test can be summarised as follows:
 - (a) All test participants submitted their analytical report within the test period.
 - (b) Eight regular participants identified and reported all of the spiking chemicals with sufficient analytical data for all of the spiking chemicals.
 - (c) Seven participants identified and reported eight out of the nine spiking chemicals with sufficient analytical data for all of the reported chemicals.
 - (d) Two participants identified and reported five to seven of the nine spiked chemicals with sufficient data.
 - (e) Two participants identified and reported less than half of the spiked chemicals with sufficient data.
 - (f) No score was given for the trial participant.
 - (g) One false positive chemical and four non-scoring chemicals were reported.
 - (h) The sample preparation and the evaluating laboratories submitted their report and are awarded the maximum performance rating of "A".
 - (i) There are ten As, seven Bs, two Cs, and two Ds in the test score for the 19 regular participants and the two assisting laboratories.
- 8. The final results for all of the laboratories participating in the test are presented in the table in the Annex hereto.
- 9. The participating laboratories are reminded that if they have made any errors or reported false positives or false negatives (arising from a failure to find a spiking chemical or to provide sufficient supporting data for a chemical that is found), they should take immediate remedial action. Before participating in the next test, each such laboratory is required to submit a detailed follow-up report to the Secretariat stating the cause of the problem and any remedial action it has taken. Any such laboratory failing to submit the required report, including details of the remedial action it has taken, will not be permitted to participate in the next proficiency test.

Annex: Final Results of the Forty-Sixth Official OPCW Proficiency Test

Annex

FINAL RESULTS OF THE FORTY-SIXTH OFFICIAL OPCW PROFICIENCY TEST

Participant Laboratory Code	No. of Spiking Chemicals ¹ Reported	No. of Chemicals Scored	Rating	Comments
Australia Defence Science and Technology (DST) Group (29)	9	9	A	-
Brazil Chemical Analysis Laboratory of the Nuclear, Biological, Chemical and Radiological Defense Centre, Brazilian Navy (24)	7	7	C	Spiking chemicals G and K were not reported.
China The Laboratory of Analytical Chemistry, Research Institute of Chemical Defence (14)	9	9	A	A non-scoring chemical NR1 was reported.
China Laboratory of Toxicant Analysis, Institute of Pharmacology and Toxicology, Academy of Military Medical Sciences (26)	9	9	A	Two non-scoring chemicals NR1 and L were reported.

The spiking chemicals were as follows:

1

Sample 991: (D) Thiodiglycol Sample 992: (A) 1,5-Bis(2-hydroxyethylthio)pentane Bis(2-hydroxyethylthio)methane Sample 992: (B) Bis(2-N,N-diisopropylaminoethyl)disulfide Sample 992: (H) Sample 994: Bis(2-hydroxyethylthiomethyl)ether (C) Bis(2-N,N-diethylaminoethyl)disulfide Sample 994: (E) Sample 994: (F) Triethanolamine Sample 994: (G) Diethylphosphate Sample 996: (K) Triethanolamine

Participant Laboratory Code	No. of Spiking Chemicals ¹ Reported	No. of Chemicals Scored	Rating	Comments
France DGA Maîtrise NRBC, Département d'analyses chimiques (10)	8	8	В	Spiking chemical G was not reported.
Hungary Hungarian Defence Forces Medical Centre, Defence Health Directorate, Scientific Research Laboratory Institute, Toxicology Laboratory (19)	6	4	D	Spiking chemicals E, F and G were not reported. A non-scoring chemical NR1 was reported.
India Centre for Analysis of Chemical Toxins (CACT), CSIR–Indian Institute of Chemical Technology (02)	8	8	В	Spiking chemical G was not reported.
India Institute of Pesticide Formulation Technology (17)	7	7	C	Spiking chemicals F and G were not reported.
India VERTOX Laboratory, Defence Research & Development Establishment (13)	9	9	A	A non-scoring chemical NR1 was reported.
Iran (Islamic Republic of) Defense Chemical Research Laboratory (11)	9	9	A	A non-scoring chemical NR1 was reported.
Japan Chemical School, Ministry of Defense (08)	7	3	D	Spiking chemicals A and C were not reported. Two non-scoring chemicals NR1 and L were reported.
Netherlands TNO Defence, Security and Safety	-	-	A	Sample preparation assistance

Participant Laboratory Code	No. of Spiking Chemicals ¹ Reported	No. of Chemicals Scored	Rating	Comments
Norway Laboratory for Identification of Chemical Threat Agents, Norwegian Defence Research Establishment (FFI), Comprehensive Defence Division (20)	9	9	A	-
Pakistan Analytical Lab, Defense Science Technology Organisation, DESTO Labs complex (05)	8	8	В	Spiking chemical G was not reported.
Poland Military University of Technology, Faculty of Advanced Technologies and Chemistry (07)	5	0	#	Spiking chemicals C, E, F and G were not reported. A non-scoring chemical N and a false positive chemical M were reported.
Republic of Korea Chemical Analysis Laboratory, CB Department, Agency for Defense Development (12)	9	9	A	A non-scoring chemical NR1 was reported.
Romania Scientific Research Centre for CBRN Defense and Ecology, Chemical Analysis and Special Synthesis Laboratory (18)	8	8	В	Spiking chemical F was not reported. A non-scoring chemical L was reported.
Russian Federation Laboratory for the Chemical and Analytical Control of the Military Research Centre (21)	8	8	В	Spiking chemical G was not reported. Two non-scoring chemicals N and O were reported.

Participant Laboratory Code	No. of Spiking Chemicals ¹ Reported	No. of Chemicals Scored	Rating	Comments
Russian Federation Central Chemical Weapons Destruction Analytical Laboratory of the Federal State Unitary Enterprise, "State Scientific Research Institute of Organic Chemistry And Technology" (23)	8	8	В	Spiking chemical G was not reported. Two non-scoring chemicals N and O were reported.
South Africa Protechnik Laboratories, a division of Armscor SOC Ltd. (25)	8	8	В	Spiking chemical G was not reported.
United Kingdom of Great Britain and Northern Ireland Defence Science and Technology Laboratory, Chemical and Biological Systems, Porton Down	-	-	A	Evaluation assistance
United States of America Lawrence Livermore National Laboratory (16)	9	9	A	-