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ENGLISH only

NOTE BY THE DIRECTOR-GENERAL

EVALUATION OF THE RESULTS OF THE NINTH OFFICIAL OPCW BIOMEDICAL PROFICIENCY TEST

1. The Director-General wishes to inform the States Parties of the results of the Ninth Official OPCW Biomedical Proficiency Test, which was conducted by the Technical Secretariat (the Secretariat) from February to August 2024. 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 ISO/IEC 17043.¹ The test was conducted according to the following quality management system documents:
 - (a) “Standard Operating Procedure for the Organisation of OPCW Biomedical Proficiency Tests” (QDOC/LAB/SOP/BioPT01 (Issue 2, Revision 3, dated 31 January 2024));
 - (b) “Work Instruction for the Preparation of Samples for OPCW Biomedical Proficiency Tests” (QDOC/LAB/WI/BioPT02 (Issue 2, Revision 2, dated 30 January 2024));
 - (c) “Work Instruction for the Evaluation of Results of OPCW Biomedical Proficiency Tests” (QDOC/LAB/WI/BioPT03 (Issue 2, Revision 1, dated 30 January 2024)); and
 - (d) “Work Instruction for the Reporting of the Results of the OPCW Biomedical Proficiency Tests” (QDOC/LAB/WI/BioPT04 (Issue 2, Revision 3, dated 30 January 2024)).
2. Designated laboratories must, in order to retain their designation, demonstrate once per calendar year that they have maintained their capabilities in a biomedical proficiency test organised by the Secretariat, unless the additional guidelines in the Annex to decision C-20/DEC.4 (dated 2 December 2015) are applicable.
3. Two laboratories offered to assist the Secretariat in conducting the Ninth Official OPCW Biomedical Proficiency Test: Lawrence Livermore National Laboratory, United States of America, prepared the test samples, and FOI, Swedish Defence Research Agency, Sweden, evaluated the test results.

¹ Standard ISO/IEC 17043 of the International Organization for Standardization/International Electrotechnical Commission.



4. The preliminary evaluation report was discussed on 17 July 2024 at a hybrid meeting (held online and at the OPCW Main Building in The Hague) between Secretariat staff and the test participants. The participants were given two weeks to comment on the results and to inform the Secretariat as to whether they accepted their performance evaluation.
5. The final evaluation report was prepared by the OPCW Laboratory, together with the evaluation laboratory, and sent to all of the participants on 9 August 2024.
6. The principal results of the Ninth Official OPCW Biomedical Proficiency Test can be summarised as follows:
 - (a) Twenty-three States Parties nominated 29 laboratories, including the two assisting laboratories, to participate in the test.
 - (b) One laboratory opted to participate in the test on a trial basis, one regular laboratory cancelled participation, and another regular laboratory withdrew from the test after the dispatch of samples. No performance rating is assigned to the trial participant.
 - (c) Eighteen regular participants identified and reported all four spiking chemicals with sufficient data.
 - (d) Two regular participants identified and reported two out of the four spiking chemicals with sufficient data.
 - (e) Three regular participants identified and reported less than half of the spiking chemicals with sufficient data.
 - (f) One regular participant reported false positive chemicals and received a performance rating of F.
 - (g) The two assisting laboratories were each awarded a performance rating of A.
 - (h) Overall, the total number of participants for this test was 27, composed of 24 regular participants, one trial participant and the two assisting laboratories. There were 20 As (including the assisting laboratories), 2 Cs, 3 Ds, and 1 F in the test performance ratings.
7. The final results for all of the laboratories participating in the test are presented in the table annexed hereto.
8. 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 biomedical proficiency test.

Annex

FINAL RESULTS
OF THE NINTH OFFICIAL OPCW BIOMEDICAL PROFICIENCY TEST

Participant Code Laboratory	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
05 Australia Defence Science and Technology Group	4	4	A	-
19 Chile Servitox LTDA	-	-	D	All four spiking chemicals (A, B, C and D) were not reported.
41 China Laboratory of Toxicant Analysis, Academy of Military Medical Sciences	4	4	A	-
16 China Laboratory of Analytical Chemistry, Research Institute of Chemical Defence	4	4	A	-
43 Czech Republic Katedra toxikologie a vojenske farmacie	2	1	D	Two of the spiking chemicals (B and D) were not reported. Data provided for one chemical (C) were insufficient for scoring.
17 Finland Finnish Institute for Verification of the Chemical Weapons Convention (VERIFIN)	4	4	A	-

¹ The spiking chemicals were as follows:

Sample P091	A. N-(1-(Diethylamino)ethylidene)-P-methylphosphonamidic fluoride (A-230)
Sample P092	B. O-Isopropyl ethylphosphonofluoridate (GE)
Sample U094	C. N-(1-(Diethylamino)ethylidene)-P-methylphosphonamidic acid (A-230 acid)
Sample U095	D. O-Isopropyl ethylphosphonic acid (GE acid)

Participant Code Laboratory	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
26 France DGA Maîtrise NRBC, Département Analyse Chimique	4	4	A	-
24 Germany Bundeswehr Institute of Pharmacology and Toxicology	4	4	A	-
48 Hungary Hungarian Defence Forces, Medical Centre	4	4	A	-
39 India Biomedical Verification Division (BVD), Defence Research and Development Establishment (DRDE)	2	2	C	Two of the spiking chemicals (A and C) were not reported.
37 Iran (Islamic Republic of) Defense Chemical Research Laboratory (DCRL)	4	4	A	-
50 Japan National Research Institute of Police Science	4	4	A	-
32 Morocco National Laboratory for Scientific and Technical Police	1	-	F	Three of the spiking chemicals (A, B and D) were not reported. Data provided for one chemical (C) were insufficient for scoring. Two false positive chemicals were reported.
14 Netherlands TNO Defence, Safety and Security	4	4	A	-

Participant Code Laboratory	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
25 Republic of Korea Chemical Analysis Laboratory, Chem-Bio Technology Center, Agency for Defense Development	4	4	A	-
46 Republic of Korea CBRN Defense Research Institute, ROK CBRN Defense Command	4	4	A	-
44 Romania Chemical Analysis Laboratory, Research and Innovation Center for CBRN Defense and Ecology	4	2	C	Data provided for two chemicals (A and B) were insufficient for scoring.
18 Russian Federation Laboratory for the Chemical and Analytical Control of the Military Research Centre	4	4	A	-
47 Russian Federation Laboratory of Chemical Analytical Control and Biotesting, Research Institute of Hygiene, Occupational Pathology and Human Ecology (RIHOPHE)	4	4	A	-
33 Singapore Verification Laboratory, Defence Medical and Environmental Research Institute, DSO National Laboratories	4	4	A	-
21 Spain Toxicology Institute of Defence	2	-	D	Two of the spiking chemicals (B and D) were not reported. Data provided for two chemicals (A and C) were insufficient for scoring.

Participant Code Laboratory	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
13 Spain Laboratorio de Verificación de Armas Químicas (LAVEMA), INTA Campus La Marañosa	-	-	-	Trial participant.
United Republic of Tanzania Government Chemist Laboratory Agency	-	-	-	Cancelled participation.
06 Türkiye University of Health Sciences, Institute of Gulhane Health Sciences, Department of Medical CBRN Defense	-	-	-	Withdrew participation after sample dispatch.
29 United Kingdom of Great Britain and Northern Ireland Defence Science and Technology Laboratory, Porton Down	4	4	A	-
01 United States of America Centers for Disease Control and Prevention	4	4	A	-
10 United States of America U.S. Army Combat Capabilities Development Command (DEVCOM) Chemical Biological Center, Forensic Analytical Laboratory	4	4	A	-
<u>SAMPLE PREPARATION LABORATORY</u> United States of America Lawrence Livermore National Laboratory	-	-	A	-
<u>EVALUATION LABORATORY</u> Sweden FOI, Swedish Defence Research Agency	-	-	A	-