



S/1776/2019
24 July 2019
ENGLISH only

NOTE BY THE DIRECTOR-GENERAL

**EVALUATION RESULTS OF THE FOURTH OFFICIAL
OPCW BIOMEDICAL PROFICIENCY TEST**

1. The Director-General wishes to inform the Member States of the results of the Fourth Official OPCW Biomedical Proficiency Test, which was conducted by the Technical Secretariat (hereinafter “the Secretariat”) from February to July 2019. 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. 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 1, Revision 3, dated 11 January 2019));
 - (b) “Work Instruction for the Preparation of Samples for OPCW Biomedical Proficiency Tests” (QDOC/LAB/WI/BioPT02 (Issue 1, Revision 3, dated 11 January 2019));
 - (c) “Work Instruction for the Evaluation of Results of OPCW Biomedical Proficiency Tests” (QDOC/LAB/WI/BioPT03 (Issue 1, Revision 3, dated 11 January 2019)); and
 - (d) “Work Instruction for the Reporting of the Results of the OPCW Biomedical Proficiency Tests” (QDOC/LAB/WI/BioPT04 (Issue 1, Revision 3, dated 11 January 2019)).
2. Designated laboratories must, in order to retain their designation, demonstrate that they have maintained their capabilities by participating in every 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. One laboratory, Vertox-Biochemistry Division, Defence Research and Development Establishment, Gwalior, India, offered to assist the Secretariat in conducting the Fourth Official OPCW Biomedical Proficiency Test, and helped evaluate the test results.
4. The preliminary evaluation report was discussed at a meeting between Secretariat staff and the test participants on 19 June 2019. The participants were given two weeks



to comment on the results and to inform the Secretariat 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 17 July 2019.
6. The principal results of the Fourth Official OPCW Biomedical Proficiency Test can be summarised as follows:
 - (a) Twenty-three Member States nominated 29 laboratories, including the assisting laboratory, to participate in the test.
 - (b) Five laboratories participated in the test on a trial basis; no performance rating was provided for these participants.
 - (c) Two trial participants did not submit a test analysis report.
 - (d) The assisting laboratory was awarded a performance rating of A.
 - (e) Seventeen test participants identified and reported, with sufficient analytical data, all of the five spiked chemicals and received a rating of A.
 - (f) One test participant identified and reported sufficient analytical data for one of the spiking chemicals and received a rating of D.
 - (g) One test participant did not report any spiking chemicals and received a rating of D.
 - (h) Three test participants reported false positives and received a rating of F.
 - (i) There were 18 As, one B, two Ds, and three Fs in the test performance ratings for the regular participants, including the assisting laboratory.
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 Fourth Official OPCW Biomedical Proficiency Test

Annex

**FINAL RESULTS OF THE FOURTH OFFICIAL
OPCW BIOMEDICAL PROFICIENCY TEST**

Laboratory (Participant Code)	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
Australia Defence Science and Technology Group (09)	5	5	A	-
Chile SERVITOX Ltda (10)	0	0	F	False positives reported
China Laboratory of Toxicant Analysis, Academy of Military Medical Sciences (16)	5	5	A	-
China Laboratory of Analytical Chemistry, Research Institute of Chemical Defence (22)	5	5	A	-
Czech Republic Katedra toxikologie a vojenskéfarmacie (03)	5	4	B	Data provided for one chemical were insufficient for scoring
Denmark Danish Emergency Management Agency (24)	-	-	-	Trial participant. No report submitted
Finland VERIFIN, Finnish Institute for Verification of the Chemical Weapons Convention (08)	5	5	A	-

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The spiking chemicals were as follows: P451, P454 – O-Cyclohexyl methylphosphonofluoridate, GF; P452 – O-Isopropyl methylphosphonofluoridate, GB; U455 – O-Isopropyl methylphosphonic acid; U457 – O-Cyclohexyl methylphosphonic acid.

Laboratory (Participant Code)	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
France DGA Maîtrise NRBC, Département d'analyses chimiques (12)	5	5	A	-
Germany Bundeswehr Institute of Pharmacology and Toxicology (20)	5	5	A	-
India Vertox-Biochemistry Division, Defence Research and Development Establishment (31)	5	5	A	Evaluating Laboratory
Iran (Islamic Republic of) Defense Chemical Research Laboratory (07)	4	4	F	False positive reported
Japan National Research Institute of Police Science (28)	5	5	A	-
Malaysia Department of Chemistry Malaysia (04)	2	1	D	Data provided for one chemical were insufficient for scoring
Republic of Korea Chemical Analysis Laboratory, CB Department, Agency for Defense Development (02)	5	5	F	False positives reported
Republic of Korea Chemical, Biological and Radiological Defense Research Institute (13)	5	5	A	-
Romania Scientific Research Center for CBRN Defense and Ecology, Chemical Analysis and Special Synthesis Laboratory (14)	0	0	-	Trial participant

Laboratory (Participant Code)	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
Russian Federation Laboratory for the Chemical and Analytical Control of Military Research Centre (06)	5	5	A	-
Russian Federation Laboratory of Chemical Analytical Control and Biotesting, "Research Institute of Hygiene, Occupational Pathology and Human Ecology" (15)	5	5	A	-
Singapore Verification Laboratory, Defence Medical and Environmental Research Institute, DSO National Laboratories (01)	5	5	A	-
Spain LAVEMA (Laboratorio de Verificación de Armas Químicas), INTA Campus La Marañosa (19)	1	0	-	Trial participant. Data provided were insufficient for scoring
Sweden FOI, Swedish Defence Research Agency (21)	5	5	A	-
Switzerland Spiez Laboratory, Chemistry Division, Analytical Chemistry Branch (27)	0	0	-	Trial participant. No report submitted
Turkey University of Health Sciences (UHS), Department of Medical CBRN Defense, CBRN Analysis Laboratory (29)	0	0	D	None of the spiking chemicals were reported

Laboratory (Participant Code)	No. of Spiking Chemicals Reported¹	No. of Chemicals Scored	Rating	Comments
United Kingdom of Great Britain and Northern Ireland Defence Science and Technology Laboratory, Porton Down (18)	5	5	A	-
United Republic of Tanzania Government Chemist Laboratory Authority (17)	1	0	-	Trial participant. Data provided were insufficient for scoring
United States of America Centers for Disease Control and Prevention (05)	5	5	A	-
United States of America Edgewood Chemical and Biological Forensic Analytical Center (11)	5	5	A	-
United States of America Lawrence Livermore National Laboratory (23)	5	5	A	-
United States of America U.S. Army Medical Research Institute of Chemical Defense (26)	5	5	A	-