### **Technical Secretariat**



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### NOTE BY THE DIRECTOR-GENERAL

## EVALUATION OF THE RESULTS OF THE SECOND OFFICIAL OPCW BIOMEDICAL PROFICIENCY TEST

- 1. The Director-General wishes to inform the Member States of the results of the Second Official OPCW Biomedical Proficiency Test, which was conducted by the Technical Secretariat (hereinafter "the Secretariat") from February to June 2017. 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 1, dated 28 December 2016));
  - (b) "Work Instruction for the Preparation of Samples for OPCW Biomedical Proficiency Tests" (QDOC/LAB/WI/BioPT02 (Issue 1, Revision 1, dated 28 December 2016));
  - (c) "Work Instruction for the Evaluation of Results of OPCW Biomedical Proficiency Tests" (QDOC/LAB/WI/BioPT03 (Issue 1, Revision 1, dated 28 December 2016)); and
  - (d) "Work Instruction for the Reporting of the Results of the OPCW Biomedical Proficiency Tests" (QDOC/LAB/WI/BioPT04 (Issue 1, Revision 1, dated 28 December 2016)).
- 2. Designated laboratories must, in order to retain their designation, demonstrate that they have maintained their capabilities participating in every biomedical proficiency test organised by the Secretariat unless the additional guidelines in decision C-20/DEC.4 (dated 2 December 2015) are applicable.
- 3. Two laboratories offered to assist the Secretariat in conducting the Second Official OPCW Biomedical Proficiency Test: the DSO National Laboratories, Singapore, which assisted in sample preparation, and TNO Defence, Safety and Security, the Netherlands, which assisted in evaluating the test results.
- 4. The preliminary evaluation report was discussed at a meeting between Secretariat staff and the test participants on 23 May 2017. 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 the participants on 30 June 2017.
- 6. The principal results of the Second Official OPCW Biomedical Proficiency Test can be summarised as follows:
  - (a) Twenty Member States nominated 25 laboratories for the test participation including the two assisting laboratories.
  - (b) Two laboratories participated on a trial basis, and no score was provided for these participants.
  - (c) All test participants submitted their test analysis report within the test period.
  - (d) The two assisting laboratories were awarded a score of A.
  - (e) Sixteen test participants identified and reported, with sufficient analytical data, all of the five spiked chemicals and received a score of A.
  - (f) One test participant identified and reported insufficient data for two chemicals and received a score of C.
  - (g) Two test participants identified and reported all of the five spiked chemicals but deviated from the reporting criteria for all chemicals and received a score of D.
  - (h) One test participant did not report any spiking chemicals and received a score of D.
  - (i) One test participant reported a false positive chemical.
  - (j) There are 18 As, one C, three Ds and one F in the test scores for the regular participants including the two assisting laboratories.
- 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 Second Official OPCW Biomedical Proficiency Test

### Annex

# FINAL RESULTS OF THE SECOND OFFICIAL OPCW BIOMEDICAL PROFICIENCY TEST

Laboratory (Participant Code)	No. of Spiking Chemicals Reported <sup>1</sup>	No. of Chemicals Scored	Rating	Comments
Australia	5	5	A	-
Defence Science and Technology				
Group				
(05)				D 4 1
China	5	5	A	Reported a
Laboratory of Toxicant Analysis,				non-scoring
Academy of Military Medical Sciences				chemical in urine
(11)				samples
China	5	5	A	Reported a
Laboratory of Analytical	S	S	A	non-scoring
Chemistry, Research Institute of				chemical in urine
Chemical Defence				samples
(03)				Sumples
Czech Republic	5	5	A	_
Katedra toxikologie a vojenska				
farmacie				
(21)				
Finland	5	5	A	-
Finnish Institute for Verification of				
the Chemical Weapons Convention				
(VERIFIN)				
(09)				
France	5	5	A	-
DGA Maîtrise NRBC,				
Département d'analyses chimiques				
(18)				
Germany	5	5	A	-
Bundeswehr Institute of				
Pharmacology and Toxicology				
(15)				

<sup>1</sup> The spiking chemicals were as follows:

Sample P212 and P213: (A) and (B): Isopropyl methylphosphonofluoridate.

Sample U214, U215 and U216: (C), (D) and (E): Isopropyl methylphosphonic acid.

Laboratory (Participant Code)	No. of Spiking Chemicals Reported <sup>1</sup>	No. of Chemicals Scored	Rating	Comments
Hungary Hungarian Defence Forces Medical Centre (22)	5	3	С	Spiking chemicals A and B were not reported
India Vertox-Biochemistry Division, Defence Research and Development Establishment (16)	5	5	A	-
Iran (Islamic Republic of) Defense Chemical Research Laboratory (04)	5	5	F	Reported a false positive chemical in urine samples
Japan National Research Institute of Police Science (23)	5	0	D	Reported a non-scoring chemical in urine samples Deviated from reporting criteria
Netherlands TNO Defence, Safety and Security (10)	-	-	A	Evaluation assistance
Republic of Korea Chemical Analysis Laboratory, CB Department, Agency for Defence Development (02)	5	5	A	Reported a non-scoring chemical in urine samples
Russian Federation Laboratory for the Chemical and Analytical Control of Military Research Centre (12)	5	5	A	-
Russian Federation Laboratory of Chemical Analytical Control and Biotesting, "Research Institute of Hygiene, Occupational Pathology and Human Ecology" (19)	5	5	A	-
Singapore Verification Laboratory, Defence Medical and Environmental Research Institute, DSO National Laboratories	-	-	A	Sample preparation assistance

Laboratory (Participant Code)	No. of Spiking Chemicals Reported <sup>1</sup>	No. of Chemicals Scored	Rating	Comments
South Africa Protechnik Laboratories, a division of Armscor Defence Institutes (Pty) Ltd.				Trial participation
Sweden Swedish Defence Research Agency (FOI), CBRN Defence and Security (01)	5	5	A	-
Switzerland Spiez Laboratory				Trial participation
Turkey University of Health Sciences (UHS), Department of Medical CBRN Defense, CBRN Analysis Laboratory (17)	0	0	D	None of the spiking chemicals were reported
United Kingdom of Great Britain and Northern Ireland Defence Science and Technology Laboratory, Chemical and Biological Systems, Porton Down (06)	5	5	A	-
United States of America Centers for Disease Control and Prevention (24)	5	5	A	-
United States of America Edgewood Chemical and Biological Forensic Analytical Center (07)	5	5	A	-
United States of America Lawrence Livermore National Laboratory (14)	5	5	A	-
United States of America U.S. Army Medical Research Institute of Chemical Defense (25)	5	0	D	Deviated from reporting criteria