## **Technical Secretariat**



S/2274/2024 15 April 2024 ENGLISH only

## NOTE BY THE DIRECTOR-GENERAL

## EVALUATION OF THE RESULTS OF THE FIFTY-FOURTH OFFICIAL OPCW PROFICIENCY TEST

- 1. The Director-General wishes to inform the States Parties of the results of the Fifty-Fourth Official OPCW Proficiency Test, which was conducted by the Technical Secretariat (the Secretariat) from October 2023 to March 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 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 4, Revision 0, dated 18 April 2023));
  - (b) "Work Instruction for the Preparation of Samples for OPCW Proficiency Tests" (QDOC/LAB/WI/PT02 (Issue 3, Revision 4, dated 18 April 2023));
  - (c) "Work Instruction for the Evaluation of the Results of OPCW Proficiency Tests" (QDOC/LAB/WI/PT03 (Issue 4, Revision 2, dated 18 April 2023)); and
  - (d) "Work Instruction for the Reporting of the Results of the OPCW Proficiency Tests" (QDOC/LAB/WI/PT04 (Issue 3, Revision 3, dated 18 April 2023)).
- 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. The Centre for Analysis of Chemical Toxins, CSIR-Indian Institute of Chemical Technology, India, prepared the test samples and TNO, Defence, Safety and Security, the Netherlands, evaluated the results of the Fifty-Fourth Proficiency Test.
- 4. Twenty-nine laboratories from 24 States Parties, including the two assisting laboratories, were nominated for participation in the test.
- 5. The preliminary evaluation report was discussed at a hybrid meeting, held online and at the OPCW Centre for Chemistry and Technology between Secretariat staff and the test participants on 1 February 2024. 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 26 February 2024.
- 7. The principal results of the Fifty-Fourth Official OPCW Proficiency Test can be summarised as follows:
  - (a) All regular test participants submitted their analytical report within the test period.
  - (b) Sixteen regular participants identified and reported all of the spiking chemicals with sufficient analytical data for all of the spiking chemicals.
  - (c) Six regular participants identified and reported five out of the six spiking chemicals with sufficient data.
  - (d) One regular participant identified and reported a higher number of spiking chemicals than the number of chemicals missed.
  - (e) Four regular participants provided sufficient data for the identification of fewer than half of the spiking chemicals.
  - (f) Seven non-scoring chemicals were reported.
  - (g) The sample preparation laboratory submitted its report and was awarded the maximum performance rating of "A".
  - (h) The evaluating laboratory submitted its report and was awarded the maximum performance rating of "A".
  - (i) There are 18 As, six Bs, one C, and four Ds in the test scores for the 27 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: Results of the Fifty-Fourth Official OPCW Proficiency Test

Annex RESULTS OF THE FIFTY-FOURTH OFFICIAL OPCW PROFICIENCY TEST

Participant Laboratory Code	No. of Spiking Chemicals Reported <sup>1</sup>	No. of Chemicals Scored	Rating	Comments
Algeria Institut National de Criminalistique et de Criminologie de la Gendarmerie Nationale (35)	6	6	A	-
Australia Defence Science and Technology Group (46)	6	6	A	-
Brazil Chemical Analysis Laboratory of the Brazilian Navy, Nuclear, Biological, Chemical and Radiological Defense Centre (17)	5	5	В	Missed chemical G.
Brazil Laboratório de Análises Químicas, Centro Tecnológico do Exército (CTEx) (40)	6	6	A	-
China Laboratory of Analytical Chemistry, Research Institute of Chemical Defence (30)	6	6	A	-
Finland Finnish Institute for Verification of the Chemical Weapons Convention (VERIFIN) (27)	6	6	A	-

<sup>1</sup> Spiking chemicals

A B 1,4-Oxathiane

Bis(2-hydroxyethyl)disulfide Pinacolyl methylphosphonate

C D

Withdrawn from test

Bis(2-ethoxyethyl) ethylphosphonate E

F Diethyl methylphosphonate

G Benzilic acid

Participant Laboratory Code	No. of Spiking Chemicals Reported <sup>1</sup>	No. of Chemicals Scored	Rating	Comments
France				
DGA Maîtrise NRBC,	6		A	
Département d'analyses	0	6	A	-
chimiques (22)				
India				
Centre for Analysis of				Sample properties
Chemical Toxins,			A	Sample preparation assistance.
CSIR-Indian Institute of				assistance.
Chemical Technology				
India				Chemical G was not
Institute of Pesticide	5	5	В	
Formulation Technology (36)				reported.
India				
VERTOX Laboratory,				
Defence Research and	6	6	A	-
Development Establishment				
(34)				
Iran (Islamic Republic of)				
Defense Chemical Research	6	6	A	-
Laboratory (DCRL) (25)				
Italy				Chemical A was not
Italian Customs and				reported. Data for
Monopolies Agency,	5	2	D	chemicals C, E, and G
Antifraud Directorate,				were not sufficient for
Central Laboratory (31)				scoring.
Malaysia				Chemical F was not
				reported. Data for
Science and Technology	5	4	C	chemical C were not
Research Institute for Defence (STRIDE) (33)				sufficient for scoring.
, , ,				sufficient for scoring.
Morocco				Data for chemicals A, B,
National Laboratory for	6	1	D	E, F, and G were not
Scientific and Technical				sufficient for scoring.
Police (32)				2
Netherlands				
TNO Defence, Safety and	-	-	A	Evaluation assistance.
Security				
Nigeria				
National Agency for Food				Data for chemicals A, B,
and Drug Administration and	6	0	D	C, E, F, and G were not
Control (NAFDAC) Central				sufficient for scoring.
Laboratory (44)				

Participant Laboratory Code	No. of Spiking Chemicals Reported <sup>1</sup>	No. of Chemicals Scored	Rating	Comments
Norway Laboratory for Identification of Chemical Threat Agents, Norwegian Defence Research Establishment (FFI)#	-	-	No score	Withdrawal.
Pakistan Analytical Laboratory, Defense Science and Technology Organisation (4)	6	6	A	-
Poland Chemical Laboratory of CBRN Area Control Centre of Polish Armed Forces (37)	6	6	A	-
Republic of Korea Chemical Analysis Laboratory, CBR Directorate, Agency for Defense Development (29)	6	6	A	-
Russian Federation Central Chemical Weapons Destruction Analytical Laboratory of the Federal State Unitary Enterprise, "State Scientific Research Institute of Organic Chemistry and Technology" (6)	6	6	A	-
Russian Federation Laboratory for Chemical and Analytical Control, Military Research Centre (5)	6	6	A	-
Singapore Verification Laboratory Defence Medical & Environmental Research Institute, DSO National Laboratories (9)	6	6	A	-
Slovakia Section of Chemical Laboratories, Military Unit (14)	5	5	В	Chemical E was not reported.
South Africa Protechnik Laboratories (12)	5	5	В	Chemical G was not reported.

\_

Withdrawal from the test without penalty, before receiving samples, was granted by the OPCW and the laboratory remains designated.

Participant Laboratory Code	No. of Spiking Chemicals Reported <sup>1</sup>	No. of Chemicals Scored	Rating	Comments
Spain				
Laboratorio de Verificación de Armas Químicas (LAVEMA) (8)	6	6	A	-
Türkiye Tubitak Marmara Research Center, CBRN Defence Technologies Research Group (39)	6	0	D	Data for chemicals A, B, C, E, F, and G were not sufficient for scoring.
United Kingdom of Great Britain and Northern Ireland Defence Science and Technology Laboratory, Porton Down (2)	5	5	В	Chemical G was not reported.
United States of America DEVCOM Chemical Biological Center, Forensic Analytical Laboratory (45)	6	6	A	-
United States of America Lawrence Livermore National Laboratory (26)	5	5	В	Chemical G was not reported.