Technical Secretariat



S/2435/2025 12 August 2025 ENGLISH only

NOTE BY THE DIRECTOR-GENERAL

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

- 1. The Director-General wishes to inform the States Parties of the results of the Tenth Official OPCW Biomedical Proficiency Test, which was conducted by the Technical Secretariat (the Secretariat) from February to August 2025. 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 2, Revision 4, dated 11 February 2025));
 - (b) "Work Instruction for the Preparation of Samples for OPCW Biomedical Proficiency Tests" (QDOC/LAB/WI/BioPT02 (Issue 2, Revision 3, dated 11 February 2025));
 - (c) "Work Instruction for the Evaluation of the Results of OPCW Biomedical Proficiency Tests" (QDOC/LAB/WI/BioPT03 (Issue 2, Revision 2, dated 12 February 2025)); and
 - (d) "Work Instruction for the Reporting of the Results of the OPCW Biomedical Proficiency Tests" (QDOC/LAB/WI/BioPT04 (Issue 2, Revision 4, dated 12 February 2025)).
- 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 Tenth Official OPCW Biomedical Proficiency Test: DGA Maîtrise NRBC, Département Analyse Chimique, France, assisted in the preparation of the test samples, and TNO Defence, Safety and Security, the Netherlands, assisted in evaluation of the test results.

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

- 4. The preliminary evaluation report was discussed on 16 July 2025 at a hybrid meeting (held online and at the OPCW Centre for Chemistry and Technology in Pijnacker-Nootdorp, the Netherlands) 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 assistance laboratory, and sent to all of the participants on 1 August 2025.
- 6. The principal results of the Tenth Official OPCW Biomedical Proficiency Test can be summarised as follows:
 - (a) Twenty-four States Parties nominated 31 laboratories, including the 2 assisting laboratories, to participate in the test.
 - (b) Four laboratories opted to participate in the test on a trial basis, and one regular laboratory withdrew from the test after the dispatch of samples. No performance rating is assigned to the trial participants.
 - (c) Twenty-two regular participants identified and reported all four spiking chemicals with sufficient data and received a performance rating of A.
 - (d) One regular participant identified and reported three out of the four spiking chemicals with sufficient data and received a performance rating of B.
 - (e) One regular participant reported false positive chemicals and received a performance rating of F.
 - (f) The two assisting laboratories were each awarded a performance rating of A.
 - (g) Overall, the total number of participants for this test was 30, composed of 24 regular participants, 4 trial participants, and the 2 assisting laboratories. There were 24 A's (including the assisting laboratories), 1 B, 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 Tenth Official OPCW Biomedical Proficiency Test

Annex

FINAL RESULTS OF THE TENTH OFFICIAL OPCW BIOMEDICAL PROFICIENCY TEST

| Participant Code Laboratory | No. of Spiking Chemicals Reported ¹ | No. of Chemicals Scored | Rating | Comments |
|---|---|-------------------------------|--------|---------------------|
| 08 | | | | |
| Australia | 4 | 4 | A | |
| Defence Science and Technology | - | 7 | A | _ |
| Group | | | | |
| 43 | | | | Withdrew |
| Chile | - | - | - | participation after |
| Servitox LTDA | | | | sample dispatch |
| 44 | | | | |
| China | | _ | | |
| Laboratory of Toxicant Analysis, | 4 | 4 | A | - |
| Academy of Military Medical | | | | |
| Sciences | | | | |
| 10 | | | | |
| China | 4 | 4 | | |
| Laboratory of Analytical | 4 | 4 | A | - |
| Chemistry, Research Institute of Chemical Defence | | | | |
| 39 | | | | |
| Czech Republic | | | | |
| Military Faculty of Medicine, | 4 | 4 | A | - |
| University of Defence | | | | |
| 18 | | | | |
| Finland | | | | |
| Finnish Institute for Verification | 4 | 4 | A | _ |
| of the Chemical Weapons | · | | •• | |
| Convention (VERIFIN) | | | | |
| 13 | | | | |
| Germany | 4 | 4 | | |
| Bundeswehr Institute of | 4 | 4 | A | - |
| Pharmacology and Toxicology | | | | |

Sample P101 A. N-(1-(Diethylamino)ethylidene)-P-methylphosphonamidic fluoride (A-230)

Sample P102 B. Methyl N-(1-(diethylamino)ethylidene)phosphoramidofluoridate (A-232)

Sample U104 C. N-(1-(Diethylamino)ethylidene)-P-methylphosphonamidic acid (A-230 acid)

Sample U105 D. Methyl hydrogen N-(1-(diethylamino)ethylidene)phosphoramidate (A-232 acid).

¹ The spiking chemicals were as follows:

| Participant Code Laboratory | No. of Spiking Chemicals Reported ¹ | No. of Chemicals Scored | Rating | Comments |
|---|---|-------------------------------|--------|---|
| 50 Hungary Hungarian Defence Forces, Medical Centre | 4 | 4 | A | - |
| India Biomedical Verification Division, Defence Research and Development Establishment | 4 | 4 | A | - |
| India Institute of Pesticide Formulation Technology (IPFT) | - | - | - | Trial participant |
| 33 Iran (Islamic Republic of) Defense Chemical Research Laboratory | 4 | 4 | A | - |
| Japan National Research Institute of Police Science | 4 | 4 | A | - |
| 47 Morocco National Laboratory for Scientific and Technical Police | - | - | F | None of the spiking chemicals (A, B, C, and D) were reported. Two false positive chemicals were reported. |
| 26 Norway Analytical laboratory for CBRNE-substances, Norwegian Defence Research Establishment (FFI) | 4 | 2 | - | Trial participant |
| 25 Republic of Korea Chemical Analysis Laboratory, 5th Directorate, 3rd R&D Institute, Agency for Defense Development | 4 | 4 | A | - |
| 03 Republic of Korea CBRN Defense Research Institute, ROK CBRN Defense Command | 4 | 3 | В | Data provided for one chemical (C) were insufficient for scoring. |

| Participant Code Laboratory | No. of Spiking Chemicals Reported ¹ | No. of Chemicals Scored | Rating | Comments |
|--|---|-------------------------------|--------|-------------------|
| Romania Research and Innovation Center for CBRN Defense and Ecology, Chemical Analysis Laboratory | 4 | 4 | A | - |
| Russian Federation Laboratory for the Chemical and Analytical Control of the Military Research Centre | 4 | 4 | A | - |
| Russian Federation Laboratory of Chemical Analytical Control and Biotesting, Research Institute of Hygiene, Occupational Pathology and Human Ecology (RIHOPHE) | 4 | 4 | A | - |
| 11 Singapore Verification Laboratory, Defence Medical and Environmental Research Institute, DSO National Laboratories | 4 | 4 | A | - |
| 32 South Africa Protechnik Laboratories | - | - | - | Trial participant |
| 29 Spain Toxicology Institute of Defence | 4 | 4 | A | |
| 40 Spain Laboratorio de Verificación de Armas Químicas (LAVEMA), INTA Campus La Marañosa | 4 | 4 | A | |
| 27 Sweden Swedish Defence Research Agency, FOI | 4 | 4 | A | - |
| 19 United Republic of Tanzania Government Chemist Laboratory Agency | - | - | - | Trial participant |

| Participant Code Laboratory | No. of Spiking Chemicals Reported ¹ | No. of Chemicals Scored | Rating | Comments |
|--|---|-------------------------------|--------|----------|
| 22 | | | | |
| United Kingdom of Great Britain and Northern Ireland Defence Science and Technology Laboratory, Porton Down | 4 | 4 | A | - |
| 49 | | | | |
| United States of America Centers for Disease Control and Prevention | 4 | 4 | A | - |
| 17 | | | | |
| United States of America Lawrence Livermore National Laboratory | 4 | 4 | A | - |
| 24 | | | | |
| United States of America Combat Capabilities Development Command (DEVCOM) Chemical Biological Center, Forensic Analytical Laboratory | 4 | 4 | A | - |
| SAMPLE PREPARATION | | | | |
| ASSISTANCE LABORATORY France DGA Maîtrise NRBC, Département Analyse Chimique | - | - | A | - |
| EVALUATION ASSISTANCE LABORATORY Netherlands TNO Defence, Safety and Security | - | - | A | - |