METROLOGY SERVICE

Director
Metrology service Ltd.

Nataliia BOZHKO
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PROFICIENCY TESTING PT.UA.1.1.2016
WHEAT ANALYSIS (QUALITY)
PROFICIENCY TESTING PROGRAMME
– ROUND 12

Kyiv-2026

1. INTRODUCTION

Given the key role of reliable test results that are needed during crops trade and agriculture in general, requirements for the competence of laboratories that perform such tests should be confirmed.

The purpose of proficiency testing in wheat testing is to demonstrate the laboratory's competence (as described in ISO/IEC 17043:2023[1]) and improve the reliability of test results.

This proficiency testing involves the use of inter-laboratory comparisons to confirm the performance of individual laboratories' abilities and/or identify areas of improvement.

This proficiency testing scheme is registered in the EPTIS database.

The functioning management system Metrology Service Ltd. (further - Provider) complies with ISO/IEC 17043[1] requirements and covers all aspects of proficiency testing (further - PT) for all proficiency tests.

Provider is accredited by NAAU in accordance with the requirements of ДСТУ EN ISO/IEC 17043:2017. The list of parameters is specified in the scope of accreditation, which can be found on the website https://www.metrologyservice.com.ua/ or obtained upon request from the Provider.

2. DESCRIPTION

2.1. PARTICIPATION

2.1.1. Minimum methods/parameters for participation. Any organization, providing testing by at least one of methods/parameters in clause 2.2 may participate in this voluntary Program.

2.1.2. Participant may provide results for all the methods according to clause 2.2.

2.1.3. Metrology service Ltd. assigns a unique identification number to each participant that is confidential and reported only to this participant.

2.1.4. Participation fee for participants from Ukraine is 5500.00 UAH without VAT. Participation fee for participants from outside of Ukraine is 150.00 USD.

2.1.5. We are expecting from 10 to 20 Participants.

2.1.6. Each participant has a unique identification number what are assigned according to Application form for every round every Programme. This identification number is confidential and can be published only by the permission of the Participant. The Participant should write this unique identification number at Task sheet form for testing and reporting results for identification. If Provider is suspecting collusion or falsification, it applies own procedure for the work with unsatisfied results.

2.2. METHODS

Participants can provide test results for the following methods:

№	Parameter	Method
1	Broken grains, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
2	Grain impurities, % including:	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
2.1	weak grain, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
2.2	grain from other cereal crops, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
2.3	grain damaged by pests, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
2.4	grain with discolored germ, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
2.5	grain damaged by high temperatures, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
3	Sprouted grains, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)

4	Foreign impurities, % including:	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
4.1	seeds of other plants, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
4.2	underdeveloped grains, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
4.3	foreign matter, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
4.4	husk, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
4.5	ergot, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
4.6	smut-infected grains, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
4.7	impurities of animal origin, %	EN 15587:2018/ДСТУ EN 15587:2022 (EN 15587:2018, IDT)
5	Damaged wheat grains,% including:	ISO 7970:2021
5.1	damaged grains, %	ISO 7970:2021
5.2	grains with discolored germ, %	ISO 7970:2021
5.3	grains damaged by pests, %	ISO 7970:2021
5.4	unfilled grains, %	ISO 7970:2021
5.5	unsound grains, %	ISO 7970:2021
5.6	immature grains, %	ISO 7970:2021
5.7	sprouted grains, %	ISO 7970:2021
6	Other cereals,%	ISO 7970:2021
7	Foreign matter, % including:	ISO 7970:2021
7.1	inorganic foreign matter, %	ISO 7970:2021
7.2	organic foreign matter, %	ISO 7970:2021
8	Harmful and toxic impurities, % including:	ISO 7970:2021
8.1	harmful and toxic seeds, %	ISO 7970:2021
8.2	smutty grains, %	ISO 7970:2021
8.3	fusarium-damaged grains, %	ISO 7970:2021
8.4	rotten grains (discolored grains that are swollen and soft as a result of decomposition by fungi or bacteria), %	ISO 7970:2021
8.5	ergot, %	ISO 7970:2021
9	Foreign matter, including %	ГОСТ 30483-97/ ДСТУ 3768:2019
9.1	mineral matter, %	ГОСТ 30483-97/ ДСТУ 3768:2019
9.2	organic matter, %	ГОСТ 30483-97/ ДСТУ 3768:2019
9.3	harmful matter, %	ГОСТ 30483-97/ ДСТУ 3768:2019
9.4	spoiled grain, %	ГОСТ 30483-97/ ДСТУ 3768:2019
10	Grain impurities, % including:	ГОСТ 30483-97/ ДСТУ 3768:2019
10.1	broken grain, %	ГОСТ 30483-97/ ДСТУ 3768:2019
10.2	underdeveloped grains, %	ГОСТ 30483-97/ ДСТУ 3768:2019
10.3	sprouted grains, %	ГОСТ 30483-97/ ДСТУ 3768:2019
10.4	grain damaged by high temperatures, %	ГОСТ 30483-97/ ДСТУ 3768:2019
10.5	grain damaged by pests, %	ГОСТ 30483-97/ ДСТУ 3768:2019
10.6	cereal grains, %	ГОСТ 30483-97/ ДСТУ 3768:2019
10.7	grain with discolored germ, %	ГОСТ 30483-97/ ДСТУ 3768:2019
11	Grains damaged by Bug, %	ГОСТ 30483-97/ ДСТУ 3768:2019
12	Smutty grains, %	ГОСТ 30483-97/ ДСТУ 3768:2019

The Information for methods of preparation of samples and way of testing Participant should use from methods according to clause 2.2.

2.3. SAMPLES

2.3.1. Metrology service Ltd. is using contractors for the selection, production, homogenization and division designs that are satisfactory for the purposes of this programme. The names and addresses of contractors can be given by request after publishing the final report.

Provider uses methods according to clause 2.2. for validation of homogeneity and stability. The quantity of methods can be decreased according to the decision of Provider's technical experts.

Tests, that are required to prove homogeneity and stability of samples are performed by competent contractors according to [1-5]. Provider uses a validated procedure of management system

METROLOGY SERVICE Ltd for the samples' selection, production, division, checking of the quality and storage.

Requirements for the manufacture, quality control, storage and distribution of samples are determined by the relevant procedures of management system METROLOGY SERVICE Ltd. Metrology service Ltd uses the procedure ІПП 7.3.1. for the manufacture, homogenization and separation of samples.

2.3.2. Metrology service Ltd. will send appropriately identified and packaged sample together with task sheet form for testing and reporting results via courier delivery service of Nova Poshta LLC or other delivery service chosen by participant at the expense of the Participant. Shipping expenses are not included in the price of participation.

Wheat (*Tríticum aestívum*) in an amount of 0,250kg is used as a sample in round 12 for each participant.

To ensure the detection and proper accounting of isolated and non-uniformly distributed impurities, the entire wheat sample received, with a mass of 0,250 kg, shall be subjected to the impurity determination procedure. Any individual impurities identified in the sample, including grains of other crops, foreign matter, or other components subject to classification in accordance with the relevant normative document, shall be assigned to the appropriate impurity fraction and included in the calculation of the result.

Where testing is performed using more than one of the methods specified in 2.2 of this Programme, the analyses shall be carried out sequentially. Upon completion of each determination, all separated impurity fractions shall, after weighing and recording the results, be returned to the bulk sample. The sample shall then be re-homogenized and used for the preparation of the test portion required for the subsequent determination.

2.4. SCHEME AND SCHEDULE

2.4.1. This proficiency testing program is a simultaneous participation schemes according to A.2 of appendix A ISO/IEC 17043[1]. Selected samples, prepared according to clause 2.3, from a source of material being distributed simultaneously to participants for concurrent testing. After completion of the testing, the results are returned to Metrology Service Ltd.

Task sheet form for testing and reporting results is distributed with the sample according to clause 2.3. Participant should use only this form for reporting.

Metrology Service Ltd use statistical methods to analyze results and provide report according to clause. 2.5.

2.4.2. Round 12 schedule.

Participants registration	**till 13-00 EET 14.08.2026**
Sample shipment	**25.08.2026**
Reporting results for participants	**till 13-00 EET 18.09.2026**
Report publication	**11.10.2026**

2.5. REPORT AND PROCESSING RESULTS

2.5.1. Metrology service Ltd. processes and analyses results according to [1-5].

2.5.2. Metrology service Ltd. publishes the Proficiency testing report according to [1].

2.5.3. Provider 'll express Participant's results for quantitative methods as traditional z-scores.

2.5.4. The assigned value for each analyte was calculated as the robust mean of the trial data using Huber H15 method or Algorithm A variation, Annex C.3.

2.5.5. Proficiency testing report will be published in two languages – English and Ukrainian. Basic (reference) language is English. Both version of the report ‘ll be published at internet http://www.metrologyservice.com.ua

3. PARTICIPANT INFORMATION

Participants must provide e-mail request for participation (Annex 1 to the Program) in accordance with the schedule Round (p.2.4.2.). Application form should be sent to the e-mail address pt.smetrology@gmail.com

4. PROVIDER CONTACTS AND PROGRAM MANAGER

Metrology service Ltd., Ukraine, 03022, Kyiv, 18 Yulii Zdanovskoi st. office 704.
e-mail: pt.smetrology@gmail.com
Nataliia Bozhko
phone: +38(099)305-79-78

5. NORMATIVE REFERENCE

1. ISO/IEC 17043:2023 Conformity assessment – General requirements for the competence of proficiency testing providers.

2. ISO 13528:2022 Statistical methods for use in proficiency testing by interlaboratory comparison.

3. Fearn, T. and Thompson, M, A new test for ‘sufficient homogeneity’, Analyst, 2001, 126, 1414-1417.

4. ISO 33405:2024 Reference materials — Approaches for characterization and assessment of homogeneity and stability.

5. ILAC Discussion Paper on Homogeneity and Stability Testing, April 2008.

Addition 1. Application form:

Назва програми ПК, номер раунду: ***PT Program Name, number of raund:***	**PT.UA.1.1.2016** **WHEAT ANALYSIS (QUALITY) – ROUND 12**
Дата подачі заявки: ***Date of applying:***	
Повна назва лабораторії (українською або англійською мовою): ***The full name of the laboratory (original language or in english):***	
Адреса доставки зразка або номер відділення ТОВ «Нова пошта»: ***Address of samples delivery:*** *(вказати, отримувач юридична чи фізична особа, місто, номер відділення чи адресу доставки, контактні дані отримувача (ПІП, телефон, ЄДРПОУ)*:	
ПІБ відповідальної особи від Учасника і телефон (*при можливості мобільний***):** ***Name of the responsible person from the Participant and telephone number (if possible, mobile):***	
Електронна адреса відповідальної особи від Учасника: ***Contact email address of the responsible person from the Participant:***	
*** Адреса доставки сертифіката:** ***Certificate delivery address:*** **номер відділення ТОВ «Нова пошта»:** *(вказати, отримувач юридична чи фізична особа, місто, номер відділення чи адресу доставки, контактні дані отримувача (ПІП, телефон, ЄДРПОУ))*, **для доставки Укрпоштою вказати індекс і адресу:**	
Для договору вказати: Повна назва юридичної особи: ***Information for a contract: Full legal entity name:***	
Юридична адреса: ***Full legal address:***	
Банківські реквізити, ЄДРПОУ, ІПН: ***Company bank's detail****(account, tax code, etc):*	
ПІП, посада особи, що підписує Договір і на підставі чого: ***Name of the person signing the Contract:***	

* All fields are required