

ORGANISATIONAL AND TECHNICAL INSTRUCTIONS FOR PARTICIPATION IN THE PROFICIENCY TESTING PROGRAM

Proficiency Testing Program (designated as 'PT program')		
Program designation		VUCES-PTA/AS/2024/09
Subject of the program		Tests of selected parameters of bitumen and bituminous binders
Scope of the program		- penetration - softening point
Program realization		In accordance with the standard ISO/IEC 17043:2010
Proficiency Testing Provider (designated as 'PTP')		
Name		VUIS – CESTY, spol. s r. o.
Address		Vlčie hrdlo 1, 821 07, Bratislava - Ružinov
Website		https://www.vuis-cesty.sk/
E-mail		office@vuis-cesty.sk , oresky@vuis-cesty.sk (coordinator / head of the PTP)
Phone		+421 903 234 230 (coordinator / head of the PTP)
Contact information		
Name	Ing. Róbert Kovács	Ing. Juraj Oreský, PhD.
Function	director	coordinator / head of the PTP (planning, organisational and technical support of the PT program; final report)
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Name	Ing. Michaela Sláviková	Ing. Juraj Oreský, PhD.
Function	quality manager (collection of the results; coding/decoding of PT participants; certificates; notifications of code to participant)	expert on statistical methods (statistical processing design, assigned values, data analysis; statistical processing of PT results)
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Ing. Juraj Oreský, PhD.
coordinator PTP

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1. SUBDODÁVKA

In this PT program, the following services will be subcontracted:

- ☐ Subscription of the PT item,
- ☐ Preparation of test samples PT,
- ☒ Tests to assess the homogeneity of the PT item,
- ☒ Tests to assess the stability of the PT item.

The subcontractor is an accredited testing laboratory VUIS – CESTY, spol. s r. o., Vlčie hrdlo 1, 821 07 Bratislava - Ružinov, Certificate of Accreditation no. S-041, valid until 2025. The Laboratory can be a participant in this program VUCES-PTA/AZ/2024/08.

Note.

The PT Provider VUIS – CESTY, spol. s r. o. never subcontracts the planning of PT programs, the evaluation of participant performance, or the authorization of the final PT program performance report..

2. MANIPULATION WITH THE PT ITEM (Road Bitumen 50/70)**Sampling**

The PT item will be **Road Bitumen 50/70**. The coordinator PTP shall take samples of road bitumen in accordance with the requirements of standard EN 58, clause 8.1.1 and 8.1.5 in cans with lids, which shall be sealed and uniquely identified. The sampling shall take place between 14.10.2024 and 25.10.2024.

Transport

After collection, the PT item is transported in the shortest possible time to the premises of the PT Provider designated for its storage. The PT item shall be transported under ambient conditions in closed cans with lid.

Storage and transportation

The PT item will be stored and regularly checked until distribution in a suitable room of the PT Provider at a suitable ambient temperature.

Preparation

The PT organizer does not specially prepare the PT item for the participants.

3. PT ITEM DISTRIBUTION

Distribution of PT test samples is selected on the application form and is provided by either:

- by personal collection by the participant at the PTP or at a prearranged place and time, or
- at the request of the PTP participant via the distribution company.

In case of personal collection of the test sample, it can be collected at the PTP from 11.11.2024 to 22.11.2024 (after notification of the PTP) at the time from 8:00 - 16:00, or at other times by agreement. At least one day in advance of arrival for the purpose of receiving the test sample, it is necessary to contact the coordinator (+421 903 234 230 or oresky@vuis-cesty.sk).

Upon receipt of the test sample from the PTP, the Participant shall sign the PT Program Test Sample Acceptance Record, by signing which the person authorized by the Participant to accept the test sample certifies that the Participant has received the test sample in satisfactory condition. In the case of

distribution of a PT Program test sample by a distribution company, the PT Program Participant is requested to send notification of delivery and receipt of the test sample in satisfactory condition.

4. EXECUTION OF TESTS BY THE PARTICIPANT

The tests must be carried out between **25.11.2024** and **06.12.2024** according to the valid EN standards, only some points are specified. The purpose of this clarification is to standardise the conditions for carrying out the tests so that differences in results are not influenced by different interpretations of the EN standards.

Further specification on the tests

EN 1426 Bitumen and bituminous binders – Determination of needle penetration

During the penetration test, care must be taken to:

- perform the test a total of 3 times;
- the test temperature $(25 \pm 0,1) ^\circ\text{C}$, the total load 100 g and the loading time 5 s;
- the inner depth of the test specimen container is 35 mm and the inner diameter of the container is 55 mm;
- the sample volume approximately 80 ml;
- heated the road bitumen specimen to a temperature of $(140 \pm 5) ^\circ\text{C}$ before filling the specimen container;
- cool the sample to an ambient temperature of $15 ^\circ\text{C}$ to $30 ^\circ\text{C}$ for approximately 90 min before tempering to the test temperature;
- temper the sample to test temperature in a water bath for approximately 90 min;
- enter the results in the results record form, the penetration values and the expanded uncertainty of measurement (in absolute form), including the coefficient of expansion of the uncertainty of measurement.

EN 1427 Bitumen and bituminous binders – Determination of the softening point – Ring and Ball method

During the softening point test, care must be taken to:

- perform the test a total of 3 times;
- when using freshly boiled, cooled and distilled water or deionised water, prevent the trapping of air bubbles on the surface of the test specimen;
- heat the road bitumen samples to $(140 \pm 5) ^\circ\text{C}$ before pouring (including the two brass rings);
- do not use too much release agent;
- allow the test specimen to cool to laboratory temperature for at least 30 min (not more than 4 hours shall elapse between pouring the test specimens and the completion of the test);
- an initial bath temperature of $(5 \pm 1) ^\circ\text{C}$ for 15 to 20 min;
- the prescribed rate of temperature rise in the bath and the overall temperature deviation specified in clause 8.6 of the standard are observed;
- enter the results in the results record form, the values of the softening point and the expanded uncertainty of measurement (in absolute form), including the expansion factor of the uncertainty of measurement, on the form for recording the results.

5. SENDING OF TEST RESULTS

The results must be sent to the PTS coder by **06.12.2024** to slavikova@vuis-cesty.sk on an Excel form, which will be sent to participants upon receipt of the PT trial samples.

6. FINAL REPORT ON THE RESULTS OF THE PT PROGRAM

The final report about the PT program results, which will be available **from 20.01.2025**, will be sent by the PT Provider to the program participants only **after the payment** of the invoice for participation in the VUCES-PTA/AS/2024/09 PT program **electronically** to the e-mail of the contact person indicated by the participant in the PT program results enrolment form. In order to maintain maximum anonymity of program participants, their results and performance will be evaluated under a code designation.

7. CERTIFICATE OF LABORATORY PERFORMANCE IN THE PT PROGRAM.

A certificate of the participant's performance in the PT program and notification of the assigned code will be sent by registered mail to each participant after payment of the invoice for VUCES-PTA/AS/2024/09 to the address of the laboratory and to the contact person named by the participant on the PT program results enrolment form. The certificate of the laboratory's performance in the PT program is linked to the z-score, the evaluation of the participant's performance according to the E_n -score will be informative.

8. LODGING A COMPLAINT/APPEAL

A complaint about this PT program or an appeal of the evaluation of participants in this PT program may be directed in writing to the Quality Manager (slavikova@vuis-cesty.sk) within 10 days of the date the PT participant code notification is received by mail. The complaint/appeal will be investigated within 30 working days from the date of receipt (if necessary, the PT Provider may extend the deadline for justified reasons). The conclusion of the investigation of the complaint/appeal will be sent to the complainant or appellant in writing and in due time.

Comments and suggestions for improvement of the PT program may be submitted in the PT Organizer's Customer Satisfaction Survey or in a note on the PT Program Results Record Form.