

METHODICAL GUIDELINE FOR ACCREDITATION**MSA – L/ 01****FIELD AND SCOPE OF ACCREDITATION OF
LABORATORIES FIELD AND PROFICIENCY TESTING
PROVIDERS**

Approved by: **Ing. Štefan Král, PhD.**
Director SNAS

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Elaborated by: RNDr. Lívia Kijovská

Verified by: Ing. Jaromír Durný , Ing. Stanislav Mikušínek, Ing. Janka Szabová, Ing. Henrieta Bóriková, , Ing. Jana Pašková, Ing. Stanislav Musil, CSc.

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1 INTRODUCTION

The purpose of this MSA is to provide information how to define accreditation field and accreditation scope. MSA is applicable for all types of laboratories being accredited or already accredited as well as for proficiency testing providers and it is obligatory for SNAS, applicants for accreditation and for assessors of laboratories.

2 ABBREVIATIONS AND TERMS USED

2.1 ABBREVIATIONS

ILAC	-	International Laboratory Accreditation Cooperation
MSA	-	Methodical Guideline for Accreditation
MS	-	Management System
PT	-	Proficiency testing
ILC	-	International Laboratory Comparison
CMC	-	Calibration and measurement capability

2.2 TERMS

2.2.1 Field of Accreditation

is an informative definition entity performance which are accredited or accreditation is applied.

2.2.2 Scope of Accreditation

is a detailed description of performance the entity is accredited for.

2.2.3 Specification of activity

is a performance scope the entity applies for; as for form it is identical with the accreditation scope; however, as for their content, they can differ each other.

2.2.4 Type of laboratory

Classification of laboratory according to competence for performing modification and validation of testing and/or calibration methods and to develop new methods within the accredited activities.

2.2.5 List of accredited activities

is based on the “Scope of accreditation” and includes activities covered by flexible scope of accreditation together with information regarding the boundaries of flexibility. List is independently managed by accredited CAB.

3 RELATED STANDARDS AND NORMATIVE DOCUMENTS

ISO/IEC 17000 Conformity assessment. Vocabulary and general principles.

ISO/IEC 17011 Conformity assessment. Requirements for accreditation bodies accrediting conformity assessment bodies

Standards of ISO 80000 series - from part 1 to part 14: Quantities and Units.

ILAC-P14 ILAC Policy for Uncertainty in Calibration

ILAC-G18 Guidelines for the formulation of Scopes of accreditation for Laboratories.

EA-2/15 M EA Requirements for the Accreditation of Flexible Scopes (MSA-07: EA requirements for the accreditation of flexible scopes.)

EA-4/02 M Evaluation of the Uncertainty of Measurement in Calibration. (MSA-L/12 Vyjadrovanie neistôt merania pri kalibrácii.)

EA-4/17 M Description of scopes of accreditation for medical laboratories

Act No. 71/1967 Coll. on Administrative Proceedings (Administrative Code) as Amended

Act No. 53/2023 Coll. on Accreditation of Bodies Responsible for Conformity Assessment (further on only “Act”)

STN 01 0115 Terminology in Metrology

4 ACCREDITATION SCOPE (PERFORMANCE SPECIFICATION) OF A LABORATORY AND PROFICIENCY TESTING PROVIDER

Performance specification (accreditation scope) is defined according to individual types of laboratories/entities and performances in compliance with the tables shown in the following Annexes:

Kind of Body/Laboratory	Activities	Annex of MSA-L/01
Calibration Laboratory	Calibration of instruments and reference materials, calibration for the purpose of verification of legal measuring instruments, expressing opinions and interpretations	Annex A1
Testing Laboratory	Tests, measurements, analyses of various material, matrixes, testing of instruments, sampling, giving opinions and interpretations	Annex A2

Kind of Body/Laboratory	Activities	Annex of MSA-L/01
Medical Laboratory	Analyses, examinations of biological materials taken from the human organism and sampling	Annex A3
PT provider	PT providing and PT evaluation	Annex A4

The form of the specification of the activities of laboratories and PT providers applying for accreditation is given in the relevant annex TL OA to the Application for accreditation. If the CAB requests reaccreditation, it is not necessary to fill in the table "Specification of activities..." again. In such a case, the currently valid scope of accreditation will form an annex to the relevant TL OA. Similarly, in the case of a request for extension of accreditation, the CAB will include the extended items in the valid scope of accreditation, which will form an annex to the relevant TL OA.

A detailed guideline for definition of performance specification (accreditation scope) can be found in relevant Annexes "A".

5 ACCREDITATION FIELD OF A LABORATORY AND PT PROVIDER

A calibration laboratory defines its "Accreditation field" based on activities defined „Performance specification" (see article 4) by a general description in the fields of what quantities is the calibration performed of relevant measuring instrument and/or reference materials. If a laboratory is proficient in calibration certificates or other form of presentation of results to give opinions and interpretations as an accredited activity, and/or it is a laboratory with a flexible scope, these should be mentioned in Field of Accreditation. Examples of defined Field of Accreditation can be found in the Annex „B".

A testing laboratory defines its "Accreditation field" based on activities defined in „Performance specification" (see article 4) by a general description what methods or procedures for testing of relevant materials are used or what methods or procedures are used for measurement. If a laboratory is competent also to carry out sampling and/or to give opinions and interpretations in test protocols or other form of presentation of results as an accredited activity and/or it is a laboratory with a flexible scope, these should be mentioned in Field of Accreditation. Examples of defined Field of Accreditation can be found in the Annex „B".

A medical laboratory defines its Field of Accreditation based on activities defined in Specification of activity (see article 4) by a general description what methods or procedures for analysis and examination of relevant biological materials taken from a human organism are used. If a laboratory is also competent in sampling/or it is a

laboratory with a flexible scope, these should also be mentioned in the Field of Accreditation. Examples of defined Field of Accreditation can be found in the Annex „B“.

A PT provider defines its Field of Accreditation based on activities defined in Specification of activity (see article 4) by a general description of testing sphere, examination and/or calibration where PT are provided. Examples of defined Field of Accreditation can be found in the Annex „B“.

6 TYPES OF LABORATORIES

From the point of view of accreditation scope flexibility, possibility to introduce new methods, modification of used methods and possible development of new testing and/or calibration methods, laboratories are classified in two types:

6.1 FIXED SCOPE OF ACCREDITATION LABORATORY

The laboratory may routinely use, within accredited activities, standard, modified standard or non-standard testing, examination and/or calibration methods or sampling in a fixed scope which is not modified or validated during the validity period of accreditation.

The fixed scope does not allow additional or modified activities to be swiftly added to the scope without further assessment, even though general competence in the field has already been demonstrated. Accredited CAB can apply an extension of the scope at any time during the accreditation cycle. The assessment being carried out in real time, within the meaning of Act No 53/2023, as amended and the relevant directives.

6.2 FLEXIBLE SCOPE OF ACCREDITATION LABORATORY

The laboratory may routinely use, within accredited activities, standard, validated modified standard or validated non-standard methods of testing, examination, calibration, sampling as a part of accredited activities and may modify and validate them during the period of validity of the accreditation.

This Chapter sets out the general requirements for a laboratory with flexible scope that allow an accredited CAB to assume responsibility for managing all scope of accreditation or part of them without the need for prior assessment by the accreditation body of any new, additional or modified activity. In this case, CAB shall ensure that there is generally a clear description of competence for all stakeholders, serving not only SNAS and CAB needs, but also end-users of customer-to-customer accreditation services. The requirements are based on EA-2/15 (MSA-07 and PL-21), ILAC-G 18 and EA-4/17.

6.2.1 Limitations on the flexible scope of accreditation

6.2.1.1 Outputs (Certificates, protocols, reports, etc.) issued by CAB accredited for flexible scope and CAB accredited for a fixed scope are equal and equally reliable.

6.2.1.2 SNAS has the right to decide whether or not to grant accreditation for a flexible scope to a particular CAB.

6.2.1.3 SNAS does not allow CAB accredited for flexible scope to use flexibility within the applicable RA:

1. In calibration laboratory:

- on a new principle
- to another area of accreditation defined by SNAS
- to a new workplace
- to a new place of work of the laboratory
- to a new area of accreditation covered by another accreditation scheme (testing, examination, inspection, certification)
- regarding CMC (uncertainty)
- regarding measurement range
- regarding method modification outside of measurement range and CMC

2. In testing laboratory:

- on a new principle
- to another area of accreditation defined by SNAS
- to a new workplace
- to a new place of work of the laboratory
- to a new area of accreditation covered by another accreditation scheme (calibration, examination, inspection, certification)

3. In medical laboratory

- on a new principle
- to another area of accreditation defined by SNAS
- to a new workplace
- to a new place of work of the laboratory
- to a new area of accreditation covered by another accreditation scheme (testing, calibration, inspection, certification)

6.2.2 General

6.2.2.1 Flexible scope accreditation transfers more responsibility to CAB by demonstrating the way they work is correct, fit for purpose and is carried out competently, consistently and permanently.

6.2.2.2 The flexible scope reflects CAB's competence not only to professionally carry out the activities covered by accreditation, but also to the ability to manage all processes within a flexible scope and its commitment to providing accredited activities within this scope.

6.2.2.3 It is necessary for the CAB documented plan/development process to address how the organization sets requirements, how it takes into account the boundaries of flexibility, how it develops conformity assessment services, how it verifies to meet the requirements and how it validates complying with the requirements.

6.2.2.4 Neither SNAS nor CAB in any way indicates that an accredited CAB whose scope is flexible is more competent than a CAB with a fixed scope of accreditation. The results of the accredited activities of laboratories (examination, testing, calibration, measurement, etc.) and of the PT provider SNAS consider equivalent and at the same quality level, regardless of whether they have been obtained within a fixed or flexible scope.

6.2.2.5 SNAS shall assess CAB's extension of accreditation in flexible scope that CAB demonstrates its mode of operation is correct, fit for purpose and is carried out impartially, competently and consistently.

Where a laboratory has been granted a flexible scope of accreditation, it shall be permitted to include the activity in its scope of accreditation on the basis of its own approval without assessment by SNAS before the start of the activity. The possibility of adding new, additional, modified or developed methods within a flexible scope does not include new principles for testing, calibration, measuring or examination that were not included in the previous flexible scope of accreditation.

In calibration, possibilities for flexible scopes are more limited than in testing. It is not possible to allow flexibility regarding parameters (measurands) in calibration, because different measurands require completely different techniques. It is also not possible to allow flexibility regarding measurement range and CMC.

Boundaries of flexibility of calibration laboratories:

- Flexibility concerning subjects/instruments
It means flexibility allowing for changes related to different subject/instrument (e.g. direct current source) and using the specified method within the described measurement range and CMC.
- Flexibility concerning the performance of a given method
Means flexibility allowing for changes in the performance of a particular method of the method within the described measuring range and CMC

Boundaries of flexibility of testing laboratories:

- Flexibility concerning subject/matrix/environment
It means flexibility allowing for changes in different subjects/matrices/environments (material/product) within a certain area.
- Flexibility concerning characteristics/parameters/indicators/ analytes
Means flexibility allowing for changes in parameters
- Flexibility concerning the method and procedures used for testing
It means flexibility to introduce and mark methods and procedures, modification of the measurement range and its uncertainty, that are equivalent to those included in the flexible scope of accreditation (the basic principle of the method shall be maintained).
- Flexibility concerning the equipment
It means the possibility of using several equipment for sample analysis (while maintaining the principle of the method)

- Flexibility concerning the sampling points
It means flexibility allowing for changes in different sampling points.

Boundaries of flexibility of medical laboratories:

- Flexibility concerning biological material/matrix
It means flexibility allowing for changes in different biological materials/matrices within a certain area (e.g. within the framework of "Body fluids", flexible addition to existing biological materials, whole blood and urine, another type of biological material, sweat).
- Flexibility concerning analytes/parameters
Means flexibility allowing for changes in analytes/parameters (e.g. the flexibility consists in the addition of new parameter/analyte and/or inside the group, for example, addition of individual vitamins inside a group "vitamins", addition of GMT to "Standard biochemical parameters").
- Flexibility concerning the method used for examination
It means flexibility to introduce methods that are equivalent to those included in the flexible scope of accreditation (the basic principle of the method shall be maintained). (e.g. to the "Commercial procedure" X addition of another procedure Y, i.e. a diagnostic kit from manufacturer X and a diagnostic kit from another manufacturer Y).
- Flexibility concerning the equipment
It means the possibility of using several equipment for sample analysis (while maintaining the principle of the method).

When formulating a flexible scope, it is important that the boundaries of flexibility are clearly set. In any case, the laboratory shall maintain for SNAS control purposes an up-to-date list of all methods covered by accreditation, including additional, newly modified, implemented or developed methods.

Boundaries of flexibility shall be determined by SNAS and are listed below the table of the flexible scope of accreditation.

6.2.2.6 Scope assessment

- Competence of staff to validate modified/new methodologies

Assessment of the competence of staff at all hierarchical levels and in all positions within the laboratory is one of the key tasks of SNAS in assessing the competence of a given laboratory. The competence of laboratory staff can be obtained and demonstrated in various ways, such as:

- general knowledge of the field in which the laboratory's customers operate,
 - knowledge of the risks faced by customers and the ways in which they want to use the results,
 - knowledge of the procedures used and their reliability, including related uncertainties; knowledge of the various components contributing to the uncertainty of these procedures,
 - education and length of experience in the field concerned,
 - training received in recent years and their effectiveness,

- cooperation with scientific organizations, standardization organizations, national and international organizations contributing to the development of techniques and the application of conformity assessment procedures and their use in the field,
- internal learning processes and improvement in the form of audits, reviews and cooperation with customers.

Where a laboratory develops a new or modified method, particular attention is paid to the competence of personnel. Personnel involved in the development and modification of methods must have the necessary expertise in the methods and technologies used. They must be able to assess the suitability of the methods and the quality of the results obtained. This competence can be obtained and demonstrated in various ways, such as:

- education and training received,
- experience in the field,
- participation in research or development projects,
- work in standardization committees,
- scientific or management committees.
- successful participation in PT/ILC
- proven verifications/validations of methodologies already implemented

SNAS assesses competence for personnel authorized to develop, validate and approve methods. Where a laboratory uses a flexible scope of accreditation, the assessment shall be more comprehensive and shall include documented evidence that the laboratory operates within the flexible scope of accreditation, as well as written documents where the laboratory is taking all necessary steps in the process of developing and implementing methods within the flexible scope of accreditation.

- Development and modification of the methodology

A laboratory dealing with the development and modification of methods shall ensure criteria such as:

- procedures used in the development, validation and approval of methods,
- authorization of experienced staff responsible for the development, validation and approval of new and adapted methods,
- records describing the whole process from development to approval and verification,
- management's commitment to maintain a flexible scope if accredited for this purpose.

The procedures and responsibilities for the development, implementation and validation of modified, updated or newly implemented methods shall be described in detail in the laboratory documentation. The personnel responsible shall specify the minimum quality requirements before the start of the validation and implementation process or, even better, before the whole process of developing the method begins.

For each professional field of activity of the laboratory, management must entrust an experienced staff member with overall responsibility for the modification, development and implementation of new, additional or modified methods.

Modification and updating of development methods or activities, including any related results and other relevant data, shall be managed and recorded. These data shall be made available to SNAS, which shall carry out their inspection at regular assessments or on request.

Responsible personnel (including quality management personnel) shall regularly review additional, modified, revised or newly developed methods. The procedures and competences relating to the development or revision of accredited methods shall be subject to regular review by the laboratory management, taking into account the results of internal and external quality management. Records of these reviews shall be made available to SNAS.

- **Validation and verification**

New, additional and modified methods must be verified/validated before being included in the scope of accreditation and the laboratory's competence to implement these methods must also be verified. As regards standardized methods, validation is not required, but verification must be carried out.

In the case of the selection of standard methods or equivalent methods within the area of their application (e.g., waste testing, blood serum testing, calibration of the instrument), validation is not necessary if the use of standardized methods or their equivalents is within that subject of the standard (equivalent). However, this principle does not apply if the standard method is combined and used for a new purpose (use of the standardized method outside the area of destination). In this case, the laboratory shall validate the method.

- **Documentation**

Where relevant, a laboratory with a flexible scope of accreditation shall have fully documented procedures for validation of modified methods (including modification within boundaries of flexibility of selected schemes) and verification of other methods to be included in the flexible scope of accreditation and which are part of the laboratory documentation.

The suitability and robustness of these procedures is subject of assessment by SNAS before accreditation for flexible scope is granted.

The laboratory shall keep complete records of the validation and verification of additional methods and the data obtained shall be kept and made available for review in the assessment. These records are usually kept in the form of validation and/or verification reports.

- **Responsibility of personell**

Responsible personnel shall periodically review modified, revised or newly developed methods to ensure that these methods continue to comply with explicitly defined or implicit requirements. Procedures and responsibilities relevant to the development or modification of the methods covered by accreditation shall be regularly reviewed by the responsible management in the light of the results of internal and external quality controls. Records of this activity must be available.

6.2.2.7 Specific requirements for the assessment of a laboratory with a flexible scope

- General requirements

Assessment activities can be divided into two practical parts that are interlinked and their complexity and relevance depend on the scope. In particular, these are:

- assessment of the quality management system;
- assessment of professional competence.

As regards the professional aspect, the assessment covers all areas of activity listed in the scope of accreditation for the entire period of validity of the accreditation. In the given area of activity, this is an assessment of selected methods within the scope of accreditation and relevant employees, carried out during the assessments. The methods selected are suitable for a credible demonstration of the laboratory's ability to perform, at the appropriate quality level, all tests, examinations, calibrations designed to the scope of accreditation.

Possible criteria for the selection of methods in terms of both quantitative and qualitative are:

- evidence of the implementation of the quality management system, experience, practice and, where appropriate, fitness for modification or development of methods,
- technical complexity,
- consequences of errors (possible risks),
- a balance between standard and nonstandard methods,
- a balance between the complete observation of the results and the control of the validation reports and/or records and/or quality management reports and/or inspection reports of laboratory equipment.

In the course of the initial assessment and reassessment, the number of methods under assessment shall be large enough to allow the methods in each area of activity to be determined and adequately assessed. At least one method must be assessed in each area of activity.

In the course of each assessment, all methods modified, newly implemented or developed by the laboratory in the period since the last assessment must be assessed.

- Requirements for flexible scope

When assessing the flexible scope of accreditation, the assessment of the quality management system of a given laboratory shall focus on the implementation of validation and/or verification procedures and on the monitoring of activities related to their implementation, such as review of requirements, tenders and contracts, management review, internal audits, assessment of competence and competence of personnel, estimates of measurement uncertainty, equipment and measurement follow-up, competence testing activities and internal quality management. Particular attention must be paid to the eligibility of references to accreditation in view of the activities not yet considered within the flexible scope of accreditation.

It is also important to review the management of the List of Activities when assessing.

6.2.3 Requirements to be met by a flexible-range CAB

6.2.3.1 Cab shall maintain a "List of Activities" (hereinafter referred to as the List), which are carried out under a flexible scope.

6.2.3.2 The scope of accreditation, issued by SNAS, is different from the List. The flexible scope laboratory list must provide updated transparent information on the application of a flexible scope of accreditation. List must be up to date and publicly available, unless there is a good reason not to do so (e.g. regulatory requirements).

The scope of accreditation must include a link to the List (up-to-date link on the website of the laboratory or the organization of which the laboratory is a part).

In the case of calibration laboratories, the List must contain at least:

- identification of the subject (name of CAB, number of the accreditation certificate)
- update to the relevant date
- unambiguous identification of type of measure in one type of meter/measuring device, while the calibration method, measuring range and CMC shall be preserved and the label of the methods included in the flexible scope of accreditation, with the measuring range and CMC unchanged

In the case of testing laboratories, the List must contain at least:

- identification of the subject (name of CAB, number of the accreditation certificate)
- update to the relevant date
- unambiguous identification of subject /matrix /environment, property /parameter /pointer, principle and label of the methods, equipment, specific methods used, other specifications (e.g. workplace, sampling points etc.)

In the case of medical laboratories, the List must contain at least:

- identification of the subject (name of CAB, number of the accreditation certificate)
- update to the relevant date
- unambiguous identification of biological material/matrix, analyte/parameter, principle of the methods, label of the methods, equipment, other specifications (e.g. workplace, specific methods used etc.)

6.2.3.3 CAB shall maintain and have a fully documented system for proper management of the flexible scope and its subsequent updating. Such a system must ensure that:

- responsibilities for managing a flexible scope are laid down,
- updating of the List shall be carried out only after appropriate professional activities have been carried out,
- information on what is and can be covered by accreditation is clear and exact,
- the procedure for receiving applications for activities covered by a flexible scope and which have not yet been carried out is processed and followed. Such procedures shall

ensure that CAB complies with the following minimum requirements before accepting work:

- CAB shall have access to all necessary resources and other means required to complete the specific activity required,
 - CAB has suitably qualified staff to complete the specific activity and its validation or verification,
 - responsibilities are laid down for all groups of activities,
 - the necessary validation or verification is carried out, which is determined by the CAB procedure,
 - the relevant process is approved,
 - the addition of additional or modified activity to the List has been validly approved by CAB management,
 - all new CAB premises that will be included in the additional or modified conformity assessment activity and have previously been notified and verified by SNAS.
- the contract review procedure contains elements applicable to this type of accredited scope, especially in those cases where CAB does not yet have the required activities included in the List. In such cases, the CAB must inform the client:
- that it will not be possible to issue a report/certificate covered by accreditation, unless the activities set out in its system are satisfactorily completed,
 - that it must take note of certain facts (e.g., time needed for implementation, price, etc.).

6.2.3.4 If the verification/validation process of the activity resulted in a conclusion that the CAB is unable to issue a protocol/certificate, the CAB must ensure that a cause analysis is carried out and adequate corrective action/action is taken. Such action shall include:

- informing the client that as long as analysis and follow-up activities are carried out, CAB will not be able to issue accredited reports/certificates and justification,
- reviewing relevant procedures or methods, where the cause would be in a specific technical problem related to the activity in question, in order to resolve the identified problem and ensure that it no longer occurs in the future,
- redefining the boundaries within the scope is flexible. In this case, CAB must inform SNAS to check whether the scope of accreditation has to be modified.

Changes to the List can only be made by the laboratory after the necessary actions have been performed and all requirements specified in its own documented flexible scope management system have been met.

The laboratory shall immediately inform SNAS in writing of any change made to the List, whereby the laboratory must submit relevant evidence of the change (e.g. change implementation plan, current list of activities with marked changes, validation / verification protocol) and keep a history of the changes.

The flexibility within a laboratory accredited applies to specific laboratory personnel who may be modified or supplemented as needed by the laboratory after meeting the conditions and criteria defined in the flexible scope management system of the documented by CAB and accepted by SNAS. It is necessary to complete the table "Personnel competent to modify and validate methods/develop new methods during the validity of accreditation". The table shows the individual laboratory staff with whom this laboratory competence is tied.

6.2.4 SNAS approach to flexible scope

6.2.4.1 SNAS has a flexible scope accreditation policy (PL-21).

6.2.4.2 In determining the level of risks associated with activities, to accept the application of a CAB for a flexible scope and design a suitable assessment process, SNAS shall consider, in addition to the usual risks associated with accreditation processes in accordance with Policy PL-24, the following aspects:

- Complexity and level of familiarity of SNAS with the conformity assessment activities. For example, with new and emerging activities, the competency requirements may not yet be fully known.
- Extent of flexibility requested by CAB
- Robustness of the process (including extent of controls) designed by CAB for managing its flexible scope
- Risks to the reputation of SNAS
- Stability of technical personnel within the CAB, responsible for the management of flexible scope and for the different activities relating to flexible scope
- Ability of the CAB to demonstrate that the way that it operates is suitable and valid, fit-for-purpose, and is undertaken impartially, competently and consistently
- Stakeholders/regulatory expectations

6.2.4.3 SNAS will check whether CAB is competent to manage a flexible scope and comply with CAB requirements. The verification process involves examining the actual examples where CAB has implemented a flexible scope. When assessing (granting accreditation, surveillance, re-accreditation) control questions for testing, calibration and medical laboratories are always completed.

6.2.4.4 In preparation, the SNAS assessment program may sample CAB activities, taking into account the risks and factors detailed in 6.2.4.2, to establish an adequate level of sampling confirming that ongoing checks and effective implementation (during surveillance and re-accreditation) are in place effectively in areas such as:

- All additional / modified activities
- Verification/Validation
- Metrology assessment (where applicable) / quality assurance mechanisms
- Competence and training of personnel involved in additional or modified activities
- Availability of working instructions, legal requirements, directives, etc.

- Comparison with other activities
- Risk assessment

6.2.4.5 SNAS shall consider the following aspects during the assessment and decision-making process:

- Degree of understanding of the CAB in the rules and procedures for implementing and managing a flexible scope
- Performance and robustness of the CAB's management system for the defined boundaries
- Knowledge of the CAB and its compliance to the relevant standards and activities
- The planned frequency with which the CAB intends to update the List of activities relating to the flexible scope
- Proofs of the performance of the full process including the extent of controls implemented by the CAB for managing a flexible scope
- Extent of flexibility given to CAB

6.2.4.6 The scope of accreditation issued by SNAS shall include boundaries of flexibility given and an actual reference to the List. At the next SNAS assessment, changes added within a flexible scope may be included in the accreditation certificate.

6.2.4.7 If SNAS finds that CAB is not complying with the requirements set out in this document, it may reconsider the scope, e.g. such as to reduce or even withdraw flexibility, thereby limiting the specific activities listed in the List.

7 OPTIONS AND INTERPRETATIONS

In report on results (test protocols or calibration certificates), laboratory may express opinions or interpretations concerning achieved results. These opinions and interpretations are related mainly to:

- opinions on the declaration of conformity of the results with specified requirements;
- meeting of contract requirements;
- recommendations how to use results;
- instructions how to use results for improvement;
- intervals or conditions of results validity etc.

The declaration of conformity of the results with specified requirements, or commentary on results in medical laboratories is not considered to be expression of opinion or interpretation of a result.

If a laboratory seeks to be accredited for expression of opinions and interpretations it is obliged to complete a Table "Staff members competent to express opinions and interpretations". In the table individual competent staff members are mentioned. In the tables „Performance specification" should be marked what activity results the expression

of opinions and interpretations will be related to (see individual Annexes “A”). The competence to express opinions and interpretations is an additional activity connected to the laboratory performance which is a subject of accreditation.

In medical laboratories, expressing opinions and interpretations is an integral part of the results presentation.

8 IN-HOUSE / IN-HOME CALIBRATION

If a laboratory does not use a competent external provider of this service for calibration of its measuring instruments and/or reference materials it is authorized to ask SNAS to consider the laboratory competence to perform such type of calibration for its own use (e. g. in the field of calibration of measurement glass, photometers, own standard materials etc.).

Performance of calibrations directly connected with testing methods (identification of response depending on the content of the monitored parameter/intensity of parameter), e. g. in the field of photometric or separation tests, is not considered to be an „in-house“ / „in-home“ calibration, but it is an integral part of the used method. Likewise, setting the measuring instrument or checking is not considered as „in-house“ / „in-home“ calibration.

In the case that a laboratory wishes to be assessed for „in-house“ / „in-home“ calibration, it must state this fact in an Annex to the application for the relevant area of accreditation in relevant Table in AIS. in the respective text fields in AIS.

If a laboratory performs „in-house“ / „in-home“ calibration and this will not be included in the application for the accreditation service, the activity in question will not be assessed by SNAS , which may lead to problems with ensuring of acceptable performance of calibration and thus to non-compliance with the accreditation requirements to ensure traceability of test results.

Note: Calibration of measuring instruments carried for the need of calibration laboratory is not considered “in-home”/“in-house” calibration if the calibration range coincides with the scope of accreditation calibration laboratory.

9 ANNEXES

- Annex A1 (informative) - Guidelines for calibration laboratories
- Annex A2 (informative) - Guidelines for testing laboratories
- Annex A3 (informative) - Guidelines for medical laboratories
- Annex A4 (informative) - Guidelines for proficiency testing providers
- Annex B (informative) - Scope of accreditation

9.1 ANNEX A1 – GUIDELINES FOR CALIBRATION LABORATORIES

9.1.1 In general

Form of activities specification for calibration laboratories seeking accreditation is given in the following tables which are annexed to the Application for Accreditation, which is filled in by the applicant in the AIS. By filling in relevant text fields the applicant specifies activity which he seeks accreditation for and which will be after the completing accreditation, mentioned in the Annex to the accreditation certificate. In the case of re-accreditation, extension of accreditation or after changes have been made, the valid scope of accreditation is attached, or valid scope of accreditation with changes made (e.g. extended items) as an integral part of Annex OA-1 (see chapter 4). In the case of an accredited flexible scope, the laboratory adds these activities to the List.

All types of laboratories fill in the relevant text fields in AIS. When the laboratory with flexible scope performs part of activities as laboratory with fixed scope the table A1-1 is to be filled in independently for activities carried out as routine activities (fixed scope) and separately for activities covered by the flexible scope. Table A1-1 for laboratory with flexible scope will be a base for a List of activities controlled by the laboratory only. Part of Table A1-1 for a laboratory with a flexible scope is a link to the controlled List and below the table information on what the flexibility applies to.

If the laboratory requires accreditation to express opinions and interpretations it shall fill the Table A1-3.

If the laboratory seeks accreditation for performance of modifications and validations of used calibration methods, it shall complete the Table A1-2 for flexible scope of accreditation.

Calibration laboratory performing its own („in-house “/ „in-home“) calibration fills in relevant text files in AIS and table A1-4.

Laboratories do not fill in those tables that are irrelevant for accreditation of their activities

Table templates for activity specification/scope of accreditation of a fixed scope calibration laboratory:

Fill in the tables according to the laboratory specification: A1-1, A1-3, A1-4

Table A1-1

**Specification of activities for calibration laboratory with a fixed scope
(calibration)**

Laboratory:	with fixed scope
	<input checked="" type="checkbox"/>

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=...$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1	2	3	4	5	6	7	8

9.1.2 Instructions for filling the table:

Column 1:

In the vertical field "Item" by order number listed are items to which the specification is divided. The purpose of arranging into numbered items is to ensure limpidity of specification and to simplify reference to table in various circumstances (e.g., during the planning of assessment, etc.)

If a laboratory calibrates measuring instruments of several quantities it is recommended to make basic division (1., 2.,...) according to quantities (length, angle, temperature...) and more detailed division (1.1, 1.2,...2.1, 2.2 etc.) according to the kind of measuring instruments (tick measuring instruments for length, gauge blocks, dial pointer electrical measuring instruments, digital electrical measuring instruments etc.).

Column 2:

In the column 2 listed are kinds of measuring instruments/measuring device which have common characteristic signs, at least those for which related are data given in other columns. In principle, breakdown into types can be made (for. example length measures can be itemized down to measures, gauges, etc., vacuum meters can be itemized in to deformation, compress ones, Pirani, ionizing, etc., pyrometer itemized into brightness, color, total radiation, etc.) or to merge (e.g., thermo-electrical thermometers and temperature sensors, measuring instruments for air humidity, etc.). The details of this specification depend on type of laboratory. For laboratory with fixed scope the specification shall be sufficiently detailed, covering nomenclature of types of measuring instruments for calibration of which the laboratory is competent/accredited.

The scope of the accredited KL for authorization purposes, in accordance with the Metrology Act, in the column "Type of gauge, measuring instrument" must contain the name of the type of the specified gauge exactly according to Annex no. 1 to decree no. 161/2019 Coll. on gauges and metrological control as amended by decree no. 346/2022 Coll. (hereinafter referred to as the "Decree on Metrology"). Alternatively, if the type of specified gauge in the column "Type of gauge, measuring device" does not contain the exact name of the type of specified gauge according to Appendix no. 1 to the decree on measuring instruments, in case of such a different name, a note is made with a reference

to the exact number of the item of the type of specified measuring instrument according to Annex no. 1 to the decree on metrology, as a correspondence link.

Column 3:

In the column 3 listed is the calibrated / measured quantity by which the calibrated gauge / measuring means is calibrated or measured. A quantity is a term quantitatively describing a property or state of a physical object or effect. Physical quantities are e.g. strength, speed, length, weight, time, electric current and temperature. Each physical quantity is assigned a unit of measure, which is listed in the "Measurement range" column.

The transitional period for the implementation of this change in the scope of accreditation for the calibration laboratory is until the next assessment in the CAB.

Column 4:

In this column listed is the range of values of the measured quantity in which the laboratory is capable to calibrate measuring instruments listed in the column 2 with uncertainties and using methods listed in other columns. If the base for specification are values of measuring ranges of calibrated measuring instruments (usually for laboratories with fixed scope), it is necessary to respect the definition of the measurement range of the measuring instrument in accordance with STN 01 0115, particularly not to confuse measurement range with scale/indicator range. In case of multirange measuring instruments and with set of instruments of different ranges listed is lower limit of the lowest range and upper limit of the highest range. Analogically, with set of single value measures (gauge blocks, weights, etc.) listed as the measurement range are measures with lowest and highest nominal value.

Column 5:

In this column is expanded uncertainty with coverage factor k , which, in the case of normal (Gaussian) distribution equals 2 and which is achieved by laboratory at usual calibration conditions.

Usual conditions are:

- calibration of instruments listed in column 2 of the table and in range given in column 4,
- usage of measurement standards, gauges and and of equipment listed in controlled laboratory documentation
- usage of established methods and documented procedures listed in column 5 of the table,
- performing calibrations in the working environment specified in controlled laboratory documentation
- realization of activities (preparation, entire measurements, evaluation) by selected technical staff in accordance with the conditions prescribed by methods of calibration or the other regulations.

The stated value of uncertainty corresponds to CMC (calibration and measurement capability – see Policy SNAS PL-34 and MSA-L/12). It is recommended to state, in the form of note to the heading or to the values in this column, circumstances having great influence to given uncertainties. The most often it concerns the type and a quality (accuracy class) of calibrated instruments and measured quantities for which the uncertainty values apply, or values influencing quantities in case of big impact upon uncertainty values listed in the table.

Laboratory has to demonstrate at the accreditation the relevant supporting materials to given uncertainties, such as methodology of calculation/evaluation, balances, estimates, justifications, etc.

Uncertainty declared in column 4 must not be value which the laboratory can achieve under special conditions and circumstances, like higher demand for time, staff, environment, etc. which does not occur in normal practice.

If the condition of normal distribution is not fulfilled there shall be used the coverage factor k which corresponds to a probability interval of approximately 95%. In this case the reason for using such coverage factor shall be stated in “Other specifications”.

For laboratories with fixed scope only one uncertainty value for given measurement range listed in column 4 is given. With extensive measurement range (big nonlinear dependence of uncertainty, large measurement range) when it is not possible to assign a single uncertainty value to a whole range, it is appropriate to segment the range and for each sub-range assign a relevant value of uncertainty.

Uncertainties shall be given, most preferably, in absolute values of measured quantities rounded to 2 significant digits. If it is practical with particular instruments (constant value of uncertainty within the whole range) or it is commonly used to, relative values of uncertainties rounded to maximum 2 valid digits can be used. In justified cases the uncertainty can be indicated by an analytical formula expressing value of uncertainty with dependence on measured value, measurement range, etc.

Column 6:

In this column the kind or principle of employed method is listed with identification whether it is a standard method, modified standard method or own method. It is not sufficient to state just “comparison method”, it has to be specified in more detailed way which one of possible comparison methods it is. If documentation contains alternative options it has to be clearly stated which method the laboratory implemented and is capable to operate it.

For laboratory with fixed scope, it has to be clear from the table which standard method is used for calibration of individual kind of measuring instruments. Reference of the method to the measuring instruments is fixed, optionality is excluded.

Column 7:

In this column normative documents specifying implemented methods shall be listed and proving that the methods are standard or procedures of calibration are validated in case

of generic methods. Documentation related to individual methods is expressed in the following way:

- in the case of standard method, stated is the identification reference of the standard or of other official regulation, for example: ISO xxxx
- in the case of not modified standard method transferred into internal regulation of a laboratory, given is the identification reference of the standard and under it in brackets identification reference of internal regulation, for example: ISO xxxx (IP yyy)
- in case of modified standard method or transferred method documented in the internal regulation of the laboratory, given is the identification reference of the internal regulation and under it in brackets identification of the standard or of the document from which the method is based on, for example: IP yyy (ISO xxxx; referenced publication)

Note Instead of “referenced publication” given can be reference where the cited text can be found.

- in case of a method developed by the laboratory, given is its internal identification reference, for example: IP yyy

Column 8:

In this column important specifications are listed that, by their character, do not belong to previous columns, especially:

a) application sphere of calibration activities, e.g., in the cases, when technical limitations exist or operating in the regulated sector, which is reflected by references to relevant legislation or directives, etc.

NOTE Laboratory must not discriminate clients from other reasons than technical (e.g., capacity, company interests, etc.).

b) location of calibration: in laboratory and/or on site, in the client’s premises (it relates to technical equipment of laboratory),

c) calibration of working measuring instruments and/or working measurement standards,

d) calibration of measuring instrument for using it under nonstandard conditions (low or high temperatures, pressure, etc.),

e) provision of opinions and interpretations on presented calibration results.

NOTE If there is a need to include tables, explanations and remarks to some items in the table these shall be numbered in the relevant cell and shall be put under the table. Table shall contain specification only.

Table A1-3

Employees capable to express opinions and interpretations

Name and surname, titles	Capacity to express opinion or interpretation – Specification of activity item No.
1	2

Instructions for filling the table:

Column 1:

The names of the persons who are capable to express opinions and interpretations.

Column 2:

Items from Tables A1-1 or A1-2 for which the particular persons are capable to express opinions and interpretations shall be given.

Table A1-4

Calibrations „in-house “ / „in-home “

(Calibration, metrological operations performed by its own calibration laboratory)

Calibrationse „in-house “ / „in-home “ yes no

List of performed calibrations „in-house“ / „in-home“ (only in case of previous answer „yes“)

Table templates for activity specification/scope of accreditation of a calibration laboratory a flexible scope of accreditation:

Fill in the tables according to the laboratory specification: A1-1, A1-2, A1-3, A1-4

Table A1-1

Specification of the activities of a calibration laboratory with flexible scope

Laboratory:	with flexible scope <input checked="" type="checkbox"/>
--------------------	---

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=...$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1	2	3	4	5	6	7	8

To mark the required scope of flexibility (in case the CAB requests a flexible scope of accreditation):

Flexibility does not apply to changing the principle of the methods, measured range and CMC used in a given flexible scope.

The laboratory keeps an up-to-date list of all calibration methods with a flexible scope of accreditation on the [www..... \(CAB completes the link to the website\)](#)

The principle of flexibility can be used by the laboratory within the framework of:

o in relation to the type of measure in one type of gauge/measuring instrument, the calibration method, measured range and CMC must be maintained o modification of methods included in the flexible scope of accreditation (measured range and CMC shall be preserved).

Instructions for completing table :

Column 1:

Column is completed, as in the case of fixed scope of accreditation A1-1

Column 2:

For laboratory with flexible scope, specifications in this column shall set types, or kinds of measuring instruments, which are related to competence/accreditation of a laboratory. The options for setting range are various, the common sign may be the used measurement method, measured quantity (DC-AC-RF electrical quantities ...), medium which the quantity is bound to (water, technical liquids...) etc. It is important to choose the approach

that ensures transparency of information of measuring instruments, which is laboratory capable to calibrate.

With a flexible scope, this column can group different types of meters within the type of meter / measuring device, while the calibration method must be maintained, but for each type of meter the measuring range and uncertainty must be defined, as well as the principle and designation of the established method.

Column 2:

Column is completed, as in the case of fixed scope of accreditation A1-1

Column 3:

Column is completed, as in the case of fixed scope of accreditation A1-1

Column 4:

Column is completed, as in the case of fixed scope of accreditation A1-1

Column 5:

Column is completed, as in the case of fixed scope of accreditation A1-1

Column 6:

Laboratory with flexible scope in this column shall declare implemented method for a given calibration, which is used for a given group of meters (individual types of meters within the type of meter). This calibration method is characteristic of several types of meters / measuring means within the type of meter, while it can be modified for individual types of meters.

Laboratory with a flexible scope have to always validate the procedure of its implementation.

Column 7:

Column is completed, as in the case of fixed scope of accreditation A1-1

Column 8:

Column is completed, as in the case of fixed scope of accreditation A1-1

Table A1-2

Personnel competent to modify and validate methods/develop new methods

First and last name, titles	Competence to modify and validate methods/develop new methods – item in in activity specification No.
1	2

First and last name, titles	Competence to modify and validate methods/develop new methods – item in in activity specification No.

Instructions for completing table A1-2:

Column 1:

The names of persons who are competent to modify and validate methods / develop new methods of calibration during the validity of the accreditation shall be indicated.

Column 2:

The items from Table A1-1 for which the persons concerned are competent to modify and validate methods / develop new methods of calibration during the validity of the accreditation shall be indicated.

Table A1-3

Employees capable to express opinions and interpretations

Name and surname, titles	Capacity to express opinion or interpretation – Specification of activity item No.
1	2

Instructions for filling the table:

Column 1 and 2:

Column is completed, as in the case of fixed scope of accreditation A1-3

Table A1-4

To be filled in as for a fixed scope of accreditation A1-4.

Calibrations „in-house“ / „in-home“

(Calibrations, metrological operations performed by its own calibration laboratory)

Calibrationse „in-house“ / „in-home“ yes no

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1	Glass thermometers	Temperature	(0 to 100) °C (100 to 200) °C (200 to 360) °C	0,15 °C 0,25 °C 0,80 °C	Comparison method at full immersion	DDD-23	Division of scale 1/10 °C
2	Devices for generating a temperature field	Temperature	(-40 to 90) °C (90 to 270) °C (270 to 500) °C	0,03 °C 0,04 °C 0,2 °C	Comparison with a thermometer or temperature sensor	PP-31-05	Calibration in the laboratory and at the customer's place
3	Climatic chambers	Relative air humidity	(10 to 95) %	2 %	Direct comparison with the benchmark	H-PP	Calibration in the laboratory and at the customer's place

Example 3

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1	2	3	4	5	6	7	8

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1	RM for refractometry	Refractive index	(1,28 to 1,81)	5.10^{-5}	Optical method indirect comparison	OIML R 108 OIML R 124 (PP-72-01)	Calibration in the laboratory
2	RM for pH-metry	pH	(1,679 to 10,000)	0,015	indirect comparison using CRM	OIML R 54 STN 65 0305 STN 99 9000 (PP-70-01)	Calibration in the laboratory

Notes:

RM – reference material

CRM – certified reference material

A1-1 Specification of activities of calibration laboratory for authorization purposes

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1	2	3	4	5	6	7	8

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1	Single-phase and multi-phase electromechanical energy meter intended for direct measurement of alternating current electrical energy	Electricity	(1 to 100) A220 V, 230 V3x220/38 0 V3x230/40 0 V3x100 V3x100/ $\sqrt{3}$ V	0,08 % 0,10 % 0,15 % 0,20 %	Comparison with the standard of electrical work	MP č. 01 MP č. 02 (STN EN 62053-11, STN EN 50470-2)	AC electrical network $f = 50$ Hz Calibration in the laboratory. Notes ¹⁾²⁾³⁾

Notes:

- 1) For the purpose of authorization according to § 31 of Act no. 157/2018 Coll. on metrology and on amendments to certain laws as amended by Act no. 198/2020 Z. z..
- 2) For the purpose of verifying the specified gauges according to Annex no. 49 to the Decree of the ÚNMS SR no. 161/2019 Coll. on measures and metrological control and for the purposes of NV 145/2016 Coll., Annex No. 5, Annex MI-003.
- 3) The current values in the table are expressed as I_b to I_{max} , respectively. I_{ref} to I_{max}

A1-1 Specification of activities of calibration laboratory with a flexible scope of accreditation

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1.1	Linear length sensors	Length	(0,1 to 16) m	0,02 mm	direct comparison with a laser interferometer	SP-11-1	
	Automatic level meters	Length	(0,5 to 16) m	0,4 mm		SP-11-1 (OIML R 85)	
	Average boards	Length	do (2 000 x1 600 x 300) mm	0,005 mm		SP-11-1 (ISO 8512-1, ISO 8512-2)	
	Laser rangefinders	Length	(0 to 16) m	0,7 mm		SP-11 (ISO 16331-1:2017)	
1.2	Calipers	Length	(0 to 2 000) mm	$(10 + 10 \cdot L)$ μ m	direct comparison with scales	SP-11-2 (VDI/VDE /DGQ 2618)	
	Depth gauges	Length	(0 to 2 000) mm	$(10 + 10 \cdot L)$ μ m		SP-11-2 (VDI/VDE /DGQ 2618)	
	Altimeters	Length	(0 to 2 000) mm	$(10 + 10 \cdot L)$ μ m		SP-11-2	

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
						(VDI/VDE/DGQ 2618)	
	Micrometers	Length	(0 to 500) mm	$(1 + 5 \cdot L)$ μm		SP-11-2 (VDI/VDE/DGQ 2618)	
	Gauges with measuring arms	Length	(0 to 1 000) mm	$(10 + 10 \cdot L)$ μm		SP-11-2 (VDI/VDE/DGQ 2618)	
1.3	Angles	Angle	$\alpha = 90^\circ$, for shoulder height up to 600 mm	3,1''	direct comparison with altimeter	SP-5-1	
	Inclinometers	Angle	2 x 90°	3'	direct comparison with altimeter, direct comparison with angular standard scales	SP-5-2 (VDI/VDE/DGQ 2618)	

Flexibility does not apply to changing the principle of the methods, measured range and CMC used in a given flexible scope.

The laboratory keeps an up-to-date list of all calibration methods with a flexible scope of accreditation on the [www..... \(CAB completes the link to the website\)](#)

The principle of flexibility can be used by the laboratory within the framework of:

x in relation to the type of measure in one type of gauge/measuring instrument, the calibration method, measured range and CMC must be maintained or modification of methods included in the flexible scope of accreditation (measured range and CMC shall be preserved).

An example of how to keep a List:

Subject identification: subject name, K-XXX

Update: 4.4.20xx (update is highlighted)

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
1.1	Calipers	Length	(0,1 to 16) m	0,02 mm	direct comparison with a laser interferometer	SP-11-1	
	Depth gauges	Length	(0,5 to 16) m	0,4 mm		SP-11-1 (OIML R 85)	
	Altimeters	Length	do (2 000 x 1 600 x 300) mm	0,005 mm		SP-11-1 (ISO 8512-1, ISO 8512-2)	
	Passameters	Length	(0 to 25) m	0,1 mm		SP-11-2	
	Laser rangefinders	Length	(0 to 16) m	0,7 mm		SP-11 (ISO 16331-1:2017)	
1.2	Calipers	Length	(0 to 2 000) mm	$(10 + 10 \cdot L)$ μ m	direct comparison with end scales	SP-11-2 (VDI/VDE/DGQ 2618)	
	Depth gauges	Length	(0 to 2 000) mm	$(10 + 10 \cdot L)$ μ m		SP-11-2 (VDI/VDE/DGQ 2618)	
	Altimeters	Length	(0 to 2 000) mm	$(10 + 10 \cdot L)$ μ m		SP-11-2 (VDI/VDE/DGQ 2618)	

Item	Kind of measuring instrument, measurement means	Measured quantity	Measurement range	Expanded uncertainty U ($k=2$)	Established methods		Other specifications
					Kind/ Principle	Identification	
	Micrometers	Length	(0 to 500) mm	$(1 + 5 \cdot L)$ μm		SP-11-2 (VDI/VDE/DGQ 2618)	
	Comma measures	Length	(0 to 5 000) mm	$(20 + 20 \cdot L)$ μm		SP-11-2 (VDI/VDE/DGQ 2618)	
	Gauges with measuring arms	Length	(0 v 1 000) mm	$(10 + 10 \cdot L)$ μm		SP-11-2 (VDI/VDE/DGQ 2618)	
1.3	Angles	Angle	$\alpha = 90^\circ$, for shoulder height up to 600 mm	3,1''	direct comparison with altimeter	SP-5-1	
	Inclinometers	Angle	2 x 90°	3'	direct comparison with altimeter,	SP-5-2 (VDI/VDE/DGQ 2618)	
	Angular scales	Angle	2 x 90°	3'	direct comparison with angular standard scales	SP-5-2 (VDI/VDE/DGQ 2618)	

9.2 ANNEX A2 – GUIDELINE FOR TESTING LABORATORIES

9.2.1 In general

The form of the activities specification for testing laboratories applying for accreditation is given in the following tables which are shown in Annex OA2 to the Application for accreditation. By filling relevant tables the applicant specifies activity for which he wants to be accredited and which will be, after the completing of accreditation, published in the Annex to the accreditation certificate. In the case of re-accreditation, extension of accreditation or after changes have been made, the valid scope of accreditation is attached, or valid scope of accreditation with changes made (e.g. extended items) as an integral part of Annex OA-2 (see chapter 4). In the case of accredited flexible scope the laboratory will add these activities to the List.

All types of laboratories fill in the prescribed text fields in the AIS. The fixed- scope laboratory shall complete Table A2-1. Laboratory with a flexible scope shall complete Table A2-1. Table A2-1 for the laboratory with a flexible scope will be the basis for a List that will be managed only by the laboratory.

Table A2-2 shall be completed by the laboratory if it requires accreditation to carry out modifications and validations of the test or measurement methods used or the development of new methods during the validity of the accreditation.

If the laboratory requires accreditation to express opinions and interpretations, it shall complete Table A2-3.

Where sampling is also carried out by the test laboratory, it shall complete a table of activity specification A2-4.

If the laboratory requires accreditation to express opinions and interpretations related to sampling, it shall complete Table A2-6.

The „in-house“ / „in-home“ calibration test laboratory shall follow Part 8 of this MSA.

The „in-house“ / „in-home“ calibration test laboratory shall fill in the relevant text fields in the AIS and Table A2-5.

Laboratories shall not complete those tables which are irrelevant to their accreditation activities.

Table templates for activity specification/scope of accreditation of a fixed- scope testing laboratory:

Fill in the tables according to the laboratory specification: A2-1, A2-3, A2-4, A2-5.

Table A2-1

Specification of the operation of the test laboratory with a fixed scope .

Laboratory:	with fixed scope
	<input checked="" type="checkbox"/>

Item	Test object		Established method		Other specifications (modification/validation, opinions/interpretations, workplace etc.)
	Subject /Matrix /Environment	Property /Parameter /Indicator /Analyte	Principle /Type	Label	
1	2	3	4	5	6

Instructions for completing table A2-1:

Column 1:

In the vertical field “Item”, the serial number shows the items into which the specification is divided. The purpose of sorting into numbered items is to ensure the clarity of the specification and to simplify the reference to the table in different contexts (e.g. when planning an assessment, etc.). Where appropriate, another method may be used instead of integers, for example by using numbering with one decimal point (1.1, 1.2, ... 2.1, 2.2, etc.) allowing for a coarse and fine vertical breakdown of the plate.

The marking or numbering of an item shall preferably be related to column 3 “Property ...”.

The vertical field “Test object” is divided into two fields, namely:

- “Subject (matrix, environment, system)”, hereinafter referred to as “Subject”, and
- “Property (parameter, pointer, analyte)”, hereinafter referred to as “Property”.

Column 2:

Column 2 gives the exact specification of the subject, which is based on the test method used. The column “Subject” shows the exact and detailed specification of tangible objects, objects, matrices or environments such as “water – drinking, underground etc.”, “food – for baby food, meat products etc.”, “working environment”, “cars”, “medical devices”, etc. If the subject of the tests is repeated in several headings, it is useful to put these items behind them and merge them.

The transitional period for defining the exact and detailed specification of the subject/matrices/environment in the scope of accreditation for the testing laboratories is until the next assessment in the CAB.

Column 3:

This column shows the characteristics tested, the parameters, the characteristics of the subjects listed in column 2. In principle, it may be the determination of several

characteristics of the same object using appropriate methods or a certain characteristics of different objects. In the latter case, you can merge a property for multiple objects into a single table field in column 3. The depth of specification of the properties to be tested (element content, e.g. lead, content of a group of elements, e.g. metals, etc.) is, like the specification of objects, linked to the relevant methods set out in columns 4 and 5.

A laboratory of this type also provides an exact specification of the property (e.g. 'lead', 'cadmium', 'tensile strength', etc.) to the precise specification of the article (for example, "lead", "cadmium", "tensile strength", etc.).

The vertical field "Method in place" is divided into two fields:

- "Principle/Kind/Type" and
- "Designation".

Column 4:

This column indicates the kind, principle or type of the test method used. The species specification shall be sufficient to distinguish from other species for the purpose of the methods used (e.g. in chemical tests gravimetry, titration, voltamperometry, spectrophotometry, GC/MS, F-AAS, etc.; in microbiological tests, cultivation, microscopy, etc.; X-rayoscopics in non-destructive tests of materials, etc., according to the catalogue of designating data). If the kind of methods in several items is the same in the cells below each other, they can be merged into a common field.

When using qualitative methods, the type/principle of the method shall be entered in brackets '(qualitative test)' or a similar indication.

Column 5:

This column shows the designations of the methods used, identifying whether it is a standard method, a modified standard method or a custom method, as follows:

as regards the standard method specified in the standard and the entity does not have an internal operating procedure in place to perform the test because it operates exactly according to the standard, an indication of the standard or other official regulation shall be provided, e.g.:

- in the case of an unmodified standard method rewritten in an internal laboratory regulation, the indication of the standard shall be indicated below and below it in brackets an indication of the internal regulation, e.g.: ISO xxxx IP yyy)

in the case of a modified standard method or a downloaded method documented in an internal laboratory regulation, the designation of the internal regulation and below it in brackets shall indicate the standard(s) or document(s) on which the procedure is based, e.g.:

Note: the location of the "quoted literature" may be the reference where the citation is located.

- in the case of a laboratory-developed method, only its internal marking shall be provided, e.g.:

Where a laboratory uses several standards/regulations/procedures to determine the relevant characteristics, only the basic regulation/basic rules or the basic standard(s) shall be indicated in column 5 and the other related rules/standards shall be entered, where appropriate, in column 6 "Other specifications".

Column 6:

This column sets out important specifications which, by their nature, do not fall within the preceding columns, in particular:

- a. information on whether opinions and interpretations will be given for the relevant test/measurement results in the protocols
- b. information about workplaces if the laboratory performs tests at several workplaces
- c. sphere for which test results are intended/appropriate, where there are technical limitations or specific areas in which the laboratory wishes to operate, e.g. "defense industry products or significant non-military material", testing for the purpose of protecting public health", etc.

Note: The laboratory must not discriminate against customers for reasons other than technical (e.g. capacity corporate interests, etc.).

- d. Place of testing, if relevant: in the laboratory and/or on site, at the customer's place, etc. (related to the technical equipment of the laboratory),
- e. Specific conditions for which tests may be carried out (low or high temperatures, high relative humidity, etc.).
- f. Characteristics of the method, if it is relevant, such as the limit of proof or the limit of determination.
- g. Other relevant information to complement the complexity of the data in the relevant horizontal field.

Note: If it is necessary to give explanatory notes or notes to certain items in the table, they shall be marked in the appropriate field with a serial number and shall be listed below the table. The table should contain only specifications.

The transitional period for modification in the scope of accreditation for the testing laboratories is until the next assessment in the CAB.

Table A2-3**Personnel competent to express opinions and interpretations**

First and last name, titles	Capacity to express opinions and interpretations - - item of activity specification No
1	2

Instructions for completing table A2-3:

Column 1:

The names of persons competent to express opinions and interpretations shall be given.

Column 2:

The entries in Tables A2-1 for which the persons concerned are competent to express opinions and interpretations shall be provided.

Table A2-4

Specification of the activities in which sampling is carried out by the laboratory

Item	Object			Method		Other specifications
	Subject	Property	Place of sampling	Type / Principle	Label	
1	2	3	4	5	6	7

The specification in this area of activity of the test laboratory shall be completed by a laboratory which, in addition to testing, also carries out sampling as well as a laboratory carrying out sampling only.

Instructions for completing Table A2-4:

Column 1:

Similar to table A2-1.

The vertical field "Object" is divided into three fields, namely:

- "Subject" and
- "Property" and
- "Place of sampling".

Column 2:

The column 'Subject' shows the exact and detailed specification of the objects, matrices or environments from which samples are taken, such as "air", "waste gases", "soils", etc. The detail of the specification shall be linked to the type of laboratory concerned, to the methods of sampling established by the laboratory and, where appropriate, to the other specifications given in column 7 of the table. For more information, see the instructions for completing Table A2-1 (column 2).

Column 3:

This column shows the characteristics, parameters, indicators or analytes to be tested in the samples taken. The depth of specification of the properties to be tested depends on the same factors as in the previous column 'Subject'.

Where the specification relates to the tests already referred to in Table A2-1, it is sufficient to indicate the item number of this table below which the characteristics for which sampling is carried out (e.g. characteristics in the RA/activity specification referred to in No 1-12) are sufficient.

Column 4:

Sampling points such as “working environment”, “waste pipes”, “stationary source of pollution”, “concrete plant”, “aggregate warehouse”, “food outlets”, etc. shall be specified.

The vertical field "Method" is divided into two fields, namely:

- "Species/Principle" and
- "Designation".

Column 5:

This column indicates the type or principle of the sampling method used. The specification of the species is sufficient to distinguish it from other types of methods used for the purpose (e.g. point sampling, poured sample, manual sampling, filter collection, solution collection, sampling from the well, etc.). The specification of this part of the table should be consistent with the information given in the standard or other sampling method used.

Column 6:

This column indicates the methods used, identifying whether it is a standard method, a modified standard method or a custom method, in accordance with the principle set out in the instructions for completing Table A2-1 (column 5).

Column 7:

This column sets out important specifications which, by their nature, do not fall within the preceding columns, in particular:

- a. Identification of whether opinions and interpretations will be included in the protocols for the relevant sampling and related results.
- b. Sphere for which sampling is carried out.
- c. Other relevant information to complement the complexity of the data in the relevant horizontal field.

Note: If it is necessary to give explanatory notes or notes to certain items in the table, they shall be marked in the appropriate field with a serial number and shall be listed below the table. The table should contain only specifications.

Table A2-6

Personnel competent to express opinions and interpretations (sampling)

First and last name, titles	Capacity to express opinions and interpretations - - item of activity specification No
1	2

Instructions for completing Table A2-6:

Column 1:

The names of persons competent to express opinions and interpretations shall be given.

Column 2:

The entries in Tables A2-4 for which the persons concerned are competent to express opinions and interpretations related to sampling shall be provided.

Table A2-5

Calibrations „in-house“ / „in-home“

(Calibrations, metrological operations performed by its own calibration laboratory)

Calibrationse „in-house“ / „in-home“ yes no

List of performed calibrations „in-house“ / „in-home“ (only in case of previous answer „yes“)

Table templates for activity specification/scope of accreditation of a testing laboratory a flexible scope of accreditation:

Fill in the tables according to the laboratory specification: A2-1, A2-2, A2-3, A2-4, A2-5

Table A2-1

Specification of the activities of a testing laboratory with flexible scope

laboratory:	with flexible scope
	<input checked="" type="checkbox"/>

Item	Object		Established method		Other specifications (opinions/interpretations, workplace etc.)
	Subject /Matrix /Environment	Property /Parameter Indicator/ Analyte	Principle / Type	Label	
1	2	3	4	5	

Below the table, flexibility is clearly defined, followed by a choice of options:

The laboratory maintains an up-to-date list of all test methods with a flexible scope of accreditation at www.cab.sk/flexible-accreditation/

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

The principle of flexibility can be used by the laboratory within the framework of:

- o objects/matrices/environments
- o properties/parameters/indicators/analytes
- o methods and procedures used for testing
- o equipment

Instructions for completing table A2-1:

Column 2:

The subject will be marked more generally, e.g. "Water", "Foods", "Air", etc. (detailed specification of the subject must be given in the List).

If a certain property is specified only in a specific matrix (specific object, e. g. drinking water), in the column "Object" for the relevant property it shall state a more detailed specification of the object "drinking water" etc.

Column 3:

Laboratory indicate this type of monitoring, test or analyte properties group name similar characteristics, such as "heavy metals", "pesticides", etc. and properties already tested by the laboratory shall be listed in the List , such as "- lead", "- zinc", "- DDT", etc. The specification of other properties in the group can only be completed in the List after performing the necessary steps specified in the documented laboratory flexible range management system.

Column 1 and 4-6 is completed, as in the case of fixed scope of accreditation A2-1.

Table A2-2

Personnel competent to modify and validate methods/develop new methods during the validity of the accreditation

First and last name, titles	Competence to modify and validate methods/develop new methods – item in activity specification No.
1	2

Instructions for completing table A2-2:**Column 1:**

The names of persons who are competent to modify and validate methods / develop new methods during the validity of the accreditation shall be indicated.

Column 2:

The items from Table A2-1 for which the persons concerned are competent to modify and validate methods / develop new methods during the validity of the accreditation shall be indicated.

Table A2-3

Personnel competent to express opinions and interpretations

First and last name, titles	Capacity to express opinions and interpretations - - item of activity specification No
1	2

Instructions for completing table A2-3:

columns 1-2 are filled in as for the fixed scope

Table A2-4

Specification of the activities in which sampling is carried out by the flexible scope laboratory

Item	Object			Method		Other specifications
	Subject	Property	Place of sampling	Type / Principle	Label	
1	2	3	4	5	6	7

Below the table, flexibility is clearly defined, followed by a choice of options:

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

The laboratory maintains an up-to-date list of all test methods with a flexible scope of accreditation at www.cab.sk/flexible-accreditation/

The principle of flexibility can be used by the laboratory within the framework of:

- objects
- properties
- methods and procedures used for sampling
- sampling points

Instructions for completing table A2-4:

columns 1, 3, 5-7 are to be completed as for the fixed scope of accreditation.

Column 2:

The subject will be marked more generally, e.g. "Water" or "Environment", from which samples are taken. Detailed specification of the subject must be given in the List.

Column 4:

Sampling points/sources such as “environment”, “waste pipes”, “stationary source of pollution”, “concrete plant”, “aggregate warehouse”, “source of water sampling”, etc. shall be specified.

The vertical field "Method" is divided into two fields, namely:

- "Species/Principle" and
- "Designation".

Instructions for completing table A2-6:

columns 1, 2 are to be completed as for the fixed scope of accreditation.

Table A2-5

To be filled in as for a fixed scope of accreditation.

Calibrations „in-house“ / „in-home“

(Calibrations, metrological operations performed by its own calibration laboratory)

Calibrations „in-house“ / „in-home“ **yes** **no**

List of performed calibrations „in-house“ / „in-home“ (only in case of previous answer „yes“)

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Examples of filling tables

A2-1 Specification of the operation of the	Test object		Established method		Other specifications (modification/validation, opinions/interpretations, workplace etc.)
	Subject /Matrix /Environment	Property /Parameter /Indicator /Analyte	Principle /Type	Label	
1	Drinking water	faecal streptococals	cultivary (quantitative)	STN ISO 7899-2	-
2	Disinfection solutions	efficiency disinfectant. Solution	cultivary (qualitative)	AHEM ¹ Annex 7/92	N/I ²
3	Foodstuff - for the nutrition of infants and small children, fruits and vegetables and their products, ready meals	lead cadmium	AAS-ETA ³	IP 65/2 ⁴	
4	Waste gases	Nitrogen oxides Expressed as NO ₂	Chemiluminescence	EN 14792 (SOP-26) ⁵	Measurements shall be made for both legitimate and technological measurements
5	Vehicles category PS	Brakes	Measurement the brake tracks	STN EN ISO 3450	Assessment of the effect of the braking system. Range: (1 to 1000) m

A2-1 Specification of the operation of the	Test object		Established method		Other specifications (modification/validation, opinions/interpretations, workplace etc.)
	Subject /Matrix /Environment	Property /Parameter /Indicator /Analyte	Principle /Type	Label	
6	Electrical and electronic household equipment and an office	Level of low energy consumption	Measurement of low energy consumption	STN EN 50564 EN 50564 (MPS 01/5.11)	0,001W ÷ 100W Testing in laboratory conditions and at a customer

A2-1 Specification of the operation of the	Test object		Established method		Other specifications (modification/validation, opinions/interpretations, workplace etc.)
	Subject /Matrix /Environment	Property /Parameter /Indicator /Analyte	Principle /Type	Label	
7	Plastic, rubber	Horizontal flammability	Time and length measurement	STN EN 60695-11-10 TL 1010 STN ISO 3795 STN EN 50086-1 FMVSS 302 MS 300-08 GS 97038 DIN 75 200 TSM0500G D45 1333 VCS 5031,19 GMW 3232 FIAT 7 - G 2000 DBL 5307 SAE J369 ASTM D5132 Toyota TSM 0500G PV 3904 SWF 47.000 PTL 8501	Tests carried out in the laboratory

A2-1 Specification of the operation of the	Test object		Established method		Other specifications (modification/validation, opinions/interpretations, workplace etc.)
	Subject /Matrix /Environment	Property /Parameter /Indicator /Analyte	Principle /Type	Label	
8	Water: - drinking - surface - waste	Temperature	Direct temperature measurement (thermometry)	ŠPP INO.M.170 (STN 75 7375)	Testing on site at a customer
9	The workplace atmosphere and indoor atmosphere	Relative humidity of the air <i>rh</i>	Measurement of Relative humidity of the air	IP-3 (STN EN ISO 7726)	

Notice:

- 1 - AHEM - Acta hygienist, epidemiologist and microbiology
- 2 - N/I - expression of opinions and interpretations
- 3 - AAS-ETA - atomic absorption spectrometry with electrothermic atomization
- 4 - IP - internal regulation
- 5 - SOP Standard Workflow

A2-4 Specification of the activities in which the laboratory with fixed scope carries out sampling

Item	Object			Method		Other specifications
	Subject	Property	Sampling point	Type / principle	label	
1	Working air	solid aerosol	Working environment	Subscription to membrane filters	EPA 235/01 (IP 123/5)	
2	Sludges	Characteristics listed in the scope of accreditation of the testing laboratory under No. x – z and sampling performed for the customer, subcontractor	ČOV ¹ , sewerage, storage and sewerage structures	point sample, mixed sample (manual sampling)	IP No 13 ² (STN EN ISO 566-1 STN EN ISO 5667-13 STN EN ISO 5667-15 STN EN ISO 5667-16)	
3	Aggregate	Items 13.1 to 13.22	building, plant	In situ, into containers	STN EN 932-1 STN EN 932-2	Workplace: BA, KE

Notice:

- 1 - wastewater treatment plant
- 2 - IP No.13 - internal regulation marking ...

Examples of filling tables

A2-1 Specification of the operation of the test laboratory with flexible scope

Item	Test object		Established method		Other specifications (scope, uncertainty, purpose, modification/ validation, opinions/ interpretations, etc.)
	Subject /Matrix /Environment	Property /Parameter /Indicator/Analyte	Principle /Type	Label	
1	Foodstuff	Sugars	LC-RI	ŠPP XY	Workplace A
		Sum of sugars	Calculation		
2	Food	Metals	AAS-ETA	IP XY (STN EN ISO XXX)	Workplace A
3	Feeds	Pesticide residues	GC-MS	ŠPP XZ	Workplace B
4	Water	count	cultivary (quantitative)	STN YYYYY	ISO
		faecal streptococals		STN XXXX	EN

Item	Test object		Established method		Other specifications (scope, uncertainty, purpose, modification/ validation, opinions/ interpretations, etc.)
	Subject /Matrix /Environment	Property /Parameter /Indicator/Analyte	Principle /Type	Label	
5	Seats of vehicles	Position of H-point of the seat	Measuring the H-point of the seat (coordinate system X,Y,Z)	UN R-17 (PVEU-PLUS-WI-03-105) SAE J 826 FMVSS 202a RCAR-IIWPG Seat/Head Restraint EURO NCAP EuroNCAP Version 3.1 June 2011	N/I

Notice:

N/I - expression of opinions and interpretations

ŠPP - Standard Workflow

IP - Internal Workflow

The laboratory maintains an up-to-date list of all test methods with a flexible scope of accreditation at www.cab.sk/flexible-accreditation/

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

The principle of flexibility can be used by the laboratory within the framework of:

x objects/matrices/environments

x properties/parameters/indicators/analytes

x the methods and procedures used for testing

x equipment

An example of how to keep a List:

Subject identification: subject name, S-XXX

Update: 4.4.20xx (update is highlighted)

A2-4 Specification of activities where a flexible-scope laboratory carries out sampling

Item	Object			Method		Other specifications
	Subject	Property	Sampling point	Type / Principle	Label	
1	Water and associated matrices	Characteristics listed in the scope of accreditation of the testing laboratory under No. x – z	Sampling source	Point sample	NRL/VŠ-ŠPP/1 ¹ (STN EN ISO 5667-1 STN ISO 5667-11 STN EN ISO 5667-14 STN ISO 5667-18)	
2	Water and associated matrices	and procurements performed for the customer, subcontractor		mixed sample, manual sampling, automatic sampling	NRL/VŠ-ŠPP/2 ¹ (STN EN ISO 5667-1 STN EN ISO 5667-3 STN ISO 5667-5 STN EN ISO 19 458 STN EN ISO 5667-14)	

Notice:

ŠPP - Standard Workflow

The laboratory maintains an up-to-date list of all test methods with a flexible scope of accreditation at www.cab.sk/flexible-accreditation/

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

The principle of flexibility can be used by the laboratory within the framework of:

- x objects
- x properties
- x methods and procedures used for sampling
- x sampling points

An example of how to keep a List:

Subject identification: subject name, S-XXX

Update: 4.4.20xx (update is highlighted)

Item	Object			Method		Other specifications
	Subject	Property	Sampling point	Type / principle	Label	
1	Water and associated matrices: - drinking water - underground water	Characteristics listed in the scope of accreditation of the testing laboratory under No. x – z and sampling performed for the customer, subcontractor	Sampling source: - wells - distribution network - springs - boreholes	point sample	ŠPP XY (STN EN ISO XXX-X STN EN ISO YYYY)	

Item	Object			Method		Other specifications
	Subject	Property	Sampling point	Type / principle	Label	
2	Water and associated matrices: - waste water		Sampling source: - ČOV - sewage shafts	mixed sample, manual sampling, automatic sampling	ŠPP XX (STN EN ISO XXX-X)	Time-integrated sample

Notice:

ČOV - wastewater treatment plant

ŠPP - Standard Workflow

9.3 ANNEX A3 – GUIDELINE FOR MEDICAL LABORATORIES

9.3.1 In general

Form of activities specification for medical laboratories applying for accreditation is given in the following tables. By filling relevant Tables the applicant specifies activities which applies accreditation for and which will be after the completing of accreditation process published in the Annex to the accreditation certificate. In the case of re-accreditation, extension of accreditation or after changes have been made, the valid scope of accreditation is attached, or valid scope of accreditation with changes made (e.g. extended items) as an integral part of Annex OA-3 (see chapter 4). In case of accredited flexible scope the laboratory will add these activities to the List.

Laboratories fill in Table A3-1 and the laboratory with flexible scope competent to develop new methods completes also Table A3-2. In case when laboratory with flexible scope performs partially also activities as laboratory with fixed scope, it will fill in separately the Table A3-1 for activities performed on routine base (fixed scope) and separately Table A3-2 for activities covered under flexible scope. Table A3-2 for laboratory with flexible scope will be the basis for the List managed only by the laboratory.

Laboratory completes Table A3-3 in the case when it also applies for the flexible scope of accreditation.

In cases where the medical laboratory carries out sampling, it fills in the Table of activity specification A3-4.

Laboratories do not fill in those tables that are irrelevant for their activities for accreditation.

Table templates for activities specification/accreditation fixed scope of a medical laboratory:

The tables as specified by the laboratory are completed: A3-1, A3-4

Table A3-1

Laboratory:	with fixed scope
	<input checked="" type="checkbox"/>

Specification of activities for fixed scope of a medical laboratory

Item	Object of examination		Established method		Other specification (equipment, workplace etc.)
	Biological sample/ Matrix	Analyte/ Parameter	Principle	Identificati on	
1	2	3	4	5	6

Instructions for filling the table:

Column 1:

In the vertical field „Item“ the order number is used for items which the specification is classified into. The purpose of arranging into numbered items is to ensure transparency of the specification and simplify references to the table in different connections (e.g. evaluating the range and complexity related to assessment, assigning tasks to assessors, indicating discovered defects, etc.).

As long as it is meaningful it is possible replace consecutive numbers by other way for example by using numbering with one decimal point (1.1, 1.2, ... 2.1, 2.2, etc.) which enables rough and soft vertical classification of the table. The indication or numbering of an item should preferably relate to the column 3 „Analyte/Parameter“.

The vertical field „Object of examination“ is divided into two fields:

- „ Biological sample/Matrix“
- „Analyte/Parameter“.

Column 2:

In the column „Biological sample/Matrix“ a matrix is mentioned for example „blood“, „serum“, „urine“, etc. If the system or biological sample repeats in several items it is meaningful to mention one under another and merge.

Column 3:

“Analyte/Parameter“ is specified in this column. Basically, it can be a determination of several properties of the same matrix by using respective method or a certain property of different matrices. In the second case in column 3 it is possible to merge more analytes/parameters into one field of the table.

The vertical field „Established method“ is divided into two fields:

- „Principle“
- „Identification“

Column 4:

In this column the principle of applied method of determining respective indicator is mentioned. The principle of method must be defined in such a way that it is possible to distinguish the method from other types of methods used for the given purpose (e.g. spectrophotometry, potentiometry, cultivation, etc.) will be possible. If the principle of the method is the same in the cells followed one under another it is possible to merge relevant rows into common field.

Column 5:

This column gives the designations of the methods used, identifying whether it is a standard method, a modified standard method or a method of its own, as follows:

- as regards the standard method and the entity does not have an internal operating procedure in place to perform the test because it operates exactly according to the recommended document, an indication of the recommended document (RD) or other official regulation shall be provided, e.g.:

RD xxxx in the case of an unmodified standard method rewritten in an internal laboratory regulation, the indication of the recommended document shall be indicated below and below it in brackets an indication of the internal regulation, e.g.: xxx

(IP yyy) in the case of a modified standard method or a downloaded method documented in an internal laboratory regulation, the designation of the internal regulation and below it in brackets shall indicate the recommended document (s) on which the procedure is based, e.g.: IP yyy (RD xxxx; citing literature)

Note: the location of the "quoted literature" may be the reference where the citation is located.

in the case of a laboratory-developed method, only its internal marking shall be provided, e.g.: IP yyy

Where a laboratory uses several recommended documents/regulations/procedures to determine the relevant characteristics, only the basic regulation/basic rules shall be indicated in column 5 and the other related rules/standards shall be entered, where appropriate, in column 6 'Other specifications'.

Where a laboratory uses several methods to determine the relevant characteristics, only the basic regulation(s) shall be indicated in column 5 and the others shall be entered, if necessary, in column 6 'Other specifications'.

Column 6:

In this column important specifications are mentioned which with their character do not belong to previous columns. E.g. when using qualitative methods, under the principle of the method, it shall be given in brackets "(qualitative method / examination)" or a similar designation. In the case of medical laboratories, the table does not require the expression of opinions and interpretations to be indicated separately.

Table A3-4

Sampling:

Laboratory:	with fixed scope
	<input checked="" type="checkbox"/>

Specification of the activities in which sampling is carried out by the laboratory

Item	Object			Established method		Other specifications
	Biological sample/ Matrix	Analyte/ Parameter	Place of sampling	Principle	Identification	
1	2	3	4	5	6	7

The specification in this field of activity of the medical laboratory is completed by a laboratory, which, in addition to examinations, also carries out sampling.

Instructions for filling in the Table:

Column 1:

As with the fixed scope of accreditation A3-1.

The vertical field "Object" is divided into three fields, namely:

- " Biological sample/Matrix ",
- " Analyte/Parameter" and
- ' Place of sampling '.

Column 2:

As with the fixed scope of accreditation A3-1.

Column 3:

This column shows the analyzed parameters of the biological materials taken listed in column 2. If the specification refers to the examinations already listed in Table A3-1, it is sufficient to indicate the item number of this table under which the parameters for which sampling is performed are located.

Column 4:

The sampling points are specified, such as 'sampling room', 'medical specialist office', etc.

The vertical field "Method" is divided into two fields, namely:

- " Principle" and
- " Identification ".

Column 5:

This column indicates the principle of the sampling method used. The specification of the principle of method should be sufficient to distinguish it from other methods used for the purpose (eg "capillary finger sampling, venous sampling", etc.). The specification of this part of the table should be identical to the information given in the standard or other sampling method used.

Column 6:

Fill in according column 5 for the fixed scope of accreditation A3-1.

Column 7:

This column sets out important specifications which, by their nature, do not fall within the previous columns, in particular:

- a. Sphere for which sampling is carried out.
- b. Further relevant information to complement the complexity of the data in the relevant horizontal field.

Note: If it is necessary to give explanatory notes or notes to certain items in the table, they shall be marked in the appropriate field with a serial number and shall be listed below the table. The table should contain only specifications.

Table templates for activity specification/scope of accreditation of a medical laboratory with a flexible scope:

The tables as specified by the laboratory are completed: A3-2, A3-3, A3-5

Table A3-2

Specification of activities for medical laboratory with flexible scope competent to develop new methods

Laboratory:	with a flexible scope
	<input checked="" type="checkbox"/>

Item	Object of examination		Established method		Application field	Other specifications (workplace etc.)
	Biological sample/Matrix	Analyte/Parameter	Principle	Identification		
1	2	3	4	5	6	7

Below the table, flexibility is clearly defined by selecting from the options:

The Laboratory maintains an up-to-date list of all examined methods with a flexible scope of accreditation on the www.cab.sk/flexibile-acreditation/

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

The principle of flexibility can be used by laboratories within the

- o biological samples/matrices,
- o analytes/parameters,
- o
- o methods and procedures used for analyse
- o devices.

Instructions for filling in the table:

Column 1:

As with the fixed scope of accreditation A3-1.

Column 2

As with the fixed scope of accreditation A3-1.

The specification may be given more generally.

Column 3:

As with the fixed scope of accreditation A3-1.

The specification may be given more generally.

Column 4:

The column "Principle" of the developed methods indicates the framework identification of the principle of the method, sufficient to distinguish from other principles of methods, e.g. photometry, spectral analysis, electrochemistry, etc.

Column 5:

As with the fixed scope of accreditation A3-1.

Column 6:

The specification of the spheres where the use of the method under development is envisaged or determined, such as "biochemistry", "hematology", "genetics" etc. (see Chapter 9.5, Annex B, section 3.1 Areas of activities of medical laboratories)

Column 7:

This column provides, where appropriate, further up-to-date specifications concerning e.g. specific workplace, enumeration of the analyzes used etc.

Note: If it is needed to put explanations or notes to some items of the table they shall be marked in relevant field by order number and shall be mentioned under the Table. The Table should contain only specifications.

Table A3-3

Personnel competent to modify and validate methods/develop new methods during the validity of accreditation

First and last name, titles	Competence to modify and validate methods/develop new methods - - Item in activity specification No
1	2

Instructions for filling the table:

Column 1:

The names of persons competent to modify and validate testing methods/develop new methods during the validity of the accreditation certificate shall be given.

Column 2:

Items from Tables A3-1 or A3-2 for which the persons concerned are competent to modify and validate test methods during the validity of the accreditation certificate shall be provided.

Examples of completed tables

A3-1 Specification of activities of a medical laboratory with a fixed scope of accreditation:

Item	Object of testing		Established method		Other specification (equipment, workplace etc.)
	Biological sample/Matrix	Analyte/Parameter	Principle	Identification	
An example from the field of biochemistry:					
1	Serum	Albumin	Photometry	PI-albumin Biovendor (SOP No.40) ₁	Equipment XX-
2		Alkaline phosphatase			-
3		Amylase			-
4	Serum	IgM antibodies of toxoplasma	ECLIA		
5		IgG antibodies of toxoplasma			
6	Cord blood	antibodies of toxoplasma	ELIFA		

Notice:

ECLIA: Electrochemical immunoassay

ELIFA: Enzyme immunofiltration test

ELISA: Enzyme immunoassay analysis

PI: package insert

SOP/SPP: Standard operating procedure/Standard working procedure^v

A3-2 Specification of activities for medical laboratory with flexible scope competent to develop new methods

An example of flexible range within a biological material:

item	Object of examination		Established method		Application field	Other specifications (equipment, etc.)
	Biological sample/Matrix	Analyte/Parameter	Principle	Identification		
1	2	3	4	5	6	7
1	Body fluid	HER 2	FISH	Commercial procedure	Laboratory diagnostic in clinical pathology	workplace A, workplace B

The Laboratory maintains an up-to-date list of all examined methods with a flexible scope of accreditation on the www.cab.sk/flexibile-acreditation/

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

The principle of flexibility can be used by laboratories within the

x biological samples/matrices,

- o analytes/parameters,
- o methods and procedures used for analyse
- o devices.

An example how to keep the List:

Subject identification: subject name, M-XXX

Update: 4.4.20xx (update is highlighted)

Item	Object of examination		Established method		Device	Other specifications (equipment, etc.)
	Biological sample/Matrix	Analyte/Parameter	Principle	Identification		
1	2	3	4	5	6	7
1	Full blood	HER 2	FISH	SPP.05 (Literature No. 1-4)	Microscope Olympus XY	workplace A, workplace B
	Urine	HER 2	FISH	SPP.05 (Literature No. 1-4)	Microscope Olympus XY	workplace A, workplace B
	Sweat	HER 2	FISH	SPP.05 (Literature No. 1-4)	Microscope Olympus XY	workplace A, workplace B

An example of flexible range within a device:

Item	Object of examination		Established method		Application field	Other specifications (equipment, etc.)
	Biological sample/Matrx	Analyte/Parameter	Principle	Identification		
1	2	3	4	5	6	7
1	serum	IgM anti-Toxoplazma protilátky	ECLIA	Commercial procedure	Laboratory diagnostic in microbiology	workplace A, workplace B

The Laboratory maintains an up-to-date list of all examined methods with a flexible scope of accreditation on the www.cab.sk/flexibile-acreditation/

Flexibility does not apply to changing the principle of the methods used in a given flexible scope.

The principle of flexibility can be used by laboratories within the

- o biological samples/matrices,
- o analytes/parameters,
- o methods and procedures used for analyse
- x devices.

An example how to keep the List:

Subject identification: subject name, M-XXX

Update: 4.4.20xx (update is highlighted)

Item	Object of examination		Established method		Device	Other specifications (equipment, etc.)
	Biological sample/Matrix	Analyte/Parameter	Principle	Identification		
1	2	3	4	5	6	7
1	serum	IgM anti-Toxo antibodies	ECLIA	EUROIMM UN IgM Toxo (SPP.01)	MSLCM12	LabEquipments
	serum	IgM anti-Toxo antibodies	ECLIA	EUROIMM UN IgM Toxo (SPP.01)	Cobas e411	Roche

A3-3 Specification of activities for which laboratory performs sampling

Laboratory	with fixed scope	with a flexible scope
	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item	Object			Method		Other specifications
	Biological sample/ Matrix	Analyte/ Parameter	Place of sampling	Principle	Identification	
Example 1:						
1	Capillary blood	Glucose	Income room - sampling part	Taking blood from finger capillary	Operating manual Super GL (SOP No. 21)	
2		Erythrocytes				
Example 2:						
1	Blood	1-41 of scope	Sampling room	Collection of venous blood	(SOP 42, Blood collection)	

notice:

1 - SOP – standard operation procedure

9.4 ANNEX A4 – GUIDELINE FOR PROFICIENCY TESTING PROVIDERS

9.4.1 In general

Form of activities specification for providers of interlaboratory proficiency testing and of interlaboratory comparisons is given in the table. Specification of the PT provider activities are specific. Specification of activity, where the „Field“ and „Subject compared properties, parameters, etc. for the given subject of the exam as well as the designation of the PT program of proficiency testing“ represent the scope of accreditation. ~~The information of compared properties, parameters and indication of the PT program, etc. for given item of test are informative.~~ By filling in the relevant tables, the applicant specifies the activities for which he wants to be accredited and which will be listed in the appendix of the accreditation certificate after the accreditation is completed. ~~By filling the~~

~~table the applicant specifies activity which he seeks accreditation for and which will be, after the completing accreditation or its extension mentioned in the Annex to the accreditation certificate. In the case of re-accreditation, extension of accreditation or after changes have been made, the valid scope of accreditation is attached, or valid scope of accreditation with changes made (e.g. expanded items) as an integral part of Annex OA-4 (see chapter 4).~~

Table templates for activity specification /scope of accreditation of the proficiency testing provider

Table A4-1

Proficiency testing Provider:	has a laboratory	provides externally services subcontracting	laboratory provided by
	<input type="checkbox"/>	<input type="checkbox"/>	

Item	Field	Subject of proficiency testing	Compared properties (parameters, indicators, analytes), Range of compared values (informative)	Indication of the proficiency testing program	Other specification
1	2	3	4	5	6

Instructions for filling the table:

Column 1:

Serial number of the field mentioned in column 2

Column 2:

In the column “Field” shall be listed such fields which are characterizing the orientation of activity of PT provider, as: living/working environment, construction materials,

metrology, food, water, hematology, serology, clinical mycology, geology, safety of products, etc.

Column 3:

In the column "Subject of proficiency testing" will be listed specification of material subjects, objects, matrixes or environments, with which the proficiency testing of interlaboratory comparison shall be performed, like "water", "working air environment", "measuring instruments for mechanical quantities", etc. If the object of testing is repeated in multiple items, it is practical to list these items consecutively and to merge them.

Column 4:

In this column will be listed data and information, ~~only for informative reason~~ of participants, as compared properties, parameters, indexes or analytes or area of application, as for example "content of elements: Cd, Pb, ...", microbiological indicators: Escherichia coli ...", types of ionizing radiation meters", "sampling of probes", etc. ~~Any changes of listed properties etc. are only item of updating of the scope of accreditation, if the provider ask for this.~~ For actual selection of listed parameters in particular programs the PT provider is responsible and it depends for example on his relevant externally provided **services**.

Column 5:

This column "Proficiency test program designation" indicates the general proficiency test program code (s) under which the program is implemented.

Column 6

In this column „Other specification“ only informative piece of information are listed for example frequency of repetition of organization of programs, or possible relation to relevant legislation, if some programs have some relation to regulatory requirements (for example verification of water meters if it is relevant) etc.

NOTE: If there is a need for explanation or for remarks to add to any of the item in the table they shall be numbered in the relevant cell and shall be put under the table. The table shall contain the specification only.

Example for filling the table A4-1

Item	Field	Subject of proficiency testing	Compared properties, parameters, indexes or analytes Range of values compared (informative)	Indication of the proficiency testing program	Other specification
		Example 1			
1	Beverages	Alcoholic Soft and energy drinks,	Alcohol content, Total dry extract, Sugar Acetaldehydes,	IP No./year	Once a year

2	Water	Waste water	<p>Stopová anorganická analýza (SAA):</p> <p>arzén (As) antimón (Sb) bárium (Ba) bór (B) cín (Sn) hliník (Al) kadmium (Cd) kobalt (Co) chróm (Cr) mangán (Mn) meď (Cu) molybdén (Mo) nikel (Ni) olovo (Pb) ortuť (Hg) selén (Se) striebro (Ag) vanád (V) zinok (Zn) železo (Fe)</p> <p>Taking samples for determination of heavy metals and polycyclic aromatic carbohydrates in full range of concentration in WW¹</p>	MPS-OOV-mm/year	Twice a year
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Item	Field	Subject of proficiency testing	Compared properties, parameters, indexes or analytes Range of values compared (informative)	Indication of the proficiency testing program	Other specification
	Water	water sampling (drinking water, surface water, waste water)	sampling from water bodies sampling from rivers and streams abstraction of surface water for bathing collection of time-proportional cast samples (selection of monitored indicators according to the range in the given matrices)	MPS-OPoV-month/year	at least once every 5 years
Example 2					
1	Lenght	end scales angle gauge dashes	- End gauges until 1000 mm - linear measure until 2000 mm	MLPM/SLM/x/year	once a two years
2	Temperature and heat	Calibration of of thermometers: - electronical thermometers, - temperature transducers	until 500 °C until 660 °C	MLPM/K/x/year	
	Example 3				

Item	Field	Subject of proficiency testing	Compared properties, parameters, indexes or analytes Range of values compared (informative)	Indication of the proficiency testing program	Other specification
1	Road and construction materials	Asphalt	Softening point penetration	VUCES-PTA/AZ/year/x	once a two years
2		Aggregates	Particle size distribution Shape index	MC/mm/year	once a five years
3.	Sampling	Fresh concrete	Sampling with a shovel	MX/mmm/rok	once a three years

Notice:

~~1. WW – waste water~~

9.5 ANNEX B – ACCREDITATION SCOPE

9.5.1 Calibration laboratories

Examples for definition of accreditation scope

... competent to perform calibration of stationary and mobile automatic emission monitoring systems in accordance with the scope of accreditation specified in the annex to the accreditation certificate.

... to perform calibration of electronic non-automatic weighing instruments of accuracy class 1, 2 and 3 ...

... calibration of measurement standards for mass and weight, of piston and electromechanical pressure meters.

Note:

When the laboratory is accredited for fixed and also flexible scope, the scope of accreditation shall be defined separately for each type.

9.5.2 Testing laboratories

Examples for definition of accreditation scope

... laboratory is competent to perform chemical, microbiological, biological and ecotoxicological testing of water, eatables, commodities for general use, cosmetics, air environment and biological materials, taking samples of water and air environment, measurement of physical quantities in living and working environment components, to express opinions and interpretations of test results in accordance with the accreditation scope specified in the annex to the certificate.

... qualitative and quantitative analysis of genetically modified organisms in eatables using molecular-biological methods...

... testing of construction products and of selected types of machines and equipment for civil engineering in accordance with the accreditation scope specified in the annex to the accreditation certificate.

... testing laboratory is competent to perform noise measurement, dimensions, mass, breaking parameters, speed, fuel consumption, smoke and sights from the vehicles, strength of the bus adds-on, endurance strength of connecting equipment and completeness of type test in the field of car industry and of transport in accordance with EC Directives, EEC regulations and with Slovak Technical Standards.

... to perform sampling from working environment in accordance with the accreditation scope specified in the annex to the certificate.

Note:

If the laboratory is accredited for a fixed and flexible scope, the scope of accreditation must be defined separately for each type.

9.5.3 Medical laboratories

9.5.3.1 Field of activities of medical laboratories

- clinical biochemistry
- clinical microbiology (bacteriology, parasitology, mycology, virology)
- hematology and transfusiology
- immunology and allergology
- medical genetics
- clinical pathology
- embryology and andrology

9.5.3.2 Examples for definition of accreditation scope

... laboratory is competent to conduct clinical biochemical, immunological and hematological examinations using physical-chemical and immunological methods in the blood serum, urine, capillary and venous blood in accordance with the accreditation scope specified in the annex to the accreditation certificate.

... laboratory is competent to perform laboratory examination and testing of biological samples of human origin using virological, serological, molecular biological, biochemical and histological methods for diagnosis of enterovirus infections and detection of antibodies against them; infectious agents causing viral hepatitis and antibodies against them; human immunodeficiency viruses (HIV) and antibodies against them and detection of prion disease pathogenic agent including CJD specific mutation within the accreditation scope.

Note:

If the laboratory is accredited for a fixed and flexible scope, the scope of accreditation must be defined separately for each type.

9.5.4 Proficiency testing providers

Examples for definition of accreditation scope

... competent to provide proficiency testing/interlaboratory comparisons in the field of physical-chemical, microbiological and hydrobiological, ecotoxicological, radiochemical testing and special organic and inorganic analysis of water and in the field of sampling water.

... competent to provide proficiency testing schemes for objects of calibration of measuring for geometrical, mechanical, thermo technical, frequency and time, calibration of reference materials and quantities of ionizing radiation in accordance with the accreditation scope specified in the annex to the certificate.

... competent to provide programs of proficiency testing/interlaboratory comparisons in the field of road and construction materials, asphalt, aggregates and sampling of fresh concrete in accordance with the accreditation scope specified in the annex to the accreditation certificate.