

NATIONAL CENTER FOR ACCREDITATION

DOCUMENT OF GUIDANCE FOR ACCREDITATION OF **INSPECTION BODIES/** NONDESTRUCTIVE TESTING

ACCORDING TO SM SR EN ISO/IEC 17020:2013

Cod DR-OI/NDT-08 Edition 4 Pag 1/19

Elaborated by LAB Department Head OI/NDT

sector

Petru COVRIG

Verified by Head DA LAB

Natalia SAPOVAL

Advised OI/NDT

CT/LAB/ subcommittee

Director

Minutes no.23 of 26.02.2021

Eugenia SPOIALĂ

Approved by

Date of approval: 26.02.2021 Date of application: 01.03.2021

Integral or partial reproduction of the present procedure in any publications and by any means (electronic, mechanical, photocopying, microfilms, etc.), is prohibited unless there is a written consent of MOLDAC.

Content

Chapter title

- 1. Purpose
- 2. Application domain
- 3. Reference documents
- 4. Definitions and abbreviations
- 5. Description of activities
- 5.1 Overview
- 5.2 Requirements according to SM SR EN ISO/IEC 17020:2013
 - 1. Application domain
 - 2. Normative references
 - 3. Terms and definitions
 - 4. General requirements
 - 5. Structural requirements
 - 6. Resource requirements
 - 7. Process requirements
 - 8. Management system requirements
- 5.3 ISO / IEC 17025 requirements to ensure the validity of the inspection results
- 6. Synthesis of modifications

1. Purpose

The purpose of the present document is to describe the requirements for accreditation of Inspection Bodies which perform non-destructive testing of various facilities from different domains of national economy, according to SM SR EN ISO/IEC 17020:2013 and to EA/IAF/ ILAC documents, and NAB which are applicable to this standard in order to ensure a unitary and consequent application.

2. Application domain

This document applies to MOLDAC personnel involved in accreditation process of CAB, as well as to the interested parties.

3. Reference documents

3.1 General documents

- Law Nr. 235 from 01.12.2011 on accreditation activities and of conformity assessment with subsequent amendments.
- Law Nr. 116 from 18.05.2012 on industrial safety of hazardous production facilities.
- SM EN ISO/IEC 17000:2020 Conformity Assessment. Vocabulary and general principles.
- SM EN ISO/IEC 17011:2017 Conformity Assessment. General requirements for the accreditation bodies accrediting conformity assessment bodies.
- SM SR EN ISO/IEC 17020:2013 Conformity assessment Requirements for the operation of various types of bodies performing inspection
- SM EN ISO/IEC 17025:2018 General requirements for the competence of testing and calibration laboratories.
- SM SR EN ISO 10012:2006 Measurement management systems. Requirements for the measurement processes and equipment.
- SM SR EN ISO 9001:2015 Quality management systems. Requirements.
- SM SR EN ISO 19011:2018 Guidelines for management system audit. Requirements.
- EA-4/15 G:2015 Accreditation for Non Destructive Testing
- SM SR EN ISO 9712:2014 Non- Destructive Testing. Qualification and certification of non-destructive personnel. (NDT).

3.2 Application documents IAF/ ILAC:

- ILAC P10:07/2020 ILAC Policy on Traceability of Measurement Results
- ILAC P9:06/2014 ILAC Policy for Participation in National and International Proficiency Testing Activities
- ILAC P14:09/2020 ILAC Policy for Measurement Uncertainty in Calibration
- ILAC P15:05/2020 Application of ISO/IEC 17020:2012 for Inspection Bodies Accreditation.

- ILAC G24:2007 Guidelines for the determination of calibration intervals of measuring instruments
- ILAC P8:03/2019 ILAC Mutual Recognition Arrangement (Arrangement): Supplementary Requirements and Guidelines for the Use of Accreditation Symbols and for Claims of Accreditation Status by Accredited Laboratories and Inspection Bodies
- ILAC-G27:07/2019 Guidance on measurements performed as part of an inspection process
- ILAC G28:07/2018 Guideline for the Formulation of Scopes of Accreditation for Inspection Bodies

EA, ILAC documents can be accessed at the following web sites: www.european-accreditation.org, www.european-accreditation.org, www.european-accreditation.org,

- 3.3 Documents of National Accreditation Body MOLDAC placed on the website www.acreditare.md:
 - Policy P-02 Policy on use of proficiency testings and of other interlaboratory comparisons in accreditation process
 - Policy P -03 Policy on measurement of traceability
 - Policy P-04 Policy on handling the nonconformities
 - Policy P-07 Policy on treating the objections of cabs regarding assessment team members and observers
 - Policy P-08 Policy and rules on the use of accreditation symbols, of ilac-mra combined mark and references to accreditation
 - CA General criteria for accreditation.
 - RA Accreditation rules.
 - National technical regulations related to the afferent domain.

4. Terms, definitions and abbreviations

4.1 Terms and definitions

For the use of this document, there are applied relevant terms and definitions from:

- SM SR EN ISO/IEC 17000:2006 Conformity assessment. Glossary and general principles.
- SM EN ISO/IEC 17011:2017 Conformity assessment. General requirements for accreditation bodies accrediting conformity assessment bodies.
- SM EN ISO/IEC 17025:2018 General requirements for the competence of testing and calibration laboratories.

- SM SR EN ISO/IEC 17043:2011 Conformity assessment. General requirements for proficiency tests
- SM SR EN ISO 9000:2016 Quality management systems. Fundamentals and glossary.

Non-destructive testing (NDT abbreviated) is the way to control the strength of a structure, parts, etc. without having to dismantle or destroy them.

It is a set of methods, which allows characterization of the integrity state of parts, industrial structures, without degrading them, either during production or during use by performing non-destructive testing on a regular basis to detect defects that by other methods is either more difficult or more expensive.

Measurement - The process of experimentally obtaining one or more values that can reasonably be attributed to a size.

Metrological Traceability - ownership of the result of a measurement to be referenced by reference through an uninterrupted and documented calibration chain, each contributing to measurement uncertainty.

4.2 Abbreviations

NAB (ONA) – National Accreditation Body

CAB (OEC) – Conformity Assessment Body

NDT – Non-destructive tests

IB/ NDT (OI/NDT) - Inspection Body for Non-Destructive Testing

CL (LE) – Calibration Laboratory

RD (DR) - Reference documents

ILC – Interlaboratory comparisons

5. Description of activities

5.1 Overview

Accreditation of Inspection Bodies will be performed in accordance with the rules and procedures of National Accreditation Bodies provided for SM SR EN ISO/IEC 17020:2013 and applicable EA, ILAC documents and with the provisions stipulated in the national documents.

Following the analysis of documents and records related to the applications, NAB may invite the applicant, if deemed necessary, in order to clarify certain aspect related to the initiated application.

5.2 Requirements according to SM SR EN ISO/IEC 17020:2013

Numbering and naming of the elements in 5.2 correspond to SM SR EN ISO/IEC 17020:2013

1. Scope

- 1.1. Present requirements specify the additional criteria for application of SM SR EN ISO/IEC 17020:2013 by various types of bodies inspecting with the purpose of accreditation.
- 1.2. These requirements are intended to be fulfilled by entities that conduct inspections of different types, by the national accreditation body.
- 1.3. Present specific requirements are added to the regulatory applicable requirements of the inspection domain mentioned in the corresponding national documents in force.
- 1.4. These requirements do not refer neither to testing laboratories, nor to calibration laboratories that have a different set of criteria defined in ISO/IEC 17025. The following normative documents contain provisions which must be taken into account when applying the requirements of this guidance document:
 - ✓ SM SR EN ISO 10012:2006 Measurement management system –
 Requirements for measurement processes and equipment,
 - ✓ Normative documents pertinent for inspection bodies, which activate in the domain of non-destructive testing, types of facilities required to be included in the accreditation, designation domain.

These documents should be held by the OI/ NDT and accessible when needed by the personnel of NAB and of OI/NDT, who should be acknowledged with the content to the necessary extent for the application of present additional requirements.

According to ILAC G27: 06/2017 if the inspection activity includes measurements and is carried out in accordance with ISO / IEC 17020 accreditation, the following requirements of ISO / IEC 17025 apply:

- Method selection, verification and validation (clause 7.2 of ISO / IEC 17025: 2017 and point 5.4 of ISO / IEC 17025: 2005);
- Metrological traceability (section 6.5 of ISO / IEC 17025: 2017 and section 5.6 of ISO / IEC 17025: 2005);
- Ensuring the validity of the results (section 7.7 of ISO / IEC 17025: 2017 and section 5.9 of ISO / IEC 17025: 2005).

2. Normative references according to chapter 3

3. Terms and definitions

According to chapter 3 of reference standard SM SR EN ISO/IEC 17020:2013.

4. Administrative requirements

4.1 Impartiality and independence

Requirements from the points 4.1.1 - 4.1.5 are fully applied, taking into account the following:

- 4.1.2 Contractual arrangements with the personnel of OI/NDT shall include the avoidance of commercial pressures, financial or of any other kind, which could affect the results.
- 4.1.3 Impartiality risks of OI/NDT shall be considered whenever modifications occur, which might affect the impartiality of OI/NDT or of its personnel.
- 4.1.4 OI/NDT shall disclose any relationships, which might affect impartiality to a relevant extent, using organizational charts or other means.

Examples of relationships, which might influence the impartiality, are the following:

- Relationships with a "mother" organization
- Relationships with departments within the same organization
- Relationships with related companies or organizations
- Relationships with regulatory authorities
- Relationships with clients
- Relationships of personnel
- Relationships with organizations, which design, manufacture, supply, install, purchase, own, use or maintain the inspected items.
- 4.1.5 OI/NDT shall have a documented declaration emphasizing its commitment to impartiality while conducting its inspection activities, conflict management of interests and ensuring the objectivity of its inspection activities. Actions emanating from the top management should not contradict the present statement.

Engagement of impartiality, objectivity of the top management should be publicly available.

4.1.6 OI/NDT should be independent to the necessary extent resulting from the conditions in which inspection bodies of type A, B or C operate.

Organizational chart showing the relationships between the departments within the same organization as well as with related organizations and companies should demonstrate the independence.

4.2 Confidentiality

Requirement is fully applied.

For the performed inspection of the facilities, the procedures should emphasize who, except the client, has the right to access the results.

5. Structural requirements

5.1 Administrative requirements

Requirements are fully applied, taking into account the following:

- 5.1.1 The Inspection Body in the field of non-destructive testing (OI/NDT) or the organization, which is a part of OI/NDT, should have the status of legal personality with headquarters in Republic of Moldova and it should legally registered.
- 5.1.2 OI/NDT, which is a part of an organization involved in other than inspection activities, should be identifiable within that organization.
- 5.1.3 Description of activities is applied particularly to activities included in required accreditation domain.

The Object of inspection is defined in accordance with Appendix nr. 1 of Law nr. 116 from 18.05.2012 "Nomenclature of dangerous industrial facilities and of productions, installations, equipment, and used technologies in dangerous industrial facilities."

- 5.1.4 OI/NDT shall be able to demonstrate which factors were taken into consideration while determining the appropriate level of contracted insurance (Insurance policy). One of the factors, which, should take into account, is the risk associated with performing of inspection activities for non-destructive testing. OI/NDT shall bear legal responsibility for prejudices caused to the client (victim) because of service provision in accordance with the accreditation domain. Coverage amount should be proportional to the level and nature of responsibilities, which may arise from provided by OI/NDT services.
- 5.1.5 Contractual provision should be stipulated among the accredited and recognized OI/NDT, and:
 - user,
 - producer,
 - importer,
 - repair service provider,
 - possessor,

For the initial and periodic performing of inspections of industrial objects, which are produced, imported, under exploitation and/or after their repair.

General terms of providing inspection services in the domain of non-destructive testing should be available. They should specify the type of work, tariffs and decision references of accreditation and designation.

5.2 Organization and management

Requirements are fully applied, taking into account the following:

Structure, requirements for accommodations, personnel, equipment, etc. for an OI/NDT should be in accordance with the provisions of documents for inspections performance applying the non-destructive testing method, and with the document EA-4/15 and with competent authorities.

OI/NDT should maintain an approved organizational chart in a determined and updated manner, which will clearly demonstrate the functions and authority lines for the personnel of the respective OI/NDT and the existing relationships. Positions of the technical manager and of the responsible for management system should be clearly presented in the organizational chart. Responsibilities each of the position within the organization, which could affect the quality of inspections or registration of results, should be included in the documentation of management system. Degree of documentation complexity and the extent to which the personnel can hold several functions will depend on the size of organization.

- 5.2.2a The size, structure, composition and management of an inspection body, taken together, shall be suitable for the competent performance of the activities within the scope for which the inspection body is accredited.
- 5.2.2b "To maintain the capability to perform the inspection activities" implies that the inspection body shall take steps to keep it appropriately informed about applicable technical and/or legislative developments concerning its activities.
- 5.2.2c OI/NDT shall maintain their capability and competence to carry out inspection activities performed infrequently (normally with intervals longer than one year). An inspection body may demonstrate its capability and competence for inspection activities performed infrequently through 'dummy inspections' and/or through inspection activities conducted on similar products.
- 5.2.3a OI/NDT shall maintain an up-to-date organizational chart or documents clearly indicating the functions and lines of authority for staff within the inspection body. The position of the technical manager(s) and the member of management referenced in clause 8.2.3 should be clearly shown in the chart or documents.
- 5.2.4a OI/NDT should supply the client with information regarding the personnel of OI/NDT who perform additional work tasks, which could affect the results of inspections.
- 5.2.5a In order to be considered "available", the person shall be a permanently employed or by contract for the external personnel.
- 5.2.5b In order to ensure that the inspection activities are carried out in accordance with ISO/IEC 17020, technical manager and his assistance should possess a technical competence necessary for understanding of all significant aspects related to the performance of inspection activities using the non-destructive testing method.

The technical manager responsible for the IT / NDT technical activities, including staff monitoring, must be certified at Level 3.

- 5.2.6a In an organization where the absence of an important person results in cessation of activity, the requirement to have an assistant is not applicable.
- 5.2.7a Categories of positions involved in inspection activities are specialists certified for performing non-destructive testing activities, and other additional positions, which could affect management, performance, recording or reporting of the inspection results.
- 5.27b The job description or other documentation shall detail the duties, responsibilities and authorities for each position category referred to in 5.2.7a.

6. Resource requirements

6.1 Personnel

Requirements are fully applicable, taking into account the following:

Qualification requirements for the specialists in the field of non-destructive testing are set in EA-4/15 and ISO 9712:2012.

The entire personnel of OI/NDT must know with the regulatory requirements applicable for the non-destructive testing methods and which are subject of the inspection body.

Personnel responsible for the performance of inspection of industrial facilities should know:

Regulated requirements applicable to these facilities.

The OI / NDT must have sufficient staff to carry out the declared activity (non-destructive testing) but not less than 2 persons.

The OI / NDT has to keep up-to-date records on the certification of non-destructive testing staff and the staff conducting the inspection report.

- 6.1.1a Where appropriate, inspection bodies shall define and document competence requirements for each inspection activity, as described in 5.1.3a.
- 6.1.1b For "personnel involved in inspection activities", see 5.2.7a
- 6.1.1c Competence requirements should include knowledge of the inspection body's management system and ability to implement administrative as well as technical procedures applicable to the activities performed.
- 6.1.1d When professional judgment is needed to determine conformity, this shall be considered when defining competence requirements.
- 6.1.2a All requirements of ISO/IEC 17020 apply equally for both employed and contracted persons.
- 6.1.6a The "mentored working period" mentioned in item b normally includes activities where inspections are performed.
- 6.1.5a The procedure for formally authorizing inspectors should specify that the relevant details are documented, e.g. the authorized inspection activity, the beginning of the authorization, the identity of the person who performed the authorization and, where appropriate, the termination date of the authorization.
- 6.1.7a Identification of training needs for each person should take place at regular intervals. The interval should be selected to ensure fulfilment of clause 6.1.6 item c. The results of the review of training, e.g. plans for further training or a statement that no further training is required, should be documented.
- 6.1.8a A major aim of the monitoring requirement is to provide the inspection body with a tool to ensure the consistency and reliability of inspection outcomes, including any

professional judgments against general criteria. Monitoring may result in the identification of needs for individual training or needs for review of the inspection body's management system.

- 6.1.8b For "other personnel involved in inspection activities", see 5.2.7a.
- 6.1.9a To be considered sufficient, the evidence that the inspector is continuing to perform competently should be substantiated by a combination of information such as;
 - satisfactory performance of examinations and determinations,
 - positive outcome of report reviews, interviews, simulated inspections and other performance assessments (see note to clause 6.1.8),
 - positive outcome of separate evaluations to confirm the outcome of the inspections (this may be possible and appropriate in the case of e.g. the inspection of construction documentation),
 - positive outcome of mentoring and training,
 - absence of legitimate appeals or complaints, and satisfactory results of witnessing by a competent body, e.g. a certification body for persons.
 - satisfactory results of witnessing by a competent body, e.g. a certification body for persons.
- 6.1.9b An effective program for the on-site observation of inspectors may contribute to fulfil the requirements in clauses 5.2.2 and 6.1.3. The program should be designed considering;
- the risks and complexities of the inspections,
- results of previous monitoring activities, and
- technical, procedural or legislative developments relevant to the inspections.

The frequency of on-site observations depends on the issues listed above, but should be at least once during the accreditation re-assessment cycle, however see application note 6.1.9a. If the levels of risks or complexities, or the results from previous observations, so indicate, or if technical, procedural or legislative changes have occurred, then a higher frequency should be considered. Depending on the fields, types and ranges of inspection covered by the inspector's authorizations, there may be more than one observation per inspector necessary to adequately cover the whole range of required competencies. Also, more frequent on-site observations may be necessary if there is lack of evidence of continuing satisfactory performance.

- 6.1.9c In inspection areas where the inspection body has only one technically competent person the internal observation on-site cannot take place. In such cases the inspection body shall have arrangements in place for external observations on-site, unless other sufficient supporting evidence that the inspector is continuing to perform competently is available (see 6.1.9a).
- 6.1.10a Records of authorization should specify the basis on which authorization was granted (e.g. the on-site observation of inspections).
- 6.1.11a Remuneration methods that provide incentives to perform inspections quickly have the potential to negatively affect the quality and outcome of inspection work
- 6.1.12a Policies and procedures should assist inspection body personnel in identifying and addressing commercial, financial or other threats or inducements which could affect their impartiality, whether they originate inside or outside the inspection body. Such procedures

should address how any conflicts of interests identified by personnel of the inspection body are reported and recorded.

Note, however, that while expectations for inspector integrity can be communicated by policies and procedures, the existence of such documents may not signal the presence of integrity and impartiality required by this clause.

6.2 Facilities and equipment

The requirements are fully applied, taking into account the following:

Requirement 6.2.1 is stipulated in EA-4/15 "Accreditation For Non-Destructive Testing".

Requirements for an OI/NDT accreditation for inspection activities performance in the domain of non-destructive testing are as follows:

- to documentary confirm possession of right of property or of the right to use and possess the equipment for performance of non-destructive testing and standards, facilities and measurement means related to the field of required activities:
- to provide working rooms for performance of inspection activities using nondestructive testing or to provide exit on the ground;
- 6.2.1a Equipment required to carry out inspection in a safe manner may include e.g. personal protective equipment and scaffolding.
- 6.2.3a If controlled environmental conditions are needed, e.g. for the correct performance of the inspection, the inspection body shall monitor these and record the results. If conditions were outside acceptable limits for the inspection to be performed, the inspection body shall record what action was taken. See also clause 8.7.4.
- 6.2.3.b Continued suitability may be established by visual inspection, functional checks and/or re-calibration. This requirement is particularly relevant for equipment that has left the direct control of the inspection body.
- 6.2.4a In order to enable tracking when items are replaced, the unique identification of an item of equipment may be appropriate even when there is only one item available.
- 6.2.4b When controlled environmental conditions are needed, the equipment used to monitor such conditions should be considered as equipment that significantly influences the result of inspections.
- 6.2.4c When appropriate (normally for the equipment covered by clause 6.2.6) the definition shall include the required accuracy and measurement range.
- 6.2.6a The justification for not calibrating equipment that has a significant influence on the outcome of inspection (see clause 6.2.4) should be recorded.

Requirement 6.2.7 concerning the traceability of national or international standards should comply with Policies of MOLDAC, code PM, P-03.

6.2.9a Where equipment is subjected to in-service checks between regular recalibrations, the nature of such checks, the frequency and acceptance criteria should be defined.

6.2.10a The information provided in 6.2.7a, 6.2.7b and 6.2.7c for programs of calibration of equipment is valid also for programs of calibration of reference materials.

Each working standard has to be accompanied by a technical sheet according to operational documents. Identification should be complete, clear and unambiguous. Records should be retained.

Measurement equipments should be maintained according to SM SR EN ISO 10012:2006 or SM SR EN ISO/IEC 17025:2006. In particular:

- Working standards of OI/NDT used in activities of non-destructive testing inspections of industrial facilities should be calibrated with insurance of traceability of international system of measurement units SI;
- Measurement equipment should be kept under strict record and should be identified;
- Measurement equipment should be controlled (adjusted, regulated) by OI/NDT in all cases before being installed or reinstated;
- Frequency of calibration of standards and working measurement instrument is determined by OI/NDT in accordance with ILAC G24:2007;

Responsibility for calibration of standards of work should be clearly defined and should be fulfilled.

When selecting the standards of work there should be taken into account the calculated expanded uncertainty and prescribed requirements of applicable normative documents.

Requirement 6.2.12 is applied to all software, including those with tables the calculation functions of which are used.

In all cases there should be present records of performed tests. It is applicable to all types of software, including text.

It is necessary to ensure that stored data could be accessed and operated for a defined period, even in case of change of data or of operating system.

- 6.2.11a When the inspection body engages suppliers to perform activities which do not include the performance of part of the inspection, but which are relevant for the outcome of inspection activities, e.g. order registration, archiving, delivery of auxiliary services during an inspection, the editing of inspection reports or calibration services, such activities are covered by the term "services" used in this clause.
- 6.2.11b The verification procedure should ensure that incoming goods and services are not used until conformance with specification has been verified.
- 6.2.13a Factors that should be considered in protecting the integrity and security of data include;
- backup practices and frequencies,
- effectiveness in restoring data from backup,

- virus protection, and
- password protection.

6.3 Subcontracting

Is fully applicable.

7. Process requirements

7.1 Inspection methods and procedures

Requirements 7.1 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

- 7.1.1 Inspection methods using the non-destructive testing method are those described in documents approved by competent authorities, normative documents of non-destructive testing method and technical sheet of the facility which is subject to inspection. OI/NDT should comply with determined requirements and should use authenticated documents.
- 7.1.2 7.1.4 Is fully applicable.
- 7.1.5 Is fully applicable, including OI/NDT should perform the analysis of applications, orders, and contracts. Only after the performance of analysis, the contract between accredited OI/NDT and the client will be concluded.
- 7.1.5a Where appropriate the contract or work order control system should also ensure that:
- contract conditions are agreed
- personnel competence is adequate
- any statutory requirements are identified
- safety requirements are identified
- the extent of any subcontracting arrangements required is identified

For routine or repeat work requests the review may be limited to considerations of time and human resources. An acceptable record in such cases would be an acceptance of the contract signed by an appropriately authorised person.

- 7.1.5b In situations where verbal work orders are acceptable, the inspection body shall keep a record of all requests and instructions received verbally. Where appropriate, the relevant dates and the identity of the client's representative should be recorded.
- 7.1.5c The contract or work order control system should ensure that there is a clear and demonstrable understanding between the inspection body and its client of the scope of the inspection work to be undertaken by the inspection body.
- 7.1.6a The information referred to in this clause is not information provided by a subcontractor, but information received from other parties, e.g. a regulating authority or the client of the inspection body. The information may include background data for the inspection activity, but not results of the inspection activity.
- 7.1.6 7.1.9 are fully applicable.

Procedures of recording the observations and primary data during the inspections should be applicable to all subjects of inspection and should comply with the applicable normative documents.

7.2 Manipulations of inspected elements and standards

Requirements 7.2 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

- 7.2.2 Subjects of inspection using non-destructive testing method are prepared by the costumer.
- 7.2.3 Defects and external non-conformities detected in the process of inspection of facility after receiving them for the performance of non-destructive testing inspection are recorded and reported to the client.
- 7.2.4 Specific conditions for the performance of non-destructive testing should be defined, taking into account the analysis of sensible points for the performance of non-destructive testing.

7.3 Inspection records

Requirements 7.3 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

7.3.1a The records should indicate which particular item of equipment, having a significant influence on the result of the inspection, has been used for each inspection activity.

This archivation should allow quick and secure identifications of inspections which industrial facilities where subject to, and to results of those inspections. OI/NDT should keep records of the inspection results.

Record of statistical data related to the conformity of industrial facilities subject to inspections should be presented to the competent authority (Law nr. 116 from 18.05.2012).

Records should indicate which equipment, having a significant influence on the inspection results, was used for non-destructive testing inspections.

Record keeping period is at least equal to the period between two successive inspections.

7.4 Inspection reports and inspection certificates

Requirements 7.4 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

For OI/NDT is distinguished the following document:

- Inspection Report (of control) – Law nr. 116 from 18.05.2016, Art.9,pt. 2).

Each OI/NDT completes the inspection reports according to the provisions of applicable normative documents.

The Head of OI/NDT verifies and signs the reports of non-destructive testing inspections.

When drafting the Inspection Reports/ Inspection Certificates OI/NDT should comply with he Policy of MOLDAC related to the utilization of accreditation symbols and references to accreditation, code P-08.

7.5 Complaints and appeals

Requirements 7.5 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

In the contract referred to in the requirement 7.1.5 should be stipulated the right of client to fill a complaint or an appeal at the OI/NDT headquarters.

This procedure should be also referred to the treatment of observations, warnings and complaints issued by state bodies.

7.6 Complaints and appeals process

Requirements are fully applicable.

8. Management system requirements

8.1 Options

Options A or B of the standard SM SR EN ISO/IEC 17020:2013 are applicable, taking into account the following:

- 8.1.3a Expression of "the present international standard" is a reference to ISO/IEC 17020.
- 8.1.3b Option B does not impose that the management system of an inspection body should be certified according to ISO 9001. However, when the determining the extent of necessary assessment, the accreditation body should consider if the inspection body has been certified according to ISO 9001 by a certification body accredited by an accreditation body which is a signatory to the IAF MLA, or to a regional MLA for certification of management systems.

8.2 Management system documentation

Requirements 8.2 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

8.2.4a For easy reference, it is recommended that the inspection body indicates where the requirements of ISO/IEC 17020 are addressed, e.g., by means of a cross reference table.

8.3 Control of documents

Requirements 8.3 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

8.4 Control of records

Requirements 8.4 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

- 8.4.1a This requirement means that all records needed to demonstrate compliance with the requirements of the standard shall be established and retained.
- 8.4.1b In cases where electronic seals or authorizations are used for approvals, access to the electronic media or seal should be secure and controlled.

8.5 Management review

Requirements 8.5 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

- 8.5.1a A review of the impartiality risk identification process and its conclusions (clauses 4.1.3/4.1.4) should be part of the annual management review.
- 8.5.1b The management review should take into account information on the adequacy of current human and equipment resources, projected workloads and the need for training of both new and existing staff.
- 8.5.1c The management review should include a review of the effectiveness of systems established to ensure adequate competence of the personnel.

8.6 Internal audits

Requirements 8.6 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

8.6.4 n1 The inspection body shall ensure that all requirements of ISO 17020 are covered by the internal audit program within the accreditation re-assessment cycle. The requirements to be covered shall be considered for all fields of inspection and for all premises where key activities are performed (see IAF/ILAC A5).

The inspection body shall justify the choice of audit frequency for different types of requirements, fields of inspection and premises where key activities are performed. The justification may be based on considerations such as;

- criticality,
- maturity,
- previous performance.
- organisational changes,
- procedural changes, and
- efficiency of the system for transfer of experience between different operational sites and between different fields of operation.
- 8.6.4 n2 Competent externally contracted personnel may carry out internal audits.
- 8.6.4 n2 If the OI/NDT detects problems that affect the fulfilment of any ISO/IEC 17020 requirement (eg increase of the complaints and appeals; unsatisfactory results in external audits; staff qualification problems, etc.), it shall apply the internal audit

with a sufficiently short frequency taking into account the risks associated with inspection activities.

8.6.5 n1 Internal audits may be performed by competent external contracted personnel.

8.7 Coercive actions

Requirements 8.7 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full.

8.8 Preventive actions

Requirements 8.8 of the Standard SM SR EN ISO / IEC 17020: 2013 apply in full, taking into account the following:

8.8.1a Preventive actions are taken in a pro-active process of identifying potential nonconformities and opportunities for improvement rather than as a reaction to the identification of non-conformities, problems or complaints.

5.3 ISO / IEC 17025 requirements to ensure the validity of the inspection results

Should demonstrate the technical competence through participation at the Interlaboratory comparisons at the national level.

In the absence of ILC at national level, the IB / NDT is required to ensure the validity of the inspection results through internal activities in accordance with ISO / IEC 17025 or bilateral comparisons.

The validity assurance at the testing should be performed in accordance with ISO/ IEC 17025, EA – 4/15 G. Policy of OI/NDT on PT/ILC should comply with the policy of MOLDAC "Policy on use of competence testing and other Interlaboratory comparisons in the process of accreditation in accordance with ILAC P9, EA-2/14 and EA-4/15", code P-02.

The main tools used to ensure the correct performance of the methods are:

- knowledge of the inspected object (6.1.3 ISO/IEC 17020);
- qualification (6.1.3 ISO/IEC 17020);
- staff ongoing training (6.1.5 ISO / IEC 17020);
- monitoring (6.1.8, 6.1.9 ISO / IEC 17020);
- monitoring through internal activities, use of reference materials or quality control
 materials; functional verifications of measuring equipment; use of verification or
 working calibrators with control charts, when applicable; intermediate checks of
 measuring equipment; analysis of reported results; internal comparisons between
 OI / NDT staff (7.7.1 ISO/IEC 17025);
- participation in proficiency testing schemes (7.7.2 ISO/IEC 17025).

The planned scope for an external assessment of competency is similar to the "in-house" assessment of staff competence, which shall be based on the use of samples with known defects.

According to the Accreditation for Non- Destructive Testing document from May 2015, rev. 01 page 11 from 24, the planned field for such an external assessment of the proficiency is

similar with the "in-house" assessment of the proficiency of the personnel, which should be based on use of samples with known defects.

Inspection bodies should ensure that each testing sample used is properly validated and when it is impossible to proved an appropriate variety of testing samples, e.g. due to the nature of undertaken attempt, the arrangements may be considered. In such cases, available items for testing during normal operation of the facility can be tested by the personnel who should be assessed, monitored, and later re-tested by a person authorized by a body for this purpose. This process is a part of internal control of the validity. Each person and body accredited is required to participate in proficiency testing, as much as at a possible and available period, taking into account the major representation from the fields of important testing and of different techniques.

Monitoring of the inspection results validity through non-destructive testing shall be planned and analysed. The results of the monitoring shall be kept.

OI/NDT should immediately inform the competent authority and MOLDAC about management system dysfunctions (relating to personnel, equipment) or on appropriateness of performed inspections, which may question the compliance of verified objects with the provisions of applicable normative documents.

6. Synthesis of modifications

There were included modifications of the following pages: 1,3,4,18,19.