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Guidance on the application of ISO/IEC 17020 in vehicle inspection

PURPOSE

This document has been produced by a work group consisting of experts from the motor vehicle inspection field and from accreditation bodies representing EA, the European co-operation for Accreditation. The purpose of this document is to provide guidance with a view to harmonise the application of *Conformity assessment – Requirements for the operation of various types of bodies performing inspection (ISO/IEC 17020:2012)* in the field of vehicle inspection. ISO/IEC 17020:2012 remains the authoritative document. In case of dispute concerning application of this document, the individual accreditation bodies will adjudicate on unresolved matters.

Authorship

This publication was prepared by the EA Inspection Committee (IC) in co-operation with International Motor Vehicle Inspection Committee, CITA.

Official language

The text may be translated into other languages as required. The English language version remains the definitive version.

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0. INTRODUCTION

0.1 Requirements for the operation of various types of bodies performing inspection are laid down in the International Standard *Conformity assessment – Requirements for the operation of various types of bodies performing inspection* (ISO/IEC 17020:2012). These requirements apply to various types of inspection. ILAC has published, and EA has adopted, ILAC P15 where helpful information is provided to ensure consistent application of the Standard.

0.2 This document provides information for the application of ISO/IEC 17020:2012 for the accreditation of inspection bodies in the field of vehicle inspection. It is intended to be used by accreditation bodies assessing vehicle inspection bodies for accreditation as well as by vehicle inspection bodies seeking to manage their operations in a manner fulfilling the requirements for accreditation. It avoids addressing information that is specifically addressed in ILAC P15 and is not intended to subtract from or add to the requirements of the standard.

0.3 The structure of this document reflects that of the Standard, including titles of clauses and their numbering. The headings and clause numbers from the Standard are first printed in bold. For ease of reference, each application note is identified by the relevant clause number of ISO/IEC 17020:2012 and an appropriate suffix, e.g. 4.1.4 a would be the first application note on the requirements of clause 4.1.4 of the standard.

0.4 The term “shall” is used throughout this document to indicate those provisions which, reflecting the requirements of ISO/IEC 17020:2012, are considered to be mandatory. The term “should” is used to indicate those provisions which, although not mandatory, are provided by EA as a recognized means of meeting the requirements. The term “may” is used to indicate something which is permitted. The term “can” is used to indicate a possibility or a capability. Vehicle inspection bodies whose systems do not follow this EA publication will only be eligible for accreditation if they can demonstrate to the accreditation body that their solutions meet the relevant clause of ISO/IEC 17020:2012 in an equivalent or better way.

0.5 National requirements shall be mentioned in the scope of accreditation and shall be considered by accreditation bodies assessing vehicle inspection bodies for accreditation.

0.6 Guidance about established methods and principles important for vehicle inspection are developed by CITA, International Motor Vehicle Inspection Committee. Such best practices on different topics are published in CITA Recommendations (*). This experience should be taken into account by inspection bodies.

0.7 It is intended that after a certain period of use, the content of this document will be revised.

(*) CITA Recommendations can be obtained free of charge from CITA through the CITA web page

1 SCOPE

1 a This document is applicable to inspection bodies performing periodic inspection of the roadworthiness of motor vehicles and their trailers as required by EU legislation (see section REFERENCES). It can also be useful for other types of vehicle inspection, such as registration / first inspection and inspection after vehicle modifications.

1 b This document is not applicable either for motor vehicle type approvals or for single vehicle approvals.

2 NORMATIVE REFERENCES

Directive 2014/45/EU on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC

Conformity assessment – Vocabulary and general principles (ISO/IEC 17000: 2020)

Conformity assessment – Requirements for the operation of various types of bodies performing inspection (ISO/IEC 17020:2012)

ILAC P15:05/2020 Application of ISO/IEC 17020:2012 for the Accreditation of Inspection Bodies

ILAC G24:2007 Guidelines for the determination of calibration intervals of measuring instruments

ILAC-G27:07/2019 Guidance on measurements performed as part of an inspection process

CITA Recommendation no. 13 – Quality measurement methods for vehicle inspection

CITA Recommendation no. 24 – Measurement traceability in vehicle inspection

3 TERMS AND DEFINITIONS

3 a For the purpose of this document, the terms and definitions given in ISO/IEC 17000 and ISO/IEC 17020:2012 apply.

3.1 a Vehicle inspection means examination of a vehicle and some of its characteristics and determination of their conformity with requirements related to road safety and environmental protection.

3.1 b Note that the EU directive 2014/45/EU on periodic roadworthiness tests for motor vehicles and their trailers uses the word “test” throughout the document, although the meaning is “inspection” according to definitions in ISO/IEC 17000. Throughout this EA-document the term “inspection” is used.

3.6 a EU directive 2014/45/EU on periodic roadworthiness tests for motor vehicles and their trailers is an example of a vehicle inspection system.

4 GENERAL REQUIREMENTS

4.1 Impartiality and independence

4.1.2 a In the cases where the inspection body has a discount policy for key account contracts, this policy shall be handled as a risk to its impartiality (see 4.1.3 – 4.1.4 in ISO/IEC 17020:2012).

4.1.3 a The inspection body should provide instructions to all personnel involved in inspection activities so they know how to identify risks, and what to do if a risk to impartiality is detected, in order to take part in the identification of risks. The inspection body shall keep records of risks detected and actions taken.

4.1.3 b Sometimes inspection bodies perform inspections at the premises of a client or workshop. In these cases the risks to impartiality shall be identified and eliminated or minimized according to clauses 4.1.3 – 4.1.4 of ISO/IEC 17020:2012.

4.1.4 a One measure for the inspection body should be to have a detailed and practical code of conduct for its inspectors to enable the inspection body to identify and mitigate possible conflicts of interests.

4.1.6 a If the inspection body has any relation with organisations operating in the field of motor vehicles, such as fleet management, maintenance, design, vehicle manufacture, vehicle retail, spare part provision, or homologation, it shall establish and implement appropriate measures to prevent potential conflicts of interest or undue influence.

4.1.6 b If the inspection body has to meet the requirements for type A, the inspection body should not market its inspection services together with a party it shall be independent of.

4.2 Confidentiality

4.2.1 a The inspection body shall have a documented statement to follow defined confidentiality terms.

4.2.1 b Information made available to national authorities, e.g. registering the results of the inspections to the database of the relevant authority, is not considered as information placed in the public domain.

4.2.1 c A legally enforceable commitment can for instance be a statement in the customer reception or on a web page, unless national legislation establishes otherwise.

4.2.1 d As a useful tool, the inspection body may publish brochures annually, or in other defined period, including information on inspection results of vehicles in general, in order to make public (users, purchasers etc. of vehicles) aware of vehicle inspection results and support improvements in the automotive and the related industry sectors.

5 STRUCTURAL REQUIREMENTS

5.1 Administrative requirements

5.1.4 a To determine adequate provisions to cover liabilities, the inspection body may take into account the following factors: general and/or professional liability insurance details, National legislation regarding liabilities, the volume of vehicles inspected, the categories of vehicles, the number of inspectors and inspection lanes, the geographic position of the inspection body's premises, number of claims occurred etc.

5.1.5 a General terms and conditions of the inspection body, including its fees, terms of payment, procedures for disputes etc., should be available to all interested parties.

5.2 Organisation and management

5.2.5 a Overall responsibility includes preconditions, resources, instructions etc., as opposed to the performance of inspections, where the inspector is fully responsible. Normally a technical manager should be responsible for the following:

- Selection of equipment and implementation of equipment maintenance schemes,
- Selection and maintenance of inspection procedures,
- Definition of competence criteria,
- Overall performance of inspectors, including quality, reliability and impartiality,
- Any technical issues raised by the inspectors.

5.2.5 b The competence level should be based on an appropriate technical qualification (e.g. technician, engineer) and perennial experience in motor vehicle technology or equivalent. Technical managers should have appropriate experience and training in vehicle inspections.

6 RESOURCE REQUIREMENTS

6.1 Personnel

6.1.1 a Competence requirements shall take into account different categories of vehicles.

6.1.2 a The inspection body should be able to demonstrate the factors taken into account to justify the number of inspectors employed or contracted.

6.1.5 a Procedures for selecting, training, authorizing and monitoring shall include (or correspond to) actions to be taken when competence or behaviour is found to be unsatisfactory.

6.1.8 a The inspection body should evaluate which approach to monitoring is most suitable, taking into account their management system, the way inspection is organized and the intended use of the monitoring results.

6.1.8 b The monitoring of inspectors should include both direct methods, such as re-inspections, mystery shopper vehicles, examination of inspection reports etc., and indirect methods, such as statistical analyses, as described in CITA Recommendation no. 13.

6.1.9 a For each inspector observations or sufficient supporting evidence shall be related to all of the main categories of vehicles covered by his/her defined competence.

6.1.11 a Whenever relevant, the remuneration should be part of the risks identification (see 4.1.3-4.1.4).

6.2 Facilities and equipment

6.2.1 a The premises, including any mobile inspection sites, used for vehicle inspections should:

- be designed with sufficient space for the technical inspectors to perform vehicle inspections adequately and correctly and in safe and secure conditions.

6.2.1 b The inspection body shall ensure that new inspection equipment is not released for use until it has been verified and, if relevant, calibrated. The verification should focus on the following items:

- conformity of the construction and function to the stated specifications;
- correct number, proper identification, no apparent damage;
- presence of relevant supporting documentation and technical data.

6.2.4 a Normally, equipment not having a significant influence on the results are those which do not directly lead to any determination of conformity with requirements.

Examples of equipment having a significant influence on the results are:

- Brake tester
- Opacimeter
- Exhaust gas analyser

Examples of equipment normally not having significant influence are devices used to check:

- Side slip
- Windscreen damage or opacity

In these cases, the results depend on the professional judgment of the inspector, and the equipment is normally used as supporting tool.

More examples are found in CITA Recommendation 24 “Measurement traceability in vehicle inspection”.

6.2.6 a The calibration programme or procedures should define the calibration processes, the environmental conditions when relevant, the frequency or other reasons for calibration, the acceptance criteria and the action to be taken when the results are found unsatisfactory and/or inadequate.

6.2.6 b The programme of calibration should take into account the manufacturers’ recommendation, the use that is made of the equipment, its history of calibration, in-service checks and relevant elements defined in ILAC G24.

6.2.6 c The calibration status should be shown clearly on relevant inspection equipment, preferably by means of suitable markers or labels, indicating when the last calibration was performed or when the next calibration is due, or the use of information programs that forbid the use of equipment out of calibration.

6.2.9 a The programme of in-service checks should take into account the manufacturers' recommendation, the use that is made of the equipment, the calibration programme etc.

6.2.9 b Inter-equipment comparisons can be considered as in-service checks.

6.2.11 a Verification of incoming goods is relevant for:

- Stickers, forms, labels, etc. meant to show inspection results (verify contents),
- Equipment for inspection (verify safety, proper functioning, sufficient documentation etc.).

6.2.13 a Commercial software generally provided by inspection equipment manufacturers can normally be considered to be adequate for use without validation or revalidation by the inspection body. However, custom made software or commercial software which has been customized should be validated.

6.2.13 b When specific software is used there shall be relevant documentation for the proper use.

6.2.13 c When tablets, laptops or similar portable PCs are used during the inspections, attention shall be given for the integrity and security of data when transferred or processed.

6.2.14 a Examinations of the effect of defects on previous inspections, and actions taken, shall be documented.

7 PROCESS REQUIREMENTS

7.1 Inspection methods and procedures

7.1.1 a The methods and procedures shall be based on relevant legislation, such as, but not limited to, the relevant EU directive, as implemented by national legislation.

The methods and procedures should also consider relevant national or international standards, other normative documents, or other inspection recommendations such as CITA Recommendations.

7.1.5 a The inspection body should have procedures for handling necessary re-planning of its daily operations based on the real availability of its inspectors or other personnel.

7.1.5 b It is common in the scope of periodic inspection of vehicles that the work to be undertaken is not formalized as an original contract in paper form. However, clients are duly informed of the work to be undertaken through:

- The applicable regulation as made publicly available by the authorities,
- The inspection body's communication towards clients, which contains its general terms and conditions, and which clearly describes the inspection process and its price per vehicle categories, including confidentiality terms.

Hence, clients identification through the inspection body's booking system and/or any kind of reservation system is considered as a valid contractual agreement by the client of the work to be undertaken and its price.

7.1.6 a Information can for instance be supplied from the vehicle industry or the type approval authority.

7.1.7 a The inspection procedure shall ensure traceability of the inspection results to the inspected vehicles.

7.1.8 a Data transfer can be for instance the transfer of results and data of the inspections to the database of the relevant competent authority.

7.3 Inspection records

7.3.1 a For the purpose of evaluation of the inspection, records shall cover, as a minimum, the inspection center, inspector(s) (see 7.3.2 ISO/IEC 17020:2012), equipment used (see 7.3.1n1 ILAC P15) and any recorded observations and data from the inspection.

7.3.1 b Additional information such as analyses of inspections results, performance indicators, statistics and quality assurance activities can be used to demonstrate the effective fulfilment of the inspection procedures and to support the evaluation of the inspections.

7.4 Inspection reports and inspection certificates

7.4.2 a In many countries the inspection reports or certificates are prescribed by national regulations. Even so, relevant requirements of ISO/IEC 17020:2012 shall be fulfilled. In the cases where modifications or additions to the prescribed certificate are expressly forbidden, an annex to the official inspection report could be used for instance.

7.5 Complaints and appeals

7.5.2 a The description of the handling process can for instance be put on a web page or handed over on-site to the interested party.

7.6 Complaints and appeals process

7.6.5 a If an appeal results in replacement of an inspection report and/or certificate, this shall be communicated, if necessary, also to the relevant national authorities, according to national legislation requirements.

8 MANAGEMENT SYSTEM REQUIREMENTS

8.6 Internal audits (Option A)

8.6.2 a An important process in vehicle inspection is the monitoring of the performance of inspectors. The audit program shall consider the importance of the monitoring process.

8.6.2 b The internal audits should include on-site visits, to cover the inspection activities.

8.6.5 a To ensure that internal audits are conducted by qualified personnel knowledgeable in inspection, at least one member of the auditor team should be qualified, or have demonstrated technical competence, in vehicle inspection, so that all procedures can be covered (see 8.6.3).