



SLOVENSKI STANDARD

oSIST prEN 16944:2016

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Kmetijski stroji in traktorji - Standardizirani dostop do informacij popravil in vzdrževanja (RMI) - Zahteve

Agricultural machinery and tractors - Standardized access to repair and maintenance information (RMI) - Requirements

Landmaschinen und Traktoren - Genormter Zugang zu Reparatur- und Wartungsinformationen (RMI) - Anforderungen

Matériel agricole et tracteurs - Accès normalisé aux informations de réparation et de maintenance - Élément complémentaire

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Agricultural machinery and tractors - Standardized access to repair and maintenance information (RMI) - Requirements

Matériel agricole et tracteurs - Accès normalisé aux
informations de réparation et de maintenance -
Élément complémentaire

Landmaschinen und Traktoren - Genormter Zugang zu
Reparatur- und Wartungsinformationen (RMI) -
Anforderungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 144.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 16944:2015) has been prepared by Technical Committee CEN/TC 144 “Tractors and machinery for agriculture and forestry”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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Introduction

In order to provide additional information on the implementation of the legal requirements specified by the EU Regulation 167/2013 and its Delegated Acts and to consider the specific conditions in the sector of agricultural and forestry vehicles, the European Commission provided CEN with a mandate to develop a European Standard (EN).

This standard includes the requirements to be fulfilled by Repair and Maintenance Information (RMI) systems as applied by the European Commission – Enterprise and Industry Directorate-general, Consumer goods - Automotive industry EC mandate M/421:

“Mandate to the European Standardization Organizations for standardization in the field of vehicle OBD, Repair and Maintenance Information” (dated Brussels, 21 January 2008).

This mandate relates to the EC type-approval system for vehicles falling into the scopes of the Regulation 167/2013 and, in particular, to requirements for access to vehicle repair and maintenance information by independent operators.

The purpose of the EC Mandate M/421 is to develop a standard or set of standards which specify the requirements to provide “standardized access to repair and maintenance information (RMI)” for independent operators.

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1 Scope

This standard specifies the requirements to be fulfilled by manufacturers of tractors, interchangeable towed equipment and trailers used in agriculture and forestry in order to comply with the obligation to provide non-discriminatory access for independent operators to Repair and Maintenance Information (RMI) and to provide information on On-Board Diagnostic (OBD) systems.

This standard specifies all organisational and technical requirements and means of verification to comply with the EU Regulation 167/2013 and its Delegated Acts with the objectives to allow the fair competition between manufacturers and between operators and to improve the competitiveness and future viability of companies with special regard to Small and Medium-sized Enterprises (SME).

This standard is applicable to agricultural and forestry vehicles approved (respectively to be approved) in accordance with the EU Regulation 167/2013.

This standard is not applicable to small series vehicles.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Not applicable

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

vehicle tractor

interchangeable towed equipment or trailer used in agriculture and forestry for which an approval in accordance with EU Regulation 167/2013 is available respectively applied for

3.2

non-discriminatory access

providing access to RMI information to approved independent operators, third party manufacturers/suppliers, and authorized dealers (or repairers), which includes information that allows diagnosis and repair of agricultural and forestry vehicles

Note 1 to entry: Any differentiation compared to manufacturer's authorized dealers based on comprehensible and justifiable reasons does not constitute a discrimination.

3.3

independent operator

company registered as a legal entity other than authorised dealers and repairers which are providing repair and maintenance services as their main business and which are directly or indirectly involved in the repair and maintenance of vehicles

prEN 16944:2015 (E)**3.4
repair and maintenance information
RMI**

information needed to maintain the original configuration or the manufacturers latest required configuration of the vehicle as placed on the market including the information required for diagnosis, servicing, inspection, periodic monitoring, repair, reprogramming or reinitialising of the vehicle which the manufacturers provide for their authorized dealers and repairers, including all subsequent amendments and supplements to such information, and all information required for the fitting of parts and equipment on vehicles

**3.5
on-board diagnostic
OBD**

system having the capability to identify the likely area of malfunction

**3.6
secure area**

part, component, system, hard- or software critical to the correct functioning of the regulatory compliance, safety and environmental control system protected against unauthorized manipulations

**3.7
service handbook**

document usually called operator's manual

Note 1 to entry: See for example clauses 'information for use' included in safety standards.

**3.8
technical manual**

document usually called repair manual

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4 Requirements related to RMI**4.1 General**

Functional safety and availability of agricultural and forestry vehicles are very critical due to the operating conditions in agriculture and forestry. Therefore, the non-discriminatory access to repair and maintenance is of high interest for vehicle manufacturers and end customers. The competition on the service level can only improve the service quality if appropriate pre-conditions are given.

The volume of information, its level of detail and the way of presenting this information are subject of the vehicle manufacturer's decision and usually depend on the vehicle complexity and the structures on the customer side.

4.2 Type of information to be provided**4.2.1 General**

To allow repair, service and maintenance the following information is usually needed but not necessarily relevant for each type of vehicle:

- the vehicle type and model;
- an unequivocal vehicle identification number per manufacturer;
- service handbooks including repair and maintenance records and service schedules;

- technical manuals and technical service bulletins;
- component and diagnosis information (such as minimum and maximum theoretical values for measurements, if available in the technical manuals for authorized dealers);
- wiring diagrams;
- diagnostic error codes, including manufacturer specific codes;
- information on the installation of new or updated software on a new vehicle or vehicle type (for instance software part number);
- information on initialization of released component included in the vehicle;
- information on reprogramming a released component included in the vehicle;
- information on a released test component using an actuation of it via diagnosis;
- information on service parts replacement procedures;
- information concerning, and delivered by means of, proprietary tools and equipment (for instance part number);
- data record information, test data and other technical information (such as two-directional monitoring data, if applicable to the technology used);
- standard work units or time periods for repair and maintenance tasks if made available, either directly or through a third party, to manufacturers' authorized dealers and repairers;
- training material;
- relevant working tools respectively relevant part numbers.

4.2.2 Vehicle parts

Part number identification information on all parts of the vehicle which can be replaced by spare parts offered by the vehicle manufacturer shall be provided. This information shall allow the identification of the vehicle and the relevant spare parts by referring for example to vehicle identification numbers, part numbers, etc. This information shall be regularly updated in order to include all modifications to individual vehicles after their production.

4.2.3 Reprogramming of control units

Information on reprogramming of control units for the purposes of, e.g. recalibration after a repair or loading software to a replacement Electronic Control Unit (ECU) or recoding or reinitialising replacement parts or components, shall be provided.

4.2.4 Tractor equipment or trailer combination

If the manufacturer recommends specific combinations of tractors, interchangeable towed equipment and trailers, these recommendations shall include information on the interconnectivity of the vehicle recommended.

4.3 Presentation of information

4.3.1 Information medium

The RMI system of the vehicle manufacturer shall allow appropriate access to the information (see 4.2) and reflect the volume and type of information. Due to the heterogeneity of the agricultural and forestry vehicle sector, organisational and technical solutions for providing the information shall necessarily include a wide range of different approaches including procedures subject to the Original Equipment Manufacturer (OEM)'s decision, for example:

- contact person;
- technical service support technician;
- hot line;
- the internet:
 - manufacturer's website;
 - RMI specific sites or information systems;
 - Example of a use case based information system, see informative Annex A;
- others.

4.3.2 Availability of information

The information on repair and maintenance shall be accessible during usual hours of business of the manufacturer. Internet based systems shall be available permanently, except as required for maintenance purposes of the system.

4.3.3 Access to information

Access to information related to non-secure areas shall require information about the applicant which is necessary for the confirmation and handling of the payment (for example name of company, name of person asking for information, information on registration as a legal entity, payment connections).

For access to any OBD and repair and maintenance information related to secure areas of the vehicle, the independent operator shall be approved and authorized for this purpose on the basis of documents demonstrating that it pursues a legitimate business activity.

4.3.4 Training

Training courses which are offered to authorized dealers or repairers and, if need be, have to be passed before getting information, shall also be available and, if need, be requested for independent operators. The conditions for joining training courses shall be the same, for example certificate of education.

Training courses shall include the same information about using the OEM's RMI system, diagnostic error codes management, live data, actuators, special functions, reprogramming procedures, technical service bulletins, wiring diagrams and the use of working tools as supplied to authorized repairers, if appropriate.

4.3.5 Fees / payment

The vehicle manufacturer may charge reasonable and proportionate fees for access to vehicle repair and maintenance information, working tools and training courses. The fee may be time-based (fee per day, month, year) or transaction-based. The fee may take into account the extent to which the information, working tools and training courses are used for providing repair and maintenance services.

The fee for getting access to RMI does not include the right to duplicate or re-publish this information.