



SLOVENSKI STANDARD

SIST EN 16944:2017

01-november-2017

Kmetijski stroji in traktorji - Standardizirani dostop do informacij o popravilih in vzdrževanju (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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Ta slovenski standard je istoveten z: EN 16944:2017

ICS:

43.040.15	Avtomobilska informatika. Vgrajeni računalniški sistemi	Car informatics. On board computer systems
65.060.01	Kmetijski stroji in oprema na splošno	Agricultural machines and equipment in general

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EUROPEAN STANDARD

EN 16944

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2017

ICS 43.040.15; 65.060.10

English Version

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

Tracteurs agricoles et pulvérisateurs automoteurs -
Accès normalisé aux informations de réparation et de
maintenance - Prescriptions

Landwirtschaftliche Traktoren und selbstfahrende
Pflanzenschutzgeräte - Genormter Zugang zu
Reparatur- und Wartungsinformationen (RMI) -
Anforderungen

This European Standard was approved by CEN on 9 July 2017.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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European foreword

This document (EN 16944:2017) 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 European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2018, and conflicting national standards shall be withdrawn at the latest by March 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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EN 16944:2017 (E)**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 European 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 European 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 European Standard is applicable to agricultural and forestry vehicles approved (respectively to be approved) in accordance with the EU Regulation 167/2013.

This European Standard is not applicable to small series vehicles, of which the annual worldwide production of a type of vehicle is less than

- 200 vehicles in case of wheeled tractors;
- 80 vehicles in case of track-laying tractors;
- 400 vehicles in case of trailers;
- 200 vehicles in case of interchangeable towed equipment.

2 Normative references

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: The volume of information, its level of detail and the way of presenting this information is dependent on the vehicle complexity and the structures.

Note 2 to entry: Any differentiation compared to manufacturer's authorized dealers based on comprehensible and justifiable reasons does not constitute a discrimination.

EN 16944:2017 (E)**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

Note 1 to entry: For the purposes of this document, authorized dealers or repairers within the distribution system of a given vehicle manufacturer are regarded as independent operators for the purpose of this standard to the extent that they provide repair or maintenance services for vehicles in respect of which they are not members of the vehicle manufacturer's distribution system.

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 which has the capability to identify the likely area of malfunction, for example by means of fault codes stored in a computer memory

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3.6**secure area**

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

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3.7**service handbook**

document usually part of the 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

4 Requirements related to RMI**4.1 General**

Functional safety and availability of agricultural and forestry vehicles are very critical due to the particular operating conditions found in agriculture and forestry. Therefore, non-discriminatory access to repair and maintenance is of high interest for both vehicle manufacturers and end customers. Competition can only improve the quality of services provided if appropriate requirements for the provision of information are established and complied with.

The volume of information, its level of detail and the way of presenting this information shall be determined by the vehicle manufacturer taking into account the vehicle complexity, the need to provide

sufficient information to allow the vehicle to be maintained as intended and the systems available to the user.

4.2 Type of information to be provided

4.2.1 General

To allow repair, service and maintenance the following information shall be provided as appropriate:

- the vehicle type and model;
- an unequivocal manufacturers vehicle identification number;
- 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 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 part numbers for working tools.

4.2.2 Vehicle parts

All parts of the vehicle which can be replaced by spare parts offered by the vehicle manufacturer shall identifiable by part number 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.