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Road vehicles — Information for remote diagnostic support — General requirements, definitions and use cases

Véhicules routiers — Information pour support de diagnostic à distance — Exigences générales, définitions et cas d'utilisation

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 31, *Data communication*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

Remote diagnostic support is used for diagnosing vehicles at a distance prior to repair work, thereby minimizing the time spent in workshops, reducing disturbances on the road network, reducing inconvenience for the vehicle users and reducing cost for vehicle owners.

This document defines remote diagnostic support and the constraints that need to be respected. This document may also serve as a reference for other standards that relate to remote diagnostic support.

This document will facilitate exchange of information for remote diagnostic support between the different stakeholders (including vehicle manufacturers and independent operators) of the vehicle repair industry.

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Road vehicles — Information for remote diagnostic support — General requirements, definitions and use cases

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1 Scope

This document specifies general requirements and constraints applicable to a remote diagnostic process, the use cases and scenarios to support the implementation of a remote diagnostic process using a standardized interface of the ExVe.

It concerns:

— the road vehicles with four or more wheels designed and constructed primarily for the carriage of persons that are defined as Category 1 vehicles in the United Nations Special Resolution No.1 in TRANS/WP.29/1045, as last amended on 19 June 2012, and

— the road vehicle with four or more wheels designed and constructed primarily for the carriage of goods that are defined as Category 2 vehicles in the United Nations Special Resolution No.1 in TRANS/WP.29/1045, as last amended on 19 June 2012,

where these road vehicles are still in accordance with the specifications of the vehicle manufacturer.

This document does not define the interfaces provided by the ExVe nor the internal implementation inside the ExVe.

Processes like repair, prognostics, monitoring, configuration, re-programming and variant coding are not part of this document.

The prerequisites (e.g. authentication and authorization) for all use cases are not covered within this document. A possible specification of the required content for the implementation of a remote diagnostic application using the web interface of the ExVe according to ISO 20078 is given in Annex A.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 20077-1:2017, *Road Vehicles — Extended vehicle (ExVe) methodology — Part 1: General information*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

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