# **TECHNICAL** REPORT

# **ISO/TR** 15031-2

First edition 2004-09-01

# **Road vehicles — Communication** between vehicle and external equipment for emissions-related diagnostics —

Part 2: Terms, definitions, abbreviations and acronyms

Véhicules routiers — Communications entre un véhicule et un équipement externe pour le diagnostic relatif aux émissions -

Partie 2: Termes, définitions, abréviations et acronymes s.

Reference number ISO/TR 15031-2:2004(E)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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

ISO/TR 15031-2 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

ISO/TR 15031 consists of the following parts, under the general title *Road vehicles* — *Communication between vehicle and external equipment for emissions-related diagnostics*:

- Part 1: General information
- Part 2: Terms, definitions, abbreviations, and acronyms [Technical Report]
- Part 3: Diagnostic connector and related electrical circuits: specification and use
- Part 4: External test equipment
- Part 5: Emissions-related diagnostic services
- Part 6: Diagnostic trouble code definitions
- Part 7: Data link security

### Introduction

The various parts of ISO 15031, when taken together, provide a coherent, consistent set of specifications for facilitating emissions-related diagnostics. ISO 15031-2 to ISO 15031-7 are based on recommended practices of the society of automotive engineers (SAE). This part of ISO 15031 is based on SAE J1930:05/98, *Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms*.

See ISO 15031-1 for general information and an introduction to ISO 15031.

As the number of sophisticated electrical and electronic systems on motor vehicles has increased, so has substantially the number of terms, abbreviations and acronyms which describe the various components of these systems. This part of ISO 15031 is intended to bring order to the proliferation of such terms, abbreviations and acronyms. It is part of a process by which the nomenclature used to convey automotive service information is being standardized in order to more accurately convey information to technicians faced with the diagnosis and repair of increasingly complex vehicles.

To be properly descriptive, each type of automotive nomenclature requires a consistent procedure. This part of ISO 15031 is concerned with a procedure for naming objects and systems and with the set of words from which names are built. Firstly, the procedure allows the complete description of objects and systems without ambiguity and the generation of names which distinguish among similar objects or systems without confusion but with brevity. Secondly, using terms which are well defined within the context of the automotive service industry, the procedure allows already existing, imprecise, names to be suitably changed and future names to be assigned in a predictable way that will reliably convey meaning to the technician.

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# Road vehicles — Communication between vehicle and external equipment for emissions-related diagnostics —

### Part 2: Terms, definitions, abbreviations and acronyms

### 1 Scope

This part of ISO 15031 is a guide to terms, definitions, abbreviations and acronyms used in emissions-related diagnostics, with respect to the communication between road vehicles and external equipment used in that field. It also specifies a procedure for constructing new terms. As it gives recommended usage of diagnostic terms applicable to electrical/electronic systems, it also makes reference to related mechanical terms, definitions, abbreviations, and acronyms.

### 2 Overview

### 2.1 General

Certain abbreviated terms, although already in common use and readily understood by manufacturers and technicians, do not follow the procedures given in this part of ISO 15031. To preserve this understanding, the terms concerned are identified in Table 2 by Footnote reference "a" as being "Historically accepted common usage", so that they will not erroneously serve as a precedent in the construction of new names. They fall into three categories:

- a) acronyms that do not logically fit the term;
- b) acronyms existing at the component level, i.e. their terms contain the base word or noun that describes the generic item that is being further defined;
- c) acronyms for terms that appear to contain the base word, but are frequently used as a modifier to another base word (this use could possibly be thought of as following the procedure, since the acronym is normally used as a modifier).

Specific applications include diagnostic service and repair manuals, bulletins and updates, training manuals, repair data bases, engine-bay emission labels, and emission certification applications.

### 2.2 Layout and explanations

### 2.2.1 Structure of document

This part of ISO 15031 is presented mainly in tabular format:

- Table 1 is used to find the accepted terms and their acronyms corresponding to existing terms, abbreviations or acronyms;
- Table 2 gives the definitions of the recommended terms;