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Third edition  
2023-04

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# Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles —

## Part 4: Diagnostic communication

*Véhicules routiers — Échange d'informations numériques sur les connexions électriques entre véhicules tracteurs et véhicules tractés —*

*Partie 4: Communication de diagnostic*



Reference number  
ISO 11992-4:2023(E)

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Published in Switzerland

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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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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](http://www.iso.org/iso/foreword.html).

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

This third edition cancels and replaces the second edition (ISO 11992-4:2014), which has been technically revised.

The main changes are as follows:

- introduction of requirement structure with numbering and name;
- introduction of application requirements;
- introduction of OSI layers related requirements;
- clarification on gateway network address translation (deleted subnet addressing subclause).

A list of all parts in the ISO 11992 series can be found on the ISO website.

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](http://www.iso.org/members.html).

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## Introduction

The ISO 11992 series specifies the interchange of digital information between road vehicles with a maximum authorised total mass greater than 3 500 kg, and towed vehicles, including communication between towed vehicles in terms of parameters and requirements of the lower OSI layers (physical and data link layer) of the electrical connection used to connect the electrical and electronic systems.

This document is structured according to the Open Systems Interconnection (OSI) Basic Reference Model, in accordance with ISO/IEC 7498-1 and ISO/IEC 10731, which structures communication systems into seven layers. When mapped on this model, the application layer protocol and data link layer framework requirements specified/referenced in the ISO 11992 series are structured according to [Figure 1](#).

[Figure 1](#) illustrates a simplified communication framework:

- vehicle normal communication framework,
- vehicle diagnostic communication framework,
- vehicle-specific use case framework, and
- vehicle lower-layers framework.

The vehicle normal communication framework is composed of ISO 11992-2 and ISO 11992-3.

The vehicle diagnostic communication framework is composed of ISO 14229-1, ISO 14229-2, ISO 14229-3 and this document.

The vehicle-specific use case framework is composed of this document, ISO 22901-1 or vehicle manufacturer-specific diagnostic data definition.

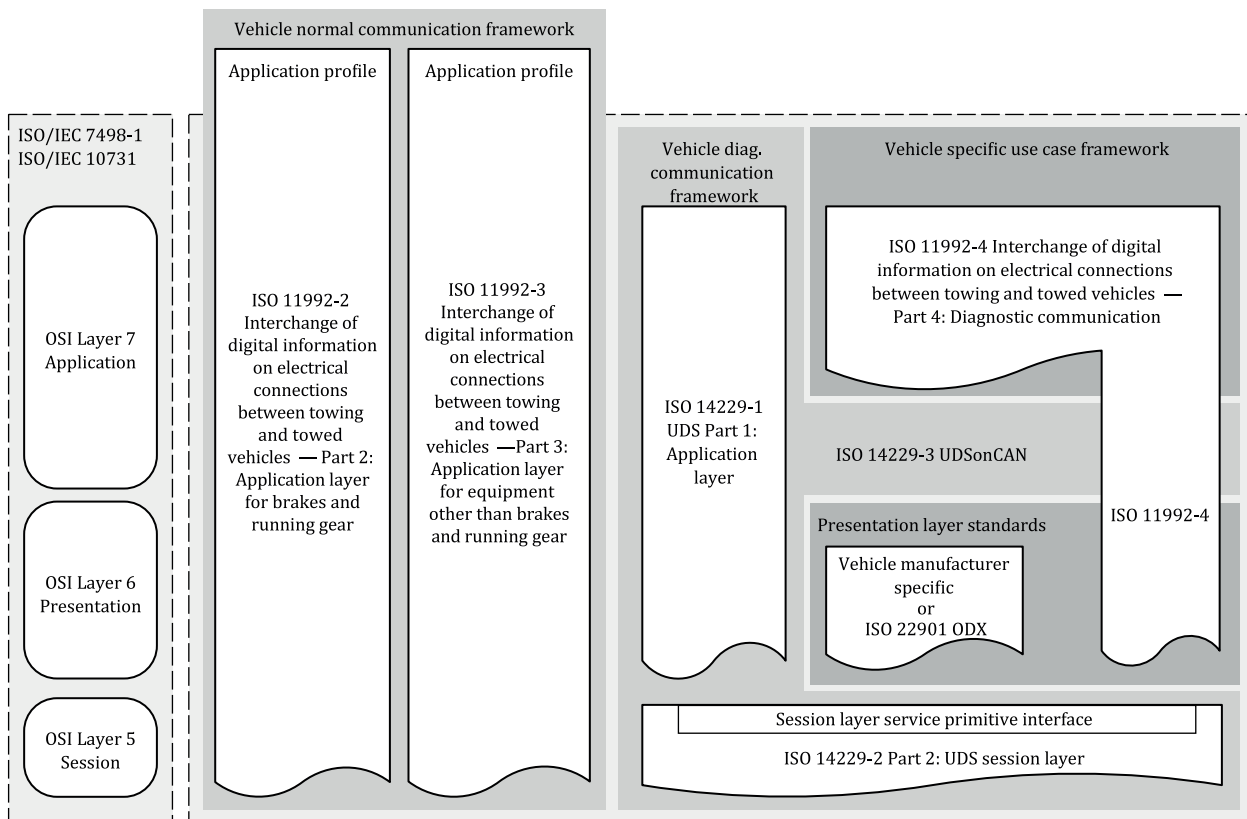


Figure 1 — ISO documents reference according to the OSI model