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

## Part 4:
## Diagnostics

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

*Partie 4: Diagnostics*

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# Foreword

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ISO 11992-4 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

ISO 11992 consists of the following parts, under the general title *Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles*:

— *Part 1: Physical and data-link layers*

— *Part 2: Application layer for brakes and running gear*

— *Part 3: Application layer for equipment other than brakes and running gear*

— *Part 4: Diagnostics*

# Introduction

ISO 11992 has been established in order to define the data interchange between road vehicles and their towed vehicles using a Controller Area Network (CAN) serial data link as specified in ISO 11898[4].

The description of this part of ISO 11992 is based on the Open Systems Interconnection (OSI) Basic Reference Model in accordance with ISO/IEC 7498[2] (and ISO/IEC 10731[3]), which structures communication systems into seven layers.

When mapped on this model, the communication system specified by ISO 11992 is broken down into:

**Layer 7**
Application layer for brakes and running gear.
Application layer for equipment other than brakes and running gear.
Application layer for diagnostics.

**Layer 3**
Network layer for diagnostics.

**Layer 2**
Data link layer for all communication types.

**Layer 1**
Physical layer for all communication types.

**Table 1 — Applicability and relationship between International Standards**

| Applicability | Normal communication | | Diagnostic communication |
|---|---|---|---|
| | Brakes and running gear | Equipment other than brakes and running gear | All applications |
| Layer 7: Application layer | **ISO 11992-2** | **ISO 11992-3** | **ISO 11992-4** ISO 14229-1 |
| Layer 6: Presentation layer | No functions specified for this layer. | | |
| Layer 5: Session layer | No functions specified for this layer. | | |
| Layer 4: Transport layer | No functions specified for this layer. | | |
| Layer 3: Network layer | No functions specified for this layer. | | **ISO 11992-4** ISO 15765-2 |
| Layer 2: Data link layer | **ISO 11992-1** | | |
| Layer 1: Physical layer | **ISO 11992-1** | | |