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Responsible committee: AUE/16 Data Communication (Road Vehicles)

Interested committees:

Title: Draft BS ISO 17978-1 Road vehicles. Service-oriented vehicle diagnostics (SOVD). Part 1: General information, definitions, rules and basic principles.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

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- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 17978-1

Road vehicles — Service-oriented vehicle diagnostics (SOVD) —

Part 1: General information, definitions, rules and basic principles

*Véhicules routiers — Diagnostic Véhicule Orienté Services
(SOVD) —*

*Partie 1: Informations générales, définitions, règles et principes
de base*

ICS: 43.040.15; 01.040.43

ISO/TC 22/SC 31

Secretariat: **DIN**

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2025-06-06

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2025-08-29

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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.

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This document was prepared by ISO/TC 22 Road vehicles, Subcommittee SC 31, Data communication WG6.

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.

INTRODUCTION

The introduction of HPCs in vehicles is associated with changes in the classical electronic and electrical vehicle architectures. Besides classical distributed embedded ECU architectures, domain- or zone-based architectures are also available. These architectures also extend beyond the physical vehicle.

This extends the focus from checking hardware to also checking the functionality of applications. It requires the recording of data such as memory usage, processor load, and the number of active services, as well as the collection of log and trace files.

These topics result in challenges regarding the management of the vehicle life cycle. Some aspects to be considered are:

- Faster release and update cycles
- Increased requirements such as data protection and cybersecurity
- State-of-the-Art diagnostic API using current information technologies

The ISO 17978 series define an API which standardizes the methods for;

- discovering the SOVD capabilities,
- performing diagnostics,
- (re-)configuring and re-programming,
- allowing the introduction of new functionalities

[Figure 1](#) shows the OSI layers of the ISO17978 series: