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Road vehicles — Extended vehicle (ExVe) web services —

Part 3: **Security**

Véhicule routiers — Web services du véhicule étendu (ExVe) —

Partie 3: Sécurité

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Contents

Page

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).

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).

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.

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.

Road vehicles — Extended vehicle (ExVe) web services —

Part 3:
Security

1 Scope

This document defines how to authenticate users and Accessing Parties on a web services interface. It also defines how a Resource Owner can delegate Access to its Resources to an Accessing Party. Within this context, this document also defines the necessary roles and required separation of duties between these in order to fulfil requirements stated on security, data privacy and data protection.

All conditions and dependencies of the roles are defined towards a reference implementation using *OAuth 2.0 compatible framework* and *OpenID Connect 1.0 compatible framework.*

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 20078-1, *Road vehicles — Extended vehicle (ExVe) 'web services' — Content*

3 Terms, definitions and abbreviations

For the purposes of this document, the terms, definitions and abbreviations given in ISO 20078-1 and following 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

3.1
Identity Token
ID Token
digitally signed JWT and contains claims about the authenticated Resource Owner

3.2
Access Token
AT
digitally signed JWT issued by the Identity Provider or Authorization Provider and consumed by the Resource Provider

Note 1 to entry: An Access Token represents an authorization that is issued to the client and limited by scope and has a defined expiration time.

3.3
Refresh Token
RT
credential (string) issued to the Accessing Party by the Identity Provider or the Authorization Provider and used to obtain a new Access Token when the currently used AT expires, or to obtain additional ATs depending on the intended scope of use