

ISO/DTS 20077-3

ISO/TC 22/SC 31/AWG-6

Secretariat: DIN

Date: ~~2022-12-19~~ 2023-02-09

Road ~~Vehicle-vehicles~~ — Extended ~~Vehiclevehicle~~ (ExVe)
methodology ~~— =~~

Part 3:
Upstream ~~Processprocess~~ to develop services.

Véhicules routiers — Méthodologie du véhicule étendu (ExVe) ~~— =~~

Partie 3: Processus amont pour le développement de services

FDIS stage

© ISO 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: + 41 22 749 01 11
E-mail: copyright@iso.org

Website: www.iso.org

iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO/DTS 20077-3

<https://standards.iteh.ai/catalog/standards/sist/692ae7c0-821c-47ea-9c26-77d934575a1f/iso-dts-20077-3>

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office

Ch. de Blandonnet 8 • CP 401

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO/DTS 20077-3](https://standards.iteh.ai/catalog/standards/sist/692ae7c0-821c-47ea-9c26-77d934575a1f/iso-dts-20077-3)

<https://standards.iteh.ai/catalog/standards/sist/692ae7c0-821c-47ea-9c26-77d934575a1f/iso-dts-20077-3>

iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO/DTS 20077-3

<https://standards.iteh.ai/catalog/standards/sist/692ae7c0-821c-47ea-9c26-77d934575a1f/iso-dts-20077-3>

Contents

Foreword v

Introduction..... vi

Part 3: Upstream process to develop services 1

1 Scope 1

2 Normative references..... 1

3 Terms, definitions..... 1

4 Abbreviated terms..... 3

5 Initiating a request for data and functions 3

5.1 Introduction and motivation..... 3

5.2 Easy Finding of the right entry point to submit requests 3

5.3 Identification form..... 3

5.4 Confidentiality..... 3

5.5 Already available data and functions API catalogue 3

5.6 Basic need expression..... 3

5.7 Basic request analysis by the VM 4

5.8 Possibility to provide SP with data and functions..... 4

5.9 Service deployability 4

5.10 Need to amend the request..... 4

5.11 Reminder SLA (service level agreement) 4

5.12 Start implementation of the service..... 5

5.13 Upstream process chart 5

Annex A (informative) Identification form..... 9

Annex B (informative) Key word list 10

Bibliography 11

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 ~~whom~~^{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 ~~the following URL~~.

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

[A list of all parts in the ISO 20077 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 \[www.iso.org/members.html\]\(http://www.iso.org/members.html\).](#)

Field Code Changed

Field Code Changed

ISO/DTS 20077-3:(E)

Introduction

~~The development of one of the remote communication solutions ISO/TC22/SC31/WG6 was in charge of reveals the~~ There is a need to facilitate starting a process of requesting data and functions from the various interfaces of the ~~Extended~~extended vehicle as defined in ISO 20077-1.

It is indeed useful to help any requesting party to quickly find the right way to express their needs towards the right place or the right resource provider without wasting time due to the multiplicity of providers.

This ~~report~~document is intended to facilitate the communication process between independent stakeholders and vehicle manufacturers (VMs), whereby service providers (SPs) seek to acquire data for the purposes of developing services.

The proposed process and template aim at helping to initiate a request by independent stakeholders and/or SPs for data and functions made available by the VMs or their offering parties.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO/DTS 20077-3

<https://standards.iteh.ai/catalog/standards/sist/692ae7c0-821c-47ea-9c26-77d934575a1f/iso-dts-20077-3>

Road vehicles — Extended ~~Vehicle~~ **vehicle** (ExVe) methodology —

Part 3: Upstream process to develop services.

1 Scope

This document describes the process to initiate and facilitate the communication between independent stakeholders and **vehicle manufacturers (VMs)**, whereby **service providers (SPs)** express the intention to obtain data and functions access from the ExVe interfaces for the purposes of developing services. Data and functions of the vehicle are basic information that are key for the development of services for the vehicle owner, driver, and user. Vehicle data and functions, in this context, comprises onboard, offboard or a combination of the two.

This document, in conjunction with ISO 20077-1 and ISO 20077-2, describes the full process for the provision of data and functions access from the ExVe interfaces between the SP and the VM.

All the situations where requested data and functions are dedicated to internal development and design or product quality improvements from **VMs**' and **Suppliers**' side are excluded from this document. Also, commercial aspects are out of the scope of this document.

2 Normative references

There are no normative references in this document.

3 Terms, definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain **terminological terminology** databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

extended vehicle

entity, still in accordance with the specifications of the **vehicle manufacturer (VM)**, that extends beyond the physical boundaries of the road vehicle and consists of the road vehicle, off-board systems, external interfaces, and the data communication between the road-vehicle and the off-board systems

Note 1 to entry: Road vehicles without off-board systems and road vehicles equipped with telematics units are extended vehicles.

Note 2 to entry: When referring to VM in this **standard document**, VM is not acting as a service provider designer.

[SOURCE: ISO 20077-1:2017, 3.4]5, modified — Note 2 to entry added.]

3.2

supplier

entity that provides parts, products, materials, and services

3.3

web service

software system, with an interface described in a machine-processable format and designed to support interoperable machine-to-machine interaction over a network

ISO/DTS 20077-3:(E)
~~[SOURCE: ISO 20077-1:2017]~~

3.4

resource

data, aggregated information, or functionalities of the connected vehicle

[SOURCE: ISO 20078-1:2019, 2021, 3.2.1, modified ~~— The note — Note 1~~ to entry has been deleted.]

3.54

service provider

entity that develops and/or provides services

Note 1 to entry: This can also be a *vehicle manufacturer(VM)* (3.5) when acting in this role.

Note 2 to entry: In this context it is the entity requesting data and functions.

~~[SOURCE: ISO 20077-1:2017]~~

3.65

vehicle manufacturer

person or body who is responsible to the approval authority for all aspects of the type approval or authorization process and for ensuring conformity of production of a vehicle

Note 1 to entry: It is not essential that the person or body be directly involved in all stages of the construction of the vehicle, system, component, or separate technical unit which is the subject of the approval process.

Note 2 to entry: ~~Adapted from Directive 2007/46/EC.~~

~~Note 3 to entry:~~ When referring to VM in this standard document, the vehicle manufacturer is not acting as a service provider

[SOURCE: Reference [6ISO 18541-1:2014-], article 3.27, modified — Note 2 to entry added.]

3.1.4616

offering party

offering party

entity that provides access to resources

Note 1 to entry: Each role could be implemented by the *vehicle manufacturer(VM)* (3.5) or other parties (e.g., IT web developers, contractor agencies, or third-party software developers).

[SOURCE: ISO 20078-1:2019]

2021, 3.81.3, modified — The phrase "web services access" has been replaced by "access" and the Note 1 to entry has been added.

3.7

function

task, action, or activity that should be achieved to satisfy a functional requirement

EXAMPLE KEY ON, ENGINE OFF, etc.,

Note 1 to entry: The same function may be used in several different use cases.

[SOURCE: ISO 20077-1:2017, 3.7]

3.98

availability

data and functions are considered available when already produced by any ECU fitted in the vehicle and that at least one of the ExVe interfaces is capable to support and transmit