Technical Specification

ISO/TS 24854-1

Intelligent transport systems — Facilities layer services —

Part 1: Architecture

Systèmes de transport intelligents - Services de la couche des fonctionnalités —

Partie 1: Architecture

Sample Document
get full document from standards.iteh.ai

First edition
2026-11

Reference number
ISO/TS 24854-1:2026(en)

© ISO 2026

ISO/TS 24854-1:2026 • https://standards.iteh.ai/catalog/standards/iso/37a27ed1-74e4-4701-b031-a4220ab489ae/iso-ts-24854-1-2026

Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2026

All rights reserved.

This ISO publication is protected by copyright and is owned by ISO and/or its licensors.

The content of this ISO publication is provided under licence, not sold. Use is subject to the applicable licence terms issued by ISO, an ISO member body, or an authorized third-party distributor.

Except as required for implementation or expressly permitted by a separate licence, no part of this ISO publication may be reproduced, distributed, modified, used, or made available in any form or by any means – electronic or mechanical, including photocopying, scanning, recording, or posting on internal or external digital platforms.

Any use beyond the scope of the granted rights is prohibited and may result in legal action.

ISO copyright office
CP 401 • CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

ISO/TS 24854-1:2026 • https://standards.iteh.ai/catalog/standards/iso/37a27ed1-74e4-4701-b031-a4220ab489ae/iso-ts-24854-1-2026

Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 General **1**
4.1 Overview 1
4.2 Architecture 2
4.3 ITS-S facilities layer capabilities 2
4.4 Usage and examples 4
4.4.1 CAM 4
4.4.2 CPH 4
4.4.3 CSH 4
4.4.4 FSH 5
4.4.5 ITS message sets 5
4.4.6 Segmentation 5
5 Requirements **5**
5.1 General requirements 5
5.2 `FacProtID` 5
Annex A (normative) **ASN.1 definitions** **6**
Bibliography **8**

Sample Document
get full document from standards.iteh.ai

© ISO 2026 – All rights reserved

ISO/TS 24854-1:2026 • https://standards.iteh.ai/catalog/standards/iso/37a27ed1-74e4-4701-b031-a4220ab489ae/iso-ts-24854-1-2026

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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.

Sample Document

This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

A list of all parts in the ISO 24854 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.

© ISO 2026 – All rights reserved

ISO/TS 24854-1:2026 • https://standards.iteh.ai/catalog/standards/iso/37a27ed1-74e4-4701-b031-a4220ab489ae/iso-ts-24854-1-2026

Introduction

This ISO 24854 series is about ITS facilities for application support, information support and communication support, i.e., features allocated in the ITS-S facilities layer. The terminology used in this document assumes the ITS station and communication architecture specified in ISO 21217. Knowledge of ISO 21217 is a pre-requisite for easy understanding of terms used in this document. Nevertheless, the concept of ITS facilities basically could also be applied in other station contexts used for Intelligent Transport Systems (ITS).

The ITS facilities layer provides a collection of ITS-S capabilities (see ISO 24102-6), which are referred to as ITS-S facilities services or simply as ITS facilities. These ITS facilities are instantiated by ITS-S facilities applications. The set of ITS facilities provides a toolkit facilitating the specification of standards and the development of ITS applications.

The availability of such ITS facilities can simplify the development of applications thereby decreasing development costs and application complexity. Furthermore, it allows applications to make use of upgrades to such services seamlessly.

ITS facilities can

— be elements of the communication protocol stack, supporting ITS-S applications,

— be elements of the communication protocol stack, providing features missing at the lower communication layers,

— be source of information for local and remote ITS-S applications,

— be destination of information from remote ITS station units (ITS-SUs) and ITS station communication units (ITS-SCUs) of the same ITS-SU, and

— contribute to the management of ITS-SUs.

Sample Document
get full document from standards.iteh.ai

To serve these purposes,

— ISO/TS 24854-1, i.e. this document, provides an architectural introduction to facilities and generally applicable normative requirements;

— ISO/TS 24854-2 specifies the ‘communication management facility’ “Communication Profile Handler” (CPH);

— ISO/TS 24854-3 specifies the ‘data management facility’ “Content Subscription Handler” (CSH);

— ISO/TS 24854-4 specifies the ‘ITS-S application support’ facility “Facilities Services Handler” (FSH*)*;

— ISO/TS 24854-5 specifies “ITS message sets”.

This document specifies a common architecture for ITS facilities layer services of which the details are specified in other parts of the ISO 24854 series. This architecture is embedded in the ITS station and communication architecture specified in ISO 21217.

© ISO 2026 – All rights reserved

ISO/TS 24854-1:2026 • https://standards.iteh.ai/catalog/standards/iso/37a27ed1-74e4-4701-b031-a4220ab489ae/iso-ts-24854-1-2026