
**Intelligent transport systems —
Communications access for land
mobiles (CALM) — ITS station
management —**

**Part 6:
Path and flow management**

*Systèmes intelligents de transport — Accès aux communications des
services mobiles terrestres (CALM) — Gestion des stations ITS —*

Partie 6: Titre manque

ISO 24102-6:2018

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Foreword

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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

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

A list of all parts in the ISO 24102 series can be found on the ISO website.

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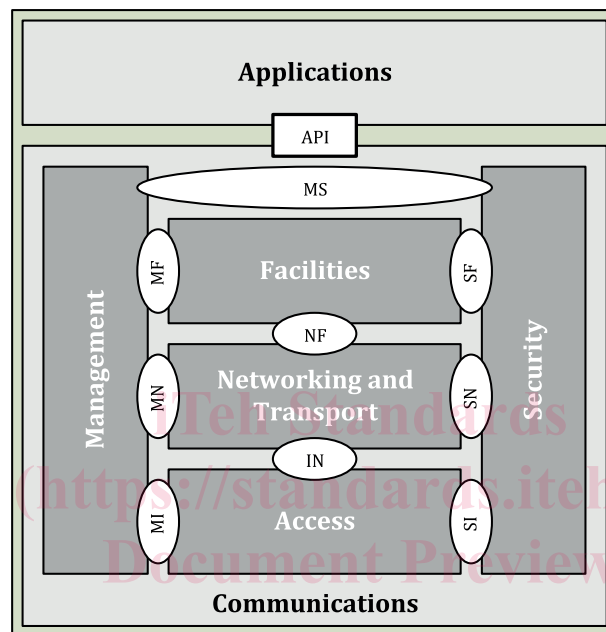
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Introduction

This document is part of a series of International Standards for communications access for land mobiles (CALM). An introduction to this series of International Standards is provided in ISO 21217:2014.

This document is Part 6 of a series of International Standards that specifies path and flow management as part of the local ITS station management.

The ITS station management entity provides functionalities related to the management of communication protocol layers and the security entity presented in the ITS station reference architecture specified in ISO 21217:2014 and presented in [Figure 1](#) — ITS station reference architecture.



<https://standards.iteh.ai/ci/83222953d14/iso-24102-6-2018> **Figure 1 — ITS station reference architecture**

The ITS station management entity is specified as a distributed process, where no supervisory entity is employed.

This document defines the functionalities of the ITS station that are used to collect the information necessary for path and flow management:

- the capabilities of all layers of the ITS station (functionalities, technologies and protocols) supported by the ITS station;
- the capabilities of neighbour ITS stations (functionalities, technologies and protocols) supported by the neighbour ITS stations;
- the current network conditions (availability and characteristics of a communication interface, availability of Internet access, etc.);
- the existing data flows and their communication requirements (identity of the destination node, security procedures applied to the data flow, end-to-end delay, packet size, etc);
- the available routing paths to a destination node;
- how a data flow is mapped to the selected routing path.

The information collected by the ITS station management entity is used to determine the most appropriate communication profile (facilities protocols, transport protocols, network protocols, access technologies and communication channels) and routing path indicating where to route packets of each

data flow, according to the communication requirements provided by the application and depending on the current network conditions. The method to perform this determination has competitive value and is out of scope of this document.

This document provides a detailed specification of the concept of paths and flows introduced in ISO 21217:2014. It complements ISO 17423:2018, ISO/TS 17429:2017, and ISO 24102-3[17]. The concept of paths and flows is essential for abstracting ITS station applications from the communications services available in the ITS station and for selecting the most appropriate communication profile (i.e. protocol stack).

The functionalities specified in this document apply to all types of ITS stations without distinction. They are useful for ITS stations equipped with various access technologies and/or various protocol stacks.

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