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**Verkehrsinformations- und Steuersysteme –
Datenschnittstellen zwischen Verkehrsleitstellen und Steuersystemen –
Teil 4: Datenschnittstellen zwischen Leitstellen für intelligente
Verkehrssysteme (ITS), die XML (Profil B) verwenden
(ISO/TS 14827-4:2022);
Englische Fassung CEN ISO/TS 14827-4:2022**

Intelligent transport systems –

Data interfaces between centres for transport information and control systems –

Part 4: Data interfaces between centres for Intelligent transport systems (ITS) using XML
(Profile B) (ISO/TS 14827-4:2022);

English version CEN ISO/TS 14827-4:2022

Systèmes de transport intelligents –

Interface de données entre centres pour les systèmes de commande et d'information des
transports –Partie 4: Interfaces de données entre centres pour systèmes de transport intelligents (ITS)
utilisant XML (Profil B) (ISO/TS 14827-4:2022);

Version anglaise CEN ISO/TS 14827-4:2022

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Nationales Vorwort

Dieses Dokument (CEN ISO/TS 14827-4:2022) wurde vom Technischen Komitee ISO/TC 204 „Intelligent Transport Systems“ in Zusammenarbeit mit dem Technischen Komitee CEN/TC 278 „Intelligente Verkehrssysteme“ ausgearbeitet, dessen Sekretariat von NEN (Niederlande) gehalten wird.

Das zuständige deutsche Normungsgremium ist der Gemeinschaftsarbeitsausschuss NA 052-00-71 GA „Gemeinschaftsarbeitsausschuss NAAutomobil/DKE: Intelligente Verkehrssysteme“ des DIN-Normenausschusses Automobiltechnik.

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Dieses Dokument enthält unter Berücksichtigung des DIN-Präsidialbeschlusses 1/2004 nur die Englische Fassung von CEN/TS 14827-4:2022.

Für die in diesem Dokument zitierten Dokumente wird im Folgenden auf die entsprechenden deutschen Dokumente hingewiesen:

ISO/TS 19468 siehe DIN CEN ISO/TS 19468

Datenaustausch zwischen Zentralen ist ein Grunddienst zur Implementierung von ITS-Diensten. Zum Zwecke der Interoperabilität sollten Datenlieferungen und gemeinschaftliche ITS-Dienste nach gewissen Normen, basierend auf vollständig beschriebenen Schnittstellen, implementiert werden. Die funktionalen Austauschprofile, welche Push- und Pull Austausch Strukturen implementieren, garantieren die zeitnahe und verlässliche Bereitstellung von Informationen, basierend auf einem festgelegten Serviceniveau und Nutzeranforderungen.

Dieses Dokument legt Anforderungen an XML-Botschaften zur Implementierung von Botschaften, die das XML-Profil B verwenden, fest.

Aktuelle Informationen zu diesem Dokument können über die Internetseiten von DIN (www.din.de) durch eine Suche nach der Dokumentennummer aufgerufen werden.

Nationaler Anhang NA (informativ)

Literaturhinweise

DIN CEN ISO/TS 19468, *Intelligente Verkehrssysteme — Datenschnittstelle zwischen Verkehrszentralen und Steuerungssystemen — Plattformunabhängige Modellspezifikationen für Datenaustauschprotokolle für Verkehrsinformations- und Steuerungssysteme*

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English Version

Intelligent transport systems -
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Part 4: Data interfaces between centres for Intelligent
transport systems (ITS) using XML (Profile B)
(ISO/TS 14827-4:2022)

Systèmes de transport intelligents -
Interface de données entre centres pour les systèmes
de commande et d'information des transports -
Partie 4: Interfaces de données entre centres pour
systèmes de transport intelligents (ITS) utilisant XML
(Profil B) (ISO/TS 14827-4:2022)

Verkehrsinformations- und Steuersysteme -
Datenschnittstellen zwischen Verkehrsleitstellen und
Steuersystemen -
Teil 4: Datenschnittstellen zwischen Leitstellen für
intelligente Verkehrssysteme (ITS), die XML (Profil B)
verwenden (ISO/TS 14827-4:2022)

This Technical Specification (CEN/TS) was approved by CEN on 29 August 2022 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (CEN ISO/TS 14827-4:2022) has been prepared by Technical Committee ISO/TC 204 "Intelligent transport systems" in collaboration with Technical Committee CEN/TC 278 "Intelligent transport systems" the secretariat of which is held by NEN.

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Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO/TS 14827-4:2022 has been approved by CEN as CEN ISO/TS 14827-4:2022 without any modification.

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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.

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 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 204, *Intelligent transport systems*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 278, *Intelligent transport systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 14827 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.

Introduction

Data exchange among centres is a baseline service for implementing intelligent transport system (ITS) services. For interoperability purposes, data delivery and collaborative ITS services need to be implemented according to certain specifications based on fully-described interfaces. The functional exchange profiles implementing push and pull exchange patterns aim to guarantee timely and reliable delivery of information, based on a defined level of service and user requirements. These depend on application level. A variety of options for implementing exchange are therefore described. These enable several interoperable exchange patterns with required features to fully satisfy user requirements: from Snapshot Pull/Push to Simple Push to Stateful Push, also considering a service request/service feedback collaborative ITS services business scenario, which allows interoperable exchange among any number of interconnected and collaborating elements to implement traffic management and traffic information services orchestrated among several ITS actors.

This document aims to define and describe the requirements on XML messages for implementing messages using XML Profile B. In particular, it is intended to be used in platform-specific implementations using simple object access protocol (SOAP) web services to enable DATEX II (EN 16157-1) XML coded messages for Snapshot Pull, Snapshot Push, Simple Push and Stateful Push. It is additionally relevant to collaborative ITS services (CISS) such as Simple CIS and Stateful CIS exchange patterns with relative functional exchange profiles as described by ISO/TS 19468. Figure 1 describes the relationship between exchange-related documents.

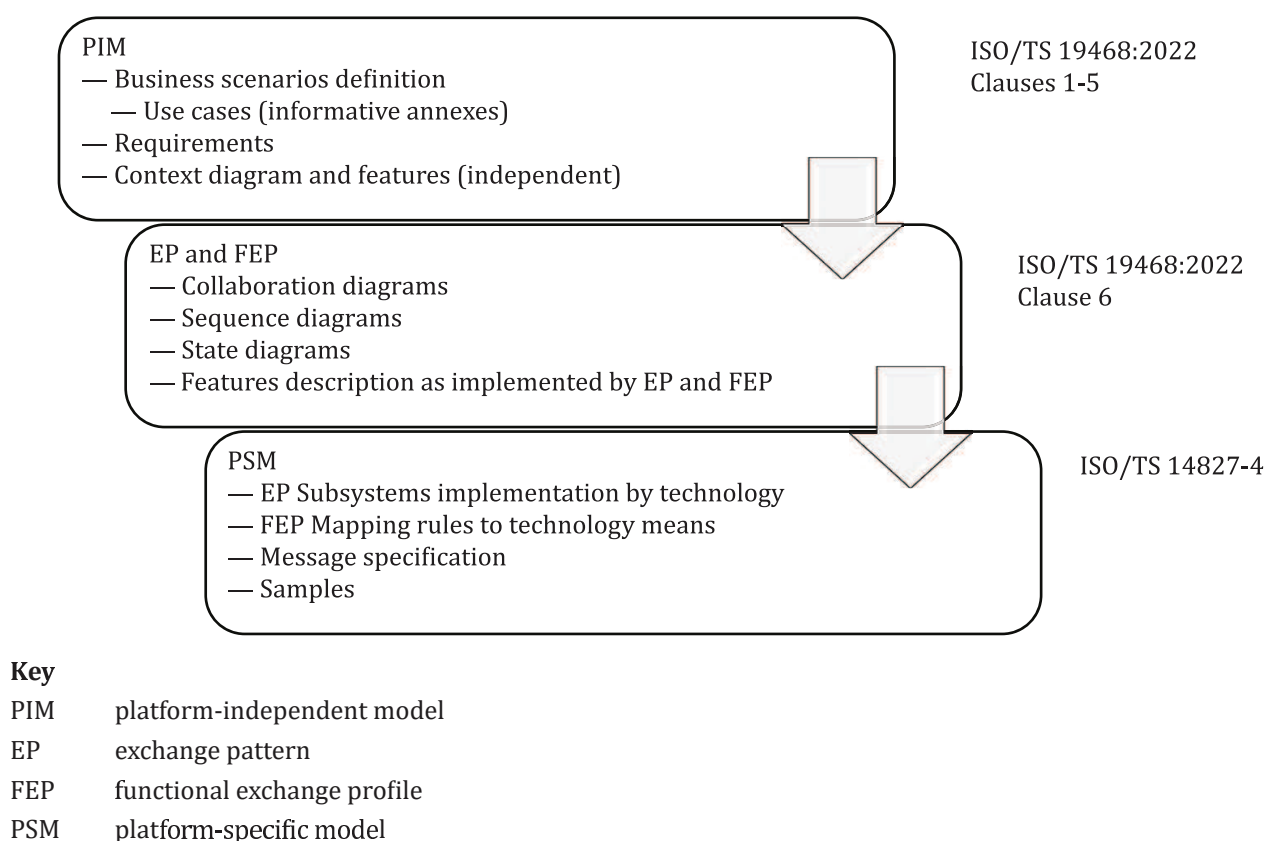


Figure 1 — Relationship between exchange-related documents

The message structure defined in this document refers to the "basic exchange data model" and derived data dictionary defined in ISO/TS 19468:2022, Annex C, which is implemented in XML schema by the DATEX II methodology defined in EN 16157-1.

This document is not intended to conflict with existing standards on interfaces of data exchange among ITS centres.