

<b>STN P</b>	<b>Inteligentné dopravné systémy Rozhrania údajov medzi centrami pre dopravné informácie a riadiace systémy Časť 4: Rozhrania údajov medzi centrami pre inteligentné dopravné systémy (IDS) použitím XML (Profil B) (ISO/TS 14827-4: 2022)</b>	<b>STN P CEN ISO/TS 14827-4</b>  01 8528
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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)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/23

Táto predbežná slovenská technická norma je určená na overenie. Prípadné pripomienky pošlite do októbra 2024 Úradu pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky.

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English Version

**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)**

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)

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**CEN ISO/TS 14827-4:2022 (E)**

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## **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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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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SPECIFICATION****ISO/TS  
14827-4**First edition  
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**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)***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  
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## ISO/TS 14827-4:2022(E)

### 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](http://www.iso.org/directives)).

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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.

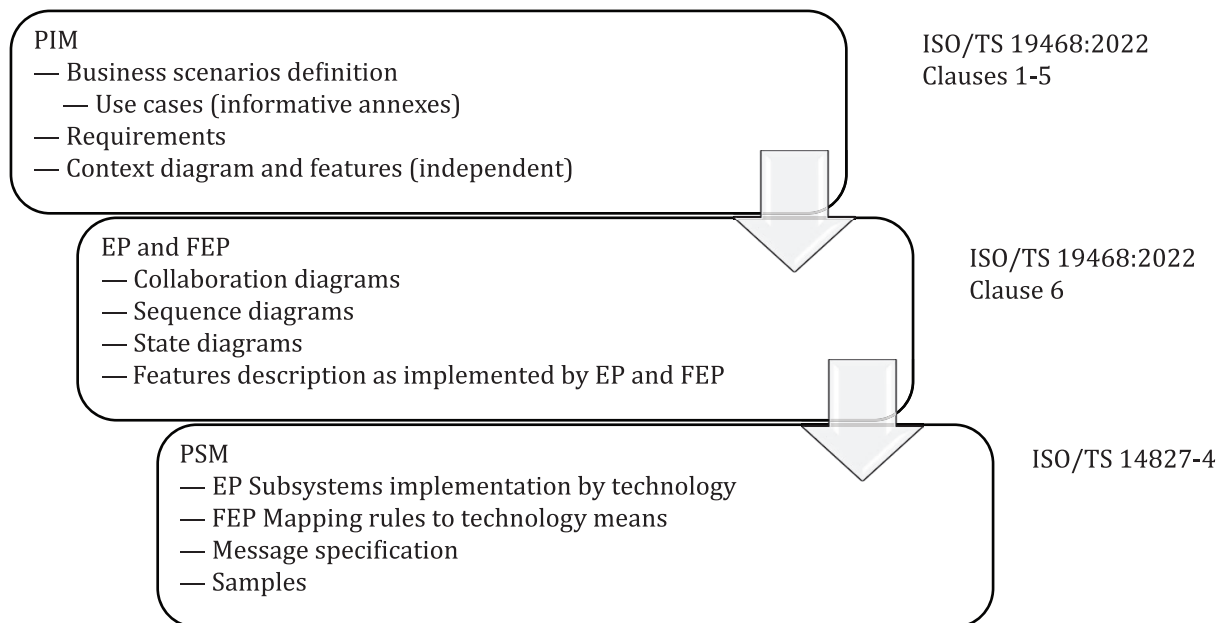
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## Introduction

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.



### Key

PIM	platform-independent model
EP	exchange pattern
FEP	functional exchange profile
PSM	platform-specific model

**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.



# 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)

## 1 Scope

This document, based on ISO/TS 19468, specifies a platform-specific method for implementing data exchange among centres based on simple object access protocol (SOAP), supporting the EN 16157 series (DATEX II) for Push/Pull data delivery and service request/feedback collaborative intelligent transport system (ITS) services.

This document defines the message rules and procedures for communication between transport information and control systems using XML (Profile B).

This document clarifies how to package end-application messages and relevant data.

The payload data definition used in specific end-applications and the exact structure of the content payload delivered in the messages are beyond the scope of this document.

Rules and procedures for exchanging data-packets in lower communication layers are also out of the scope of this document. These functionalities can be implemented using generic protocols defined in the industry standards. However, this document does define how to use these protocols.

## 2 Normative references

The following documents are referred to in the text in such a way that some of or all 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/TS 19468, *Intelligent transport systems — Data interfaces between centres for transport information and control systems — Platform-independent model specifications for data exchange protocols for transport information and control systems*

RFC 2616, *Hypertext Transfer Protocol — HTTP/1.1*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**