BS ISO 22086-2:2024

BSI Standards Publication

# Intelligent transport systems (ITS) — Network-based precise positioning infrastructure for land transportation

Part 2: Functional requirements and data sets for nomadic devices

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# National foreword

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The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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# Intelligent transport systems (ITS) — Network-based precise positioning infrastructure for land transportation —

## Part 2: Functional requirements and data sets for nomadic devices

*Systèmes de transport intelligents — Infrastructure de positionnement précis en réseau pour les transports terrestres —*

*Partie 2: Exigences fonctionnelles et ensembles de données pour les dispositifs nomades*

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# Foreword

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

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# Introduction

Lane-level positioning is deemed as a critical function to facilitate emerging applications of intelligent transport systems (ITS) for safety and traffic efficiency. Another critical issue for applications with safety concerns is to guarantee or monitor integrity of the positioning result. Global navigation satellite systems (GNSS) have led the provision of position along with velocity and time information in the ITS domain, but lane-level accuracy cannot be achieved and integrity monitoring functionalities are not supported with commercial low-cost GNSS receivers operating in standalone mode.

The ISO 22086 series deals with standard issues on a nomadic device for lane-level positioning and integrity monitoring with a GNSS-based lane-level positioning system, referred to as network-based precise positioning infrastructure for land transportation (NETPPI-LT). NETPPLI-LT provides additional information to enhance positioning accuracy and to monitor integrity over wireless links.

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