

# Intelligent transport systems — Definition of data elements and data frames between roadside modules and signal controllers for cooperative signal control

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ISO/PRF 19082

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

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

This first edition of ISO 19082 cancels and replaces the first edition of ISO/TS 19082:2020, which has been technically revised.

The main changes are as follows:

- ASN.1 modules have been specified;
- certain data elements have been imported from other documents and the related references have been clarified;
- an architecture reference model has been added.

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](http://www.iso.org/members.html).

## Introduction

Signal controllers and traffic control centres optimize signal timings based on real-time traffic information for each approach. For example, signal controllers can extend the green time for an approach with a long queue.

The aim of this document is to define data elements and data frames that are useful for optimising local and coordinated signal operation.

ISO 22951, on the pre-emption and prioritization signal system for emergency and public transport vehicles (PRESTO), specifies the message sets for signal system pre-emption and priority for transit vehicles, including communications between roadside modules and signal controllers. This document complements ISO 22951 by defining message sets for traffic information that is useful for optimizing normal signal operations. Thus, signal controllers and traffic management centres can generate signal timings referring to the messages of ISO 22951 (PRESTO) and this document. The relationship between this document and ISO 22951 is shown in [Annex C](#).

The red arrows in [Figure 1](#) illustrate message flows that are within scope of this document.

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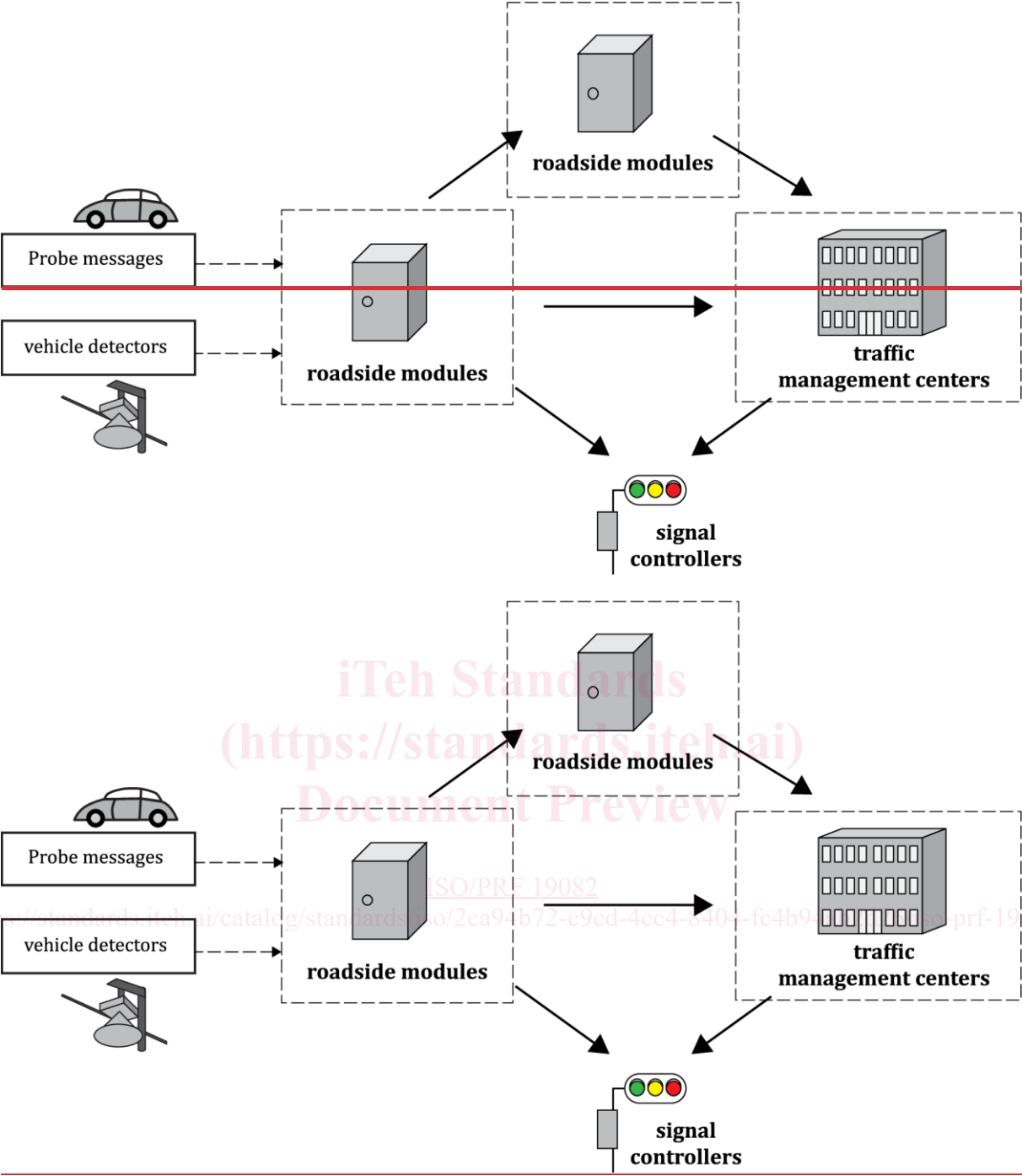


Figure 1 — Physical scope of this document

Figure 2 shows where this document is positioned within the ITS station architecture, as defined in ISO 21217.