
**Intelligent transport systems — Joint
APEC-ISO study of progress to develop
and deploy ITS standards**

*Systemes intelligents de transport — Étude de progrès conjointe
APEC-ISO pour élaborer et déployer les normes ITS*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 28682 was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*, in collaboration with APEC (*Asia-Pacific Economic Cooperation*).

Introduction

This Technical Report is intended to facilitate cooperation in ITS standardization activities by sharing recent information and experience on the application and deployment of ITS standards among APEC economies and ISO/TC 204 member countries.

The developers of this Technical Report:

- (1) surveyed the current status of and plans for ITS standards and their deployment to increase understanding and boost technology transfer among APEC and ISO/TC 204 members,
- (2) identified common problems that members are facing related to international standardization activities in the technical committee on intelligent transport systems (ISO/TC 204) of the "International Organization for Standardization" (ISO)
- (3) Presented an ITS standards policy and collective opinions to improve ITS standardization activities and implementations.

The key questions addressed in this Technical Report are:

- How similar or different are each country's approaches to the development and deployment of ITS standards?
- Who develops ITS standards nationally, regionally, and internationally?
- How many ITS standards have been developed worldwide?
- How many international ITS standards have been adopted or applied worldwide?
- What lessons have learned from the development and deployment of ITS standards?
- How to improve the practice of ITS standards development and application?
- What should be done to facilitate universal use of ITS standards?

This Technical Report contains:

- 662 ITS related standards worldwide (developed or under development) (Annex A)
- 89 Fact sheets of ITS related standards (including scope and conformance features) (Annex D)
- 100 ITS standards deployed world wide (Annex B)
- 20 Lessons learned from development or deployment experience of ITS standards (Annex C)
- Observations and Recommendations developing and deploying ITS standards (Section 4, 5, 6, 7, 8)

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1 Scope

This Technical Report

- a) provides a survey of the current status and plan of ITS standards and their deployment,
- b) identifies common problems which members are facing related to international standardization activities, and
- c) provides collective opinions to improve ITS standardization activities and their implementations.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

eSafety

safety systems using electronics and or wireless communications

3 Abbreviated terms

AEI	automatic equipment identification
AFNOR	Association Française de NORmalisation
ANSI	American National Standards Institute
APEC	Asia-Pacific Economic Cooperation
APSC	advisory panel for standards cooperation (ITU)
ASN.1	abstract syntax notation.1
ASTM	American Society for Testing and Materials
AVI	automatic vehicle identification
CD	committee draft (ISO)
CD-ROM	compact disc, read-only memory
CEN	Comite Europeen de Normalisation
CENELEC	Comite Europeen de Normalisation Electrotechnique