TECHNICAL SPECIFICATION

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CEN ISO/TS 14823

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English Version

Traffic and travel information - Messages via media independent stationary dissemination systems - Graphic data dictionary for pre-trip and in-trip information dissemination systems (ISO/TS 14823:2008)

Informations sur le trafic et le tourisme - Messages par systèmes de dissémination stationnaire indépendants du support - Dictionnaire de données graphiques pour les systèmes de dissémination d'informations avant le trajet et durant le trajet (ISO/TS 14823:2008)

Verkehrs- und Reiseinformation - Meldungen, die über medienunabhängige stationäre Verteilsysteme übertragen werden - Verzeichnis graphischer Symbole, die vor und während der Reise über Informationsverteilsysteme übertragen werden (ISO/TS 14823:2008)

This Technical Specification (CEN/TS) was approved by CEN on 9 April 2007 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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36   B-1050 Brussels

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Foreword

This document (CEN ISO/TS 14823:2008) has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 204 "Transport information and control systems".

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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.

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ISO 14823 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 278, *Road transport and traffic telematics*, in collaboration with Technical Committee ISO/TC 204, *Intelligent transport systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Introduction

This Technical Specification presents a Graphic Data Dictionary (GDD) which has been developed with the intent of creating a common basis for transmitting graphic information data that can be, irrespective of language or regional differences, decoded and understood by the users who obtain TTI (pre-trip and in-trip information) service through TTI system operators such as traffic management centres (TMCs), traffic information centres (TICs) and value-added service providers (VASPs) which add value to the TTI. Adopting unified graphic data is expected to improve the understandability of the graphic information by the user and thereby increase the convenience of TTI systems.

The purpose of GDD is, in order to facilitate the data exchange between media, to catalogue graphic images like traffic signs and pictograms specified and used uniquely in each country and to assign them a certain code.

Elements of Graphic Data

These include:

— full name of the pictogram,

— definition of the pictogram,

— code for the pictogram,

— attribute(s) of the pictogram, and

— pictogram itself.

Normative items in this document are the coding scheme involving the full name, definition and attributes to define each graphic image. It is not intended to create and specify a common design of graphic images.

Application of Graphic Data

Graphic data shall be stored in advance as a database by TTI system operators (such as TMC, TIC etc.), VASP, or in media systems, and then used as a part of TTI for data exchange among these entities. "The GDD" is a database that registers the codes and attributes of a set of graphic data in a systematic manner.

Message Creation

Data elements to be stored in the database of a TIC shall be those created by using TTI collected in the TIC. Similarly, graphic data shall be those coded beforehand and registered into the database. Messages to be dealt with in this Technical Specification are to be generated basically with data elements registered in the database of the TIC.

Traffic and travel information — Messages via media independent stationary dissemination systems — Graphic data dictionary for pre-trip and in-trip information dissemination systems

IMPORTANT — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.

1 Scope

This Technical Specification presents a system of standardized codes for existing signs and pictograms used to deliver traffic and traveller information (TTI). The coding system can be used to form messages to be handled by respective media systems, graphic messages on on-board units, and media system information on TTI dissemination systems (VMS, PC, PAT, etc.) (including graphic data). These types of information are required by travellers for their pre-trip planning as well as their in-trip plan modification based on information obtained through media systems.

As shown in Figure 1, a system handling graphic messages generally comprises TTI system operators, media systems and communication networks interconnecting these systems.

This Technical Specification relates to:

— TTI systems operators which include

  — Traffic Management Centres (TMC),

  — Traffic Information Centres (TIC),

  — Parking Information Centres (PIC),

  — Public Transport Centres (PTC),

  — Value-Added Service Providers (VASP), and

  — others;

— media systems which include

  — On-board Units (OBU),

  — Variable Message Signs (VMS),

  — Personal Computers (PC),

  — Public Access Terminals (PAT), and

  — others.

2 Normative references

The following referenced documents are indispensable for the application 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 9735, *Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules*

ISO 3166 (all parts), *Codes for the representation of names of countries and their subdivisions*

CEN prENV/278/8/15 RTTT — *Traffic and Travel Data Dictionary — Part 1: General Definitions, Entities, Attributes*

3 Terms and definitions

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

3.1
traffic and traveller information
TTI
generic term for traffic and travel-related information such as road traffic information, transfer information, or public transit information

3.2
traffic information centre
TIC
one of the TTI system operators

NOTE   Each TIC is connected to TMC, PIC, PTC and some other TICs to collect and process information generated at each of the said centres. The TIC disseminates information periodically in accordance with procedures as agreed with the corresponding VASP or from time to time on request from the VASP.

3.3
value added service provider
VASP
each VASP requests information from the corresponding TTI system operators in accordance with procedures as agreed with the TTI system operators and stores the received information in its database, then edits/processes and disseminates information requested from users in accordance with appropriate procedures as agreed with any media systems

3.4
traffic management centre
TMC
one of the TTI system operators

NOTE   Each TMC manages systems for traffic surveillance and controls by collecting and processing traffic information.

3.5
parking information centre
PIC
one of the TTI system operators

NOTE   PIC disseminates information such as the location, capacity, vacancy and other information related to the status of service/parking facilities.