NSAI Standards

Irish Standard
I.S. EN 15213-3:2013

Intelligent transport systems - After-theft systems for the recovery of stolen vehicles - Part 3: Interface and system requirements in terms of short range communication system

I.S. EN 15213-3:2013

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English Version

Intelligent transport systems - After-theft systems for the recovery of stolen vehicles - Part 3: Interface and system requirements in terms of short range communication system

Systèmes de transport intelligents - Systèmes intervenant après un vol pour la récupération des véhicules - Partie 3: Spécifications d'interface et de système pour les communications à courte portée

Intelligente Transportsysteme - Systeme für das Wiederfinden gestohlener Fahrzeuge - Teil 3: Schnittstellen- und Systemanforderungen für Nahbereichskommunikationssysteme

This European Standard was approved by CEN on 26 April 2013.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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Foreword

This document (EN 15213-3:2013) has been prepared by Technical Committee CEN/TC 278 “Road Transport and Traffic Telematics”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2013, and conflicting national standards shall be withdrawn at the latest by December 2013.

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

This document supersedes CEN/TS 15213-3:2006.

It is derived from a suite of CEN Technical Specifications CEN/TS 15213-1 to -6 inclusive dealing with the tracking and recovery of stolen vehicles. Parts 1 to 5 inclusive have been upgraded to EN status without change. CEN/TS 15213-6:2011 remains a valid Technical Specification as of the date of this publication and will be considered for EN status in due course. All these documents remain related and should be read in conjunction according to the type of technology, product or service being considered.

EN 15213 consists of the following parts:

— EN 15213-1, *Intelligent transport systems — After-theft systems for the recovery of stolen vehicles — Part 1: Reference architecture and terminology*;

— EN 15213-2, *Intelligent transport systems — After-theft systems for the recovery of stolen vehicles — Part 2: Common status message elements*;

— EN 15213-3, *Intelligent transport systems — After-theft systems for the recovery of stolen vehicles — Part 3: Interface and system requirements in terms of short range communication system* (the present document);

— EN 15213-4, *Intelligent transport systems — After-theft systems for the recovery of stolen vehicles — Part 4: Interface and system requirements in terms of long range communication system*;

— EN 15213-5, *Intelligent transport systems — After-theft systems for the recovery of stolen vehicles — Part 5: Messaging interface*;

— CEN/TS 15213-6, *Road transport and traffic telematics — After-theft services for the recovery of stolen vehicles — Part 6: Test procedures*[1)].

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1) Part 6 awaits final evaluation and ratification as EN and until such time remains a valid part of this EN as CEN/TS 15213-6:2011.

Introduction

This European Standard was developed by CEN/TC 278 "Road transport and traffic telematics", Working Group 14 (WG 14) on the subject of After Theft Systems for Vehicle Recovery (ATSVR).

WG 14 comprised representatives and experts from police, insurance associations (CEA), car manufacturers, transport associations, vehicle rental associations and ATSVR system and product providers. The work was also in cooperation with Europol and the European Police Cooperation Working Group (EPCWG).

This European Standard was developed to define an architecture within guidelines from CEN/TC 278 through which a level of interoperability can be achieved between Systems Operating Centres (SOC) and Law Enforcement Agencies (LEA), both nationally and internationally.

This will provide minimum standards of information and assurance to users as to the functionality of systems, thereby enabling the recovery of vehicles, detection of offenders and a reduction in crime.

This European Standard refers to the potential development of systems to enable law enforcement agencies to remotely slow and/or stop the engines of stolen vehicles. This situation remains and further information is available in 2012 CEN publication N2643 Feasibility Report on Remote Slow and Stop Technology, available from CEN/TC 278.

This document should be read in conjunction with EN 15213-1 which provides the preliminary framework for ATSVR concepts.

1 Scope

This European Standard focuses on Short Range (SR) Interface/Systems Requirements. SR systems use an interface that allows Detection Equipment to operate some ATSVR functions in the direct line of sight of vehicles.

SR systems enable LEAs in a particular country, to permit LEA personnel to perform actions on vehicles that are within their immediate vicinity. Such actions can include identification of vehicle data or influencing the vehicle from a remote site.

Standards for Automatic Vehicle Identification (AVI) and Automatic Equipment Identification (AEI) are being developed by CEN/TC 278/WG 12 in parallel with ISO/TC 204/WG 4. This ATSVR specification does not prejudice those standards and does not seek to establish parameters for future AVI/AEI standards. DSRC and AVI Standards are seen as basic technology blocks for types of short range ATSVR.

This part of EN 15213 describes the structure, bit arrangements, number representation and coding of message elements that are typically transmitted as data. There is no requirement to make the messages as short or as effective as possible. Emphasis is placed on making them as clear and unambiguous as possible.

For Short Range Communications, where there is very little time available for the transfer of data between passing vehicles and detection equipment, only a subset of the message elements described in this document can be transmitted. Therefore, in these cases, the data lengths are reduced to an absolute minimum.

Data elements such as times, dates, or geographical coordinates need not be transmitted because the ATSVR consists of various equipment elements that communicate and interact through various interfaces in accordance with standard procedures and protocols facilitating the recovery of stolen vehicles. These processes may involve a human operator.

ATSVR elements include the OBE installed in the vehicles, a range of Detecting Equipment and one or more System Operating Centres. One or more supporting Infrastructure Networks provides communications to support the ATSVR. The ATSVR location function may also include one or more supporting Position Reference Sources.

Some Short Range devices may be triggered by or may use long range communications and vice versa.

Some Interfaces are not within the scope of this EN. These comprise interfaces to or from sensors, actuators and human operators; from position reference sources, e.g. GPS, LEAs internal interfaces, etc.

Detection Equipment "knows" the time; in case of stationary equipment, it "knows" its coordinates, etc. The Detection Equipment may concatenate these data elements to the data coming from the vehicle, when sending a complete data set to ATSVR System Operating Centres or to LEA as described in other parts of this EN.

Wherever possible the same specifications, data structures, contents, and definitions have been used throughout this EN. This EN does not seek to define the requirements or actions of the various human elements of the ATSVR, but it does aim to identify the interactions and interfaces that exist amongst the equipment and human elements operating within the system.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12253, *Road transport and traffic telematics — Dedicated short-range communication — Physical layer using microwave at 5,8 GHz*