# TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

# **CEN/TS 15213-4**

November 2006

ICS 35.240.60

#### **English Version**

Road transport and traffic telematics - After-theft systems for the recovery of stolen vehicles - Part 4: Interface and system requirements for long range communication

Télématique des transports - Systèmes intervenant après un vol pour la récupération des véhicules volés - Partie 4 : Exigences d'interface et de système pour les communications à longue portée

This Technical Specification (CEN/TS) was approved by CEN on 5 September 2006 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.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Cont	ents	age	
E a wasse	ord		
	rction		
	Scope		
1			
2	Normative references		
3	Terms and definitions	6	
4	Symbols and abbreviations	6	
5	Requirements for Long Range Operations	7	
5.1	LR ATSVR Architecture	7	
5.2 5.3	The LR ATSVR Process The LR ATSVR Functions		
6 6.1	Vehicle Tracking System Parameters Attack Resistance		
6.2	Technical Specification	9	
6.3	Activation of the ATSVR Process	10	
6.4 6.5	Deactivation of the ATSVR Process Functional Specification		
6.6	Detection		
6.7	Information Protocol	11	
6.8	Tests		
6.9 6.10	Integrity of Response		
6.11	Management of False Alarms		
6.12	Quality of Process		
6.13 6.14	Quality of Information		
6.14 6.15	Quality of EquipmentQuality of Manufacturing		
6.16	Quality of Installation	13	
6.17	Transmitted Power		
6.18 6.19	Safety of Vehicle UserSafety of Operators of Mobile Equipment		
J. 13	Security Considerations in LR Systems	1 \$	
/ 7.1	Communications security	14	
7.2	Stored Data Security		
7.3	Personnel Security		
7.4 7.5	Radio Transmissions  Data Protection requirements		
	A (informative) Examples of Long Range Systems		
	B (informative) Regulatory issues		
Bibliography20			

#### **Foreword**

This document (CEN/TS 15213-4:2006) has been prepared by Technical Committee CEN/TC 278 "Road Transport and Traffic Telematics", the secretariat of which is held by NEN.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Cyprus, Czech Republic, I rlands agdom. Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

#### Introduction

This Technical Specification 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 is comprised of representatives and experts from police, insurance associations (CEA), car manufacturers, transport associations, vehicle rental associations and ATSVR system and product providers working in cooperation with Europol and the European Police Cooperation Working Group (EPCWG).

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

This document will provide minimum standards of information and assurance to users regarding the functionality of systems, so as to enable the recovery of vehicles, detect offenders and reduce crime.

This Technical Specification should be read in conjunction with CEN/TS 15213-1, Road transport and traffic OR STORE telematics - After-theft systems for the recovery of stolen vehicles - Reference architecture and terminology, which provides the preliminary framework for ATSVR concepts.

#### 1 Scope

This Technical Specification specifies the characteristics required to operate the Long Range ATSVR Architecture.

An ATSVR consists of various elements that communicate and interact through a range of interfaces in accordance with standard procedures and protocols in order to facilitate the recovery of stolen vehicles. These processes may involve a human operator.

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

The LR systems use an interface that allows the Detection Equipment to operate some ATSVR Functions at distances greater than the direct line of sight. These LR systems are generally operated with ATSVR Location Functions using long-range communications.

This Technical Specification permits existing proprietary systems to operate using these interface specifications at ATSVR application level.

The main subject areas are:

— Definition of classes and categories.

—	Interoperability and compatibility of systems at:	
	— Functional level;	
	— Information level;	
	— Performance level;	
	Identification of communications supporting infrastructures.	
	Specification of compatible interfaces for ATSVR applications.	
_	Restriction of specifications to:	
	— Application level;	
	— Operating level;	
	— User level.	
	Ω,	

#### 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.

CEN/TS 15213-1:2005, Road transport and traffic telematics - After-theft systems for the recovery of stolen vehicles - Part 1: Reference architecture and terminology

CEN/TS 15213-3:2006 Road transport and traffic telematics - After-theft systems for the recovery of stolen vehicles - Part 3: Interface and system requirements for short range communication

#### 3 **Terms and definitions**

For the purposes of this Technical Specification, the terms and definitions given in CEN/TS 15213-1:2005 and CEN/TS 15213-3:2006 apply.

## Symbols and abbreviations

#### 4.1

DE

**Detection Equipment** 

#### 4.2

LEA

J. 15213-1) Law Enforcement Agency (see CEN/TS 15213-1)

#### 4.3

LR

Long Range

# 4.4

OBE

On Board Equipment

## 4.5

SOC

System Operating Centre

### 4.6

SR

Short Range