



National Standards Authority of Ireland

IRISH STANDARD

I.S. CEN ISO/TS 14907-1:2005

ICS 35.240.60

**ROAD TRANSPORT AND TRAFFIC
TELEMATICS - ELECTRONIC FEE
COLLECTION - TEST PROCEDURES FOR
USER AND FIXED EQUIPMENT - PART 1:
DESCRIPTION OF TEST PROCEDURES
(ISO/TS 14907-1:2005)**

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales
<http://www.standards.ie>

*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland and comes into
effect on:
April 20, 2005*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
LAW**

© NSAI 2005

Price Code AA

Údarás um Chaighdeán Náisiúnta na hÉireann

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN ISO/TS 14907-1

February 2005

ICS 35.240.60

Supersedes ENV ISO 14907-1:2000

English version

Road transport and traffic telematics - Electronic fee collection -
Test procedures for user and fixed equipment - Part 1:
Description of test procedures (ISO/TS 14907-1:2005)

Télématique de la circulation et du transport routier
télépéage - Procédures de test relatives aux équipements
embarqués et aux équipements fixes - Partie 1: Description
des procédures de test (ISO/TS 14907-1:2005)

Telematik für den Straßenverkehr und den Transport -
Elektronische Gebührenerhebung - Testverfahren für
straßenseitige und fahrzeugseitige Einrichtungen - Teil 1:
Beschreibung von Testverfahren (ISO/TS 14907-1:2005)

This Technical Specification (CEN/TS) was approved by CEN on 12 April 2004 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, 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

Contents

	page
Foreword.....	4
Introduction.....	5
1 Scope.....	6
2 Normative references.....	9
3 Terms and definitions.....	9
4 Abbreviations.....	11
5 Test parameters and test procedures for EFC.....	12
6 Inspection and tests.....	23
7 Evaluation and certification.....	34
Annex A (informative) How to use this Technical Specification.....	36
A.1 General framework.....	36
A.2 Step by step guidance.....	37
Annex B (informative) Traffic, vehicle and other performance tests.....	38
B.1 Traffic conditions, vehicle characteristics and environmental influences.....	38
B.2 Traffic conditions.....	39
B.3 Vehicle characteristics.....	49
B.4 Environmental influences.....	57
Annex C (informative) Reliability/availability tests.....	59
C.1 Overview.....	59
C.2 Reliability / availability test.....	61
Annex D (informative) Classes of equipment.....	65
Annex E (informative) Examples for statistical calculations.....	67
E.1 Example: The calculation of a quantity from a sample.....	67
E.2 Statistical considerations when proving low transaction-error rates.....	68
E.3 MTTF determination.....	70
Annex F (informative) Examples of referenced pre-tests based on European test procedures.....	71
F.1 Dedicated Short-Range Communication (DSRC).....	71
F.2 Environment.....	75
F.3 EMC.....	77
F.4 Referenced test procedure documents of Annex F.....	78
Annex G (informative) Test methods and tools.....	81
G.1 General.....	81
G.2 Inspection.....	81

G.3	Simulation	82
G.4	Laboratory tests	83
G.5	Field tests.....	84
G.6	Exemplary form of a test protocol.....	86
Annex H (informative)	Examples of EFC scenarios	87
H.1	General	87
H.2	Single vehicle test	87
H.3	Bulk vehicle test	89
Bibliography	93

CEN ISO/TS 14907-1:2005 (E)

Foreword

This document (CEN ISO/TS 14709-1:2005) 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 "Intelligent Transport Systems".

This document supersedes ENV ISO 14907-1:2000.

This document is part of the following series of standards related to testing of electronic fee collection (EFC) equipment and systems:

- CEN ISO/TS 14907-1, *Road transport and traffic telematics – Electronic fee collection – Test procedures for user and fixed equipment – Part 1: Description of test procedures (ISO/TS 14907-1:2005)*
- CEN ISO/TS 14907-2¹⁾, *Road transport and traffic telematics – Electronic fee collection – (EFC) Test procedures for user and fixed equipment - Part 2: EFC application interface conformance tests specification*

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

¹⁾ To be published.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-