

ILNAS

Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN ISO 17575-2:2016

Electronic fee collection - Application interface definition for autonomous systems - Part 2: Communication and connection to the lower layers (ISO

Perception du télépéage - Définition de
l'interface d'application pour les
systèmes autonomes - Partie 2:
Communications et connexions aux

Elektronische Gebührenerhebung -
Definition der Anwendungsschnittstelle
für autonome Systeme - Teil 2:
Kommunikation und Verbindung mit den

02/2016



National Foreword

This European Standard EN ISO 17575-2:2016 was adopted as Luxembourgish Standard ILNAS-EN ISO 17575-2:2016.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

<https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html>

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

ILNAS-EN ISO 17575-2:2016

EUROPEAN STANDARD **EN ISO 17575-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2016

ICS 35.240.60; 03.220.20

Supersedes CEN ISO/TS 17575-2:2010

English Version

**Electronic fee collection - Application interface definition
for autonomous systems - Part 2: Communication and
connection to the lower layers (ISO 17575-2:2016)**

Perception du télépéage - Définition de l'interface
d'application pour les systèmes autonomes - Partie 2:
Communications et connexions aux couches basses
(ISO 17575-2:2016)

Elektronische Gebührenerhebung - Definition der
Anwendungsschnittstelle für autonome Systeme - Teil
2: Kommunikation und Verbindung mit den unteren
Schichten (ISO 17575-2:2016)

This European Standard was approved by CEN on 11 December 2015.

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.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

European foreword..... 3

ILNAS-EN ISO 17575-2:2016 - Preview only Copy via ILNAS e-Shop

European foreword

This document (EN ISO 17575-2:2016) has been prepared by Technical Committee ISO/TC 204 “Intelligent transport systems” in collaboration with Technical Committee CEN/TC 278 “Intelligent transport systems” 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 August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

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 ISO/TS 17575-2:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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.

Endorsement notice

The text of ISO 17575-2:2016 has been approved by CEN as EN ISO 17575-2:2016 without any modification.

**Electronic fee collection —
Application interface definition for
autonomous systems —**

**Part 2:
Communication and connection to
the lower layers**

*Perception du télépéage — Définition de l'interface d'application pour
les systèmes autonomes —*

Partie 2: Communications et connexions aux couches basses



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

| | Page |
|--|-----------|
| Foreword | iv |
| Introduction | v |
| 1 Scope | 1 |
| 2 Terms and definitions | 2 |
| 3 Abbreviated terms | 3 |
| 4 EFC Front End communication architecture | 4 |
| 4.1 General..... | 4 |
| 4.2 Relationship with the overall EFC architecture..... | 5 |
| 5 EFC communication services (functions) | 5 |
| 5.1 General concept..... | 5 |
| 5.2 Initialization phase..... | 7 |
| 5.2.1 General..... | 7 |
| 5.2.2 Incoming (BE to FE Application) session request..... | 7 |
| 5.2.3 Outgoing (FE Application to BE) session establishment..... | 8 |
| 5.3 Point-to-point communication service primitives..... | 8 |
| 5.3.1 General..... | 8 |
| 5.3.2 Unstructured messages (ADUs)..... | 8 |
| 5.3.3 Structured messages (ADUs)..... | 8 |
| 5.4 Session end..... | 8 |
| 5.5 Session failure..... | 9 |
| 5.6 Security considerations..... | 9 |
| 5.7 Media selection options..... | 9 |
| 6 The use of a communication stack | 9 |
| 6.1 General..... | 9 |
| 6.2 Requirements for an underlying communication technology..... | 9 |
| 6.3 Mobile terminated calls..... | 10 |
| Annex A (normative) Abstract API definition | 11 |
| Annex B (normative) Protocol implementation conformance statement (PICS) proforma | 17 |
| Annex C (informative) API requirements | 22 |
| Annex D (informative) Examples of definitions for appropriate languages | 23 |
| Annex E (informative) Use of this part of ISO 17575 for the EETS | 26 |
| Bibliography | 28 |