TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
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CEN/TS 17457

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English Version

Postal services - Digital, optional online connected, opening and closing systems for parcel receptacles for home use with free access for the delivery and collection operators and consumers

Services postaux - Systèmes d'ouverture et de fermeture, électroniques, optionnellement connectés, pour compartiments à colis, pour utilisation à domicile, avec accès libre pour les opérateurs de distribution et de retrait et les consommateurs

Postalische Dienstleistungen - Digitale, optional online verbundene Öffnungs- und Schließsysteme für Paketübergabeeinheiten mit freiem Zugang für Zustell- und Abholdienstleister und Kunden

This Technical Specification (CEN/TS) was approved by CEN on 28 March 2020 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
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European foreword

This document (CEN/TS 17457:2020) has been prepared by Technical Committee CEN/TC 331 “Postal services”, the secretariat of which is held by NEN.

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

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

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Introduction

This document focuses on the authentication of a delivery agent attempting to deliver a parcel into a receptacle or parcel box system. Today, without a uniform system, the interoperability between manufacturers and delivery operators is complex, as shown in Figure 1. The goal of this document is to improve this situation as shown in Figure 2. Ideally, for a group of manufacturers who want to operate with a group of delivery operators, it is advantageous to use a common system. This document specifies the parameters to use to direct opening system solutions.

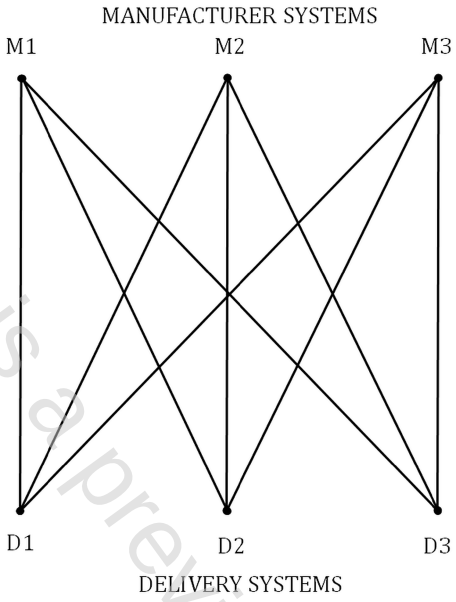

Figure 1 — Interoperability diagram without this document

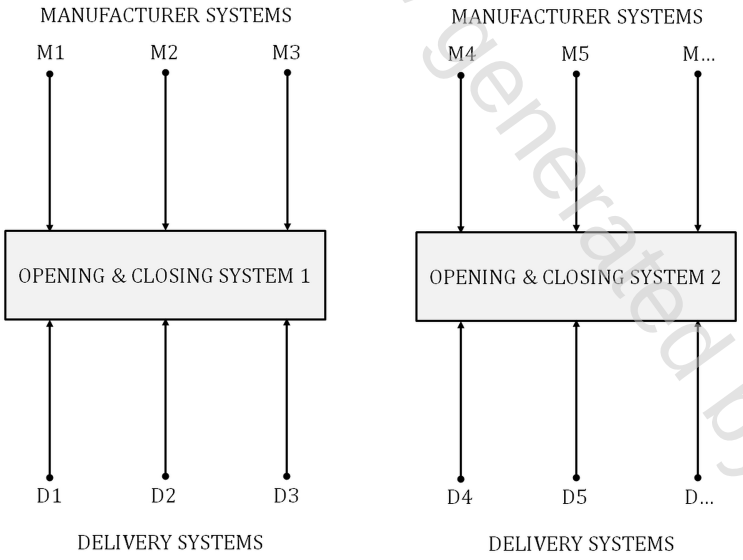

Figure 2 — Interoperability diagram according to this document

The opening system is a service provider based on an intermediary between the delivery organization and the recipient, following Figure 3. The trust service can be a manufacturer or a manufacturer with a third party.

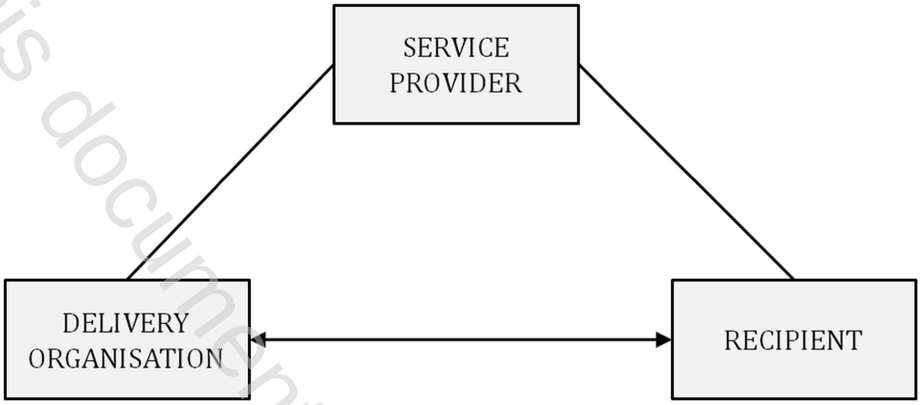

Figure 3 — Service provider organization

1 Scope

The objective of this document is to define the framework for secure, trustworthy and user-friendly opening systems for parcel boxes for home use. Particular attention is given to facilitating secure electronic authentication of the delivery operator. This document exists considering the Standardization request M/548 from the European Commission and it aims to solve the lack of operability between parcel box manufacturers and delivery operators.

Therefore, this document describes the minimal requirements of a digital, optional online connected, opening and closing system for parcel boxes and prerequisites to create favourable conditions of interoperability between all market participants.

This document is designed to fit with solutions already on the market and define the good practices and pathway for future systems. It adopts an approach which is open to innovation. It is expected to be possible to achieve the necessary requirements through different technologies.

The systems of opening rights are intended to open parcel boxes as defined in CEN/TS 16819. However, the specification is extended to other receptacle solutions, in the frame of the home use (e.g. garage door, bags, etc.), when these receptacle solutions are compliant with the requirements of CEN/TS 16819 when the case allows.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/ui

— IEC Electropedia: available at http://www.electropedia.org/

3.1
parcel box
receptacle intended to receive parcel delivered by a delivery operator

[SOURCE: CEN/TS 16819:2015, definition 3.1]

3.2
parcel
postal item containing goods with or without commercial value, other than an item of correspondence, with a weight not exceeding 31,5 kg

[SOURCE: Regulation (EU) 2018/644 on cross-border parcel delivery services]

3.3
opening right
right required to a parcel operator to access a parcel box