PD CEN/TS 15448:2014

BSI Standards Publication

Postal services — Open standard interface between image controller and enrichment devices (OCRs, video coding systems, voting systems)

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National foreword

This Published Document is the UK implementation of CEN/TS 15448:2014. It supersedes DD CEN/TS 15448:2006 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SVS/4, Postal services.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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English Version

Postal services - Open standard interface between image controller and enrichment devices (OCRs, video coding systems, voting systems)

Services postaux - Interface standard ouverte entre le contrôleur d'images et les dispositifs enrichis (OCR, systèmes d'encodage vidéo, systèmes de votes)

Postalische Dienstleistungen - Offene Normschnittstelle zwischen Bildbearbeitung und Anreicherungsgeräten (OCR, Videocodierungssysteme, Abstimmungssysteme)

This Technical Specification (CEN/TS) was approved by CEN on 15 March 2014 for provisional application.

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Foreword

This document (CEN/TS 15448:2014) has been prepared by Technical Committee CEN/TC 331 “Postal services”, the secretariat of which is held by NEN.

The document supersedes CEN/TS 15448:2006.

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Introduction

There is a growing demand on the postal operators to combine parts of their sorting automation equipment from different suppliers to optimize performance. In the past this has led to project specific interfaces being negotiated between one postal operator and one or multiple suppliers. These project-specific interfaces were developed by the suppliers and maintained for an agreed period of time. This approach has several disadvantages:

— The interface is derived from an interface that was not intended to be open,

— The interface is developed for a single project and works only in the context of that project (extra costs),

— Each participating supplier has to implement the interface (multiple effort),

— Experience shows that integration of components with project-specific interfaces is complex and expensive,

— Project-specific interfaces are not integrated into the product line and once the initially agreed maintenance period is over it may be difficult and expensive to maintain and/or may hinder the adoption of equipment upgrades.

This has led to “open interfaces” defined by one supplier. These still have the disadvantage of being in product use by only one supplier.

Within a group of postal operators and suppliers it was decided to develop a set of “open standard interfaces” which will be developed by the suppliers and referred to by the postal operators. The benefits of these interfaces are expected to be that they:

— are fixed in an international standard (with change control);

— are agreed and implemented by major suppliers;

— are agreed by customers and therefore used in calls for tenders;

— will result in net savings with the high initial development effort and consequent higher basic equipment prices being more than offset by reduced project development, integration and maintenance costs;

— will minimize the need for project integration effort by reducing implementation timescales;

— will increase competition between suppliers by stimulating product improvements.

This document covers the interface between an image controller and so called enrichment devices (OCR, Video Coding System or Voting System).

The communication partners of this interface will be called Image Controller (IC) on the one side and Enrichment Device (ED) on the other side.

Other work items (subject to agreement of CEN/TC331 and the UPU Standards Board) will be defined to cover other areas as and when the need is identified and the resources for development become available. A separate project group for each interface will undertake the work.

1 Scope

The purpose of this Technical Specification is to define the requirements of the OCR/VCS Standard interface and to convey these requirements in context to the reader.

This document is arranged under 4 main clauses as described in Figure 1:

— UCM (Use Case Model) describes the use cases for the IC/ED Interface using sequence diagrams with messages.

— IDD (Interface Design Description) defines the data model for the IC/ED interface.

— SDD (System Design Description) defines the mandatory specification of the IC/ED interface in terms of architecture, services and behavioural models. In the Common Part of this clause no middleware or transport layer is specified. The common part of this clause is intended to be middleware-independent.

— SDD-TCP/IP, SDD-CORBA, in these specialized clauses. The specifications for 2 compatible transport solutions TCP/IP, CORBA are provided. Further middleware solutions (such as SOAP) can be added when available, provided that they are fully compatible with the Common Part.

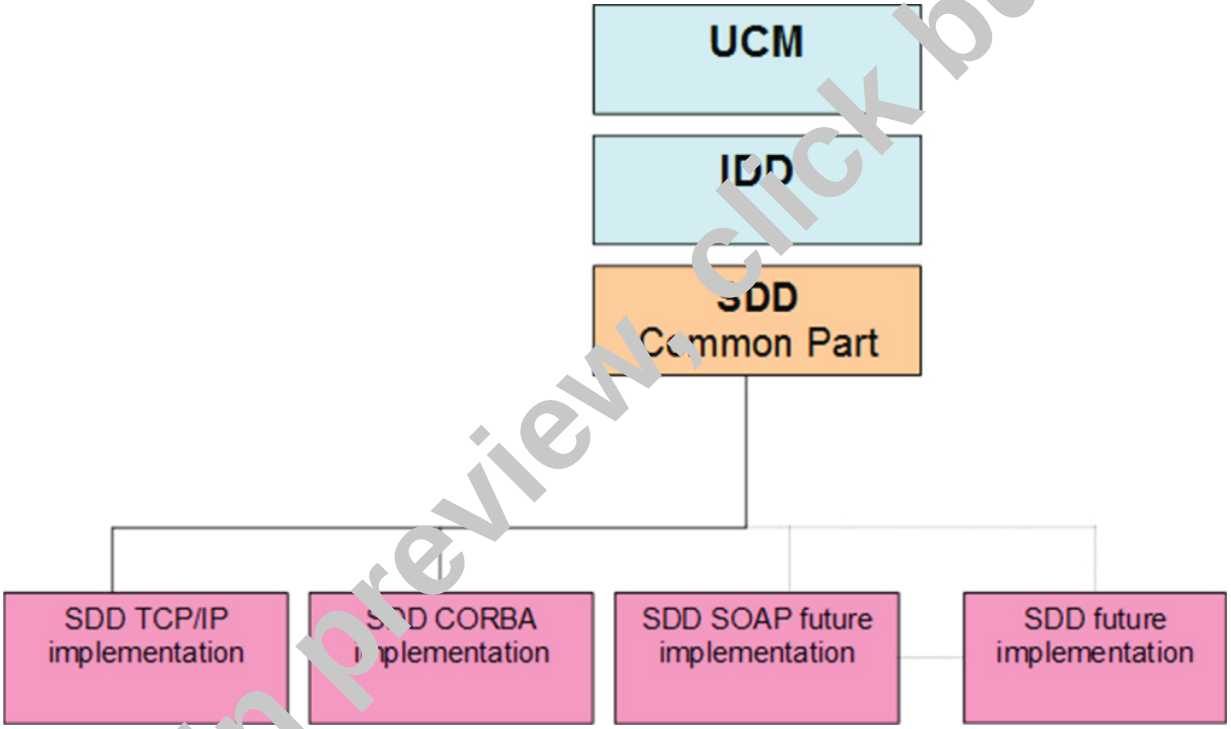

Figure 1 — IC/ED Interface Document Structure

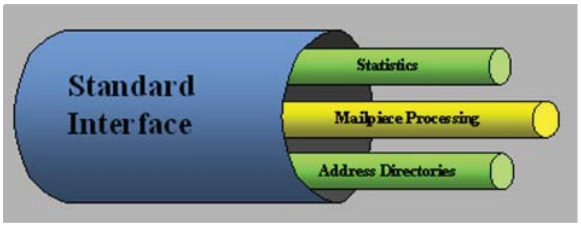

Figure 2 — Interface environment of an Enrichment Device