Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists

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# EESTI STANDARDI EESSÕNA

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13606-3:2008 sisaldab Euroopa standardi EN 13606-3:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 26.05.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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Võtmesõnad:

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# **EUROPEAN STANDARD**

# EN 13606-3

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#### **English Version**

# Health informatics - Electronic health record communication Part 3: Reference archetypes and term lists

Informatique de la santé - Communication des dossiers de santé informatisés - Partie 3: Archétypes de référence et listes de termes

Medizinische Informatik - Kommunikation von Patientendaten in elektronischer Form - Teil 3: Referenzarchetypen und Begriffslisten

This European Standard was approved by CEN on 28 February 2008.

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# **Foreword**

This document (EN 13606-3:2008) has been prepared by Technical Committee CEN/TC 251 "Health informatics", 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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

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 ENV 13606-3:2000.

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, 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 the United Kingdom.

# Introduction

# 0.1 Summary

Part 3 of the 13606 standards series contains two kinds of specifications:

- 1 normative set of (coded) term lists that each defines a controlled vocabulary for a Reference Model attribute that is defined in Part 1 of this standard series;
- 2 informative set of Reference Archetypes: expressed as mappings that each specifies how the Part 1 Reference Model should be used to represent information originating from:
  - set of HL7 version 3 Acts that form part of the Clinical Statement Domain Message Information Model;
  - o specialisations of ENTRY that are defined in the openEHR Reference Model.

#### 0.2 Term Lists

Each term list is referenced by its corresponding attribute as an invariant constraint in Part 1 of this standard series, by referring to its term list name. For each term list, every code value is accompanied by a phrase and description; however, in each case it is the code that is to be used as the Reference Model attribute value. Language translations of the phrase and description will therefore not affect the instances of RECORD COMPONENT that are communicated using this standard.

Should any future revision prove necessary for these term lists, a technical revision of this standard will be required. Such a revised standard shall specify an updated Reference Model identifier that shall then be used as the value of the rm\_id of an EHR\_EXTRACT, to inform the recipient of the version of this standard that was used in its creation.

A cross-mapping of the term list for LINK.role to HL7 actRelationship codes is also provided for the convenience of those wishing to adopt or interface this standard with HL7 version 3. This is part of a longer-term vocabulary harmonisation project between the health informatics standards development organizations (SDO's), and might therefore be extended in the future via other publications, such as the planned HL7-13606 Implementation Guide (see below). It is therefore informative in this standard.

### 0.3 Reference Archetypes

Each Reference Archetype is represented in this standard as a mapping correspondence table to indicate the way in which the ITEM structure within a 13606 Part 1 ENTRY is to be used to represent the classes and attributes of relevant HL7 v3 and *open*EHR classes. These two external models have been chosen for inclusion as these are the most likely internationally-used source models from which fine-grained clinical data may need to be transformed into this standard for communication.

These Reference Archetypes are included as an aid to those adopting this standard and wishing to transform Electronic Health Record (her) data from existing HL7 v3 or openEHR instances or messages. It is recognised that full two-way interoperability between these various representations requires more detail, including rich vocabulary and data type harmonisation, and a corresponding set of technical artefacts such as eXtensible Markup Language (XML) Schemata and Extensible Stylesheet Language Transformation (XSLT) scripts. Such interoperability is very much the goal of current SDO harmonisation efforts, and will be published as an HL7-13606 Implementation Guide, possibly as an open-access and regularly updated resource. However, the outstanding work required to achieve this level of interoperability might take up to another year from when this standard is expected to be published. It has therefore been decided to offer what does exist towards harmonisation in an informative form within this standard, as an aid to those already needing to make such data transformations. A worked example of the HL7 v3 to ISO 13606 mapping is given in Annex B.

# 1 Scope

This Standard addresses the communication of part or all of electronic health records (EHR) of a single identified subject of care between EHR systems, or between EHR systems and a centralised EHR data repository. It may also be used for EHR communication between an EHR system or repository and clinical applications or middleware components (such as decision support components) that need to access or provide EHR data, or as the representation of EHR data within a distributed (federated) record system.

This Standard. Part 3 of the 13606 EHR Communications Standard Series, defines term lists that each specify the set of values that particular attributes of the Reference Model defined in Part 1 of this Series may take. It also defines informative Reference Archetypes that correspond to ENTRY-level compound data structures within the Reference Models of *open*EHR and HL7 Version 3, to enable those instances to be represented within a consistent structure when communicated using this standard.

# 2 Terms and definitions

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

#### 3.1

#### archetype instance

individual metadata class instance of an Archetype Model, specifying the clinical concept and the value constraints that apply to one class of Record Component instances in an electronic health record extract

#### 3.2

#### clinical information

information about a person, relevant to his or her health or health care

#### 3.3

## committed

information that has been persisted within an electronic health record system and which constitutes part of the electronic health record for a subject of care

# 3.4

#### committer

agent (party, device or software) whose direct actions have resulted in data being committed to an electronic health record

#### 3.5

## composer

agent (party, device or software) responsible for creating, synthesising or organising information that is committed to an electronic health record

#### 3.6

#### electronic health record extract

part or all of the electronic health record for a subject of care, communicated in compliance with EN 13606

#### 3.7

## electronic health record system

system for recording, retrieving and manipulating information in electronic health records

#### 3.8

## entries

health record data in general (clinical observations, statements, reasoning, intentions, plans or actions) without particular specification of their formal representation, hierarchical organisation or of the particular Record Component class(es) that might be used to represent them

#### 3.9

#### patient

synonym for a subject of care