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English Version

Health informatics - Mapping of hierarchical message descriptions to XML

Informatique de santé - Carte des descriptions de message
hiérarchique en XML

Medizinische Informatik - Mapping von hierarchischen
Nachrichtenbeschreibungen nach XML

This Technical Specification (CEN/TS) was approved by CEN on 8 August 2005 for provisional application.

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Contents

Page

Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Abbreviations	6
5 Overall structure of this document	6
6 Message and GPIC support	7
7 Support of Data Types: general issues	9
8 Primitive Data Types	10
9 Data Value.....	18
10 Basic Data Types	19
11 Textual and coded Data Types	25
12 Quantity Types	33
13 Time-related Data Types	39
14 CEN message XML ITS support prior to RIM/GPICS/CEN Data Types.....	44
Annex A (informative) Additional references	46
Annex B (informative) Null Flavors	47
Annex C (informative) Generic Schema Definition	49
Annex D (informative) XML ITS Rules for CEN messages prior to availability of RIM, GPICS and CEN Data Types	51
Bibliography	55

Foreword

This document (CEN/TS 15211:2006) has been prepared by Technical Committee CEN/TC 251 “Health Informatics”, the secretariat of which is held by NEN.

This document includes material first defined in draft standards of HL7 (an ANSI accredited Standards Development Organisation) for which HL7 holds the copyright.

The descriptions in this document are partly different due to the fact that the CEN rules for drafting and presentation of standards are different.

CEN/TC 251 wishes to express its gratitude towards HL7 experts for generously sharing their work with the expert team and to thank the HL7 organisation for allowing the reproduction of their material in this document.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

Additional standards for representing CEN/TC 251 specifications may be developed for various technological approaches, e.g. for XML. These standards are called "Implementable Technology Specification" (ITS).

In developing this document for an XML ITS there has been the wish to harmonise with HL7 specifications, so that the health informatics industry in Europe and the USA can more easily be aligned. To this end a collaboration agreement was entered into in March 2000 between CEN/TC 251 and HL7. The goal was set for a maximum degree of alignment while maintaining their independence and need to serve the business requirements of the respective markets but also to make the results available to ISO for possible international standardisation.

This document differs from HL7 specifications in several areas:

- the CEN Data Types specification CEN/TS 14796 varies from the HL7 specifications in a number of respects. Some Data Types are not supported, while others are modified. The CEN/TS lists such changes where they have been identified;
- this document supports the CEN GPICs specification. Although comparable to HL7 CMETs in some ways, there are essential differences to be noted;
- this document supports CEN message specifications such as those used in the service messages specification;
- this document also supports an earlier version of CEN message specifications. This is an independent specification not linked to the three areas already identified.

In most other respects, this document is derived from the HL7 Version 3 XML ITS although partly described differently due to the fact that CEN is following the ISO rules for drafting and presentation of standards which HL7 is not.

NOTE Editor's note to the draft: The assistance of Charles McCay, Chair of the HL7 XML SIG in the preparation of this draft is gratefully acknowledged.

1 Scope

This document defines an XML ITS – Implementable Technology Specification for use in communicating healthcare information and for other health informatics purposes, using the CEN Data Types, CEN GPICs and CEN message specifications. The recommendations in each of the three areas are separately addressed, such that the ITS may have a scope wider than messaging, supporting other contexts of use of GPICs and CEN Data Types.

2 Normative references

Not applicable.

3 Terms and definitions

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

3.1

Data Type

set of distinct values, characterised by properties of those values and by operations on those values

3.2

date

identification of a particular calendar day, expressed by some combination of the data elements calendar year, calendar month, calendar week, calendar day or day of the year

3.3

Implementable Technology Specification

description of how to implement CEN artefacts in a concrete syntax

3.4

null flavor

reason for the absence of a valid data value

3.5

period of time (= time-interval)

portion of time between two time points

NOTE A period of time is often also referred to as period.

3.6

recurring time-interval

series of consecutive time-intervals of the same duration

3.7

time-point

instant in the laps of time regarded as dimensionless

3.8

value domain

set of valid data values for a Data Type