



BSI Standards Publication

## Health informatics — Sharing of OGD registry information

**bsi.**

...making excellence a habit.™

**National foreword**

This Published Document is the UK implementation of ISO/TS 13582:2015. It supersedes PD ISO/TS 13582:2013 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee IST/35, Health informatics.

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.

© The British Standards Institution 2015. Published by BSI Standards Limited 2015

ISBN 978 0 580 91607 6

ICS 35.240.80

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

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 December 2015.

**Amendments issued since publication**

Date	Text affected
------	---------------

---

TECHNICAL  
SPECIFICATION

**ISO/TS**  
**13582**

Second edition  
2015-12-15

---

---

**Health informatics — Sharing of OID  
registry information**

*Informatique de santé — Partage des informations de registre des  
identifiants d'objets (OID)*



Reference number  
ISO/TS 13582:2015(E)

© ISO 2015



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2015. 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

<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms, definitions and abbreviated terms</b> .....	<b>1</b>
3.1 Terms and definitions.....	1
3.2 Abbreviated terms.....	2
<b>4 Explanation of terms</b> .....	<b>2</b>
4.1 OID registry and OID repository.....	2
4.2 Registration Authority (RA).....	2
4.3 Responsible (Managing) Authority (MA).....	3
4.4 Submitting Authority (SA).....	3
4.5 Current Registrant.....	3
4.6 First Registrant.....	3
4.7 First Registration Authority.....	3
4.8 Rec. ITU-T X.660   ISO/IEC 9834-1.....	3
<b>5 Object identifiers in healthcare</b> .....	<b>4</b>
5.1 General.....	4
5.2 Additional descriptions.....	5
5.3 Related work.....	5
<b>6 Approach</b> .....	<b>5</b>
6.1 Requirements analysis.....	5
6.2 Preparatory work.....	6
<b>7 Information model</b> .....	<b>6</b>
7.1 General.....	6
7.2 Agenda of tables and symbols.....	7
7.2.1 Class attribute and associated tables.....	7
7.2.2 Conformance statements.....	8
7.3 XML exchange format.....	8
7.4 Registry.....	8
7.4.1 Attributes.....	8
7.4.2 Associations.....	9
7.4.3 Example.....	9
7.5 Oid.....	9
7.5.1 Attributes.....	10
7.5.2 Associations.....	12
7.6 RegistrationAuthority.....	12
7.6.1 Attributes.....	12
7.6.2 Associations.....	13
7.7 ResponsibleAuthority.....	13
7.7.1 Attributes.....	13
7.7.2 Associations.....	13
7.8 SubmittingAuthority.....	13
7.8.1 Attributes.....	14
7.8.2 Associations.....	14
7.9 HistoryAnnotation.....	14
7.9.1 Attributes.....	14
7.10 Reference.....	15
7.10.1 Attributes.....	15
7.11 AdditionalProperty.....	15
7.11.1 Attributes.....	16
7.12 Person.....	16

7.12.1	Attributes	16
7.13	Organization	16
7.13.1	Attributes	17
<b>8</b>	<b>List of codes and enumerations</b>	<b>17</b>
8.1	CountryCodes	17
8.2	LanguageCodes	18
8.3	OIDcategories	18
8.4	OIDstatusCodes	18
8.5	ReferenceType	18
8.6	RoleCodes	19
8.7	RoleStatus	19
<b>9</b>	<b>Datatypes</b>	<b>19</b>
9.1	Address AD	19
9.2	Coded simple value CS	19
9.3	Encapsulated data ED	19
9.4	Entity name for a person EN.PN	20
9.5	Entity name for an organization EN.ON	20
9.6	Instance identifier II	20
9.7	Interval of time stamp IVL_TS	20
9.8	String ST	20
9.9	String ST.NT	21
9.10	Object identifier (dot notation) ST.OID	21
9.11	Object identifier (asn1 notation) ST.ASN1	21
9.12	Object identifier (iri notation) ST.IRI	21
9.13	Symbolic name ST.SYMB	21
9.14	Telecommunication TEL	21
9.15	Locatable resource TEL.URL	21
9.16	Time stamp TS	21
<b>Annex A</b>	<b>(informative) OID types and sub trees</b>	<b>22</b>
<b>Annex B</b>	<b>(informative) Use cases and object identifier resolution system (ORS)</b>	<b>23</b>
<b>Annex C</b>	<b>(informative) W3C Schema for XML representation and information model</b>	<b>26</b>
<b>Bibliography</b>		<b>27</b>

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 215, *Health informatics*.

This second edition cancels and replaces the first edition (ISO/TS 13582:2013), of which it constitutes a minor revision.

## Introduction

OID (Object Identifiers) are unique identifiers for any kind of objects. A globally unique identifier for each of these concepts will help to ensure international exchangeability of objects within different applications (e.g. healthcare information systems).

In the exchange of healthcare information, additional information about the object being identified is generally very beneficial but typically not contained in a transaction of data between systems. Such information (responsible organizations, a human readable name, a description of the object, etc.) is referred to as the OID metadata and is housed in an OID Registry.

Today, due to lack of standardization of the set of metadata (both content and structure), existing OID registries are not compatible.

# Health informatics — Sharing of OID registry information

## 1 Scope

This Technical Specification specifies the mandatory and optional information to be recorded in any registry of OIDs, using an information model.

It specifies which parts of that information are to be regarded as public and which parts are to be subject to security and privacy requirements.

All registries support the recording of mandatory information, but the recording of any specific object identifier in one or more repositories is always optional. In some cases, security and privacy requirements are more stringent for e-health applications.

In detail, this Technical Specification:

- specifies an information model and a corresponding XML format for the export of the contents of an OID registry, suitable e.g. for import to a different OID registry;
- references common Use Cases for OID registries/repositories;
- references an Object Identifier Resolution System (ORS) which provides a look-up mechanism for information related to an object identifier, with guidance on the use of that facility.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 639-1, *Codes for the representation of names of languages — Part 1: Alpha-2 code*

ISO 3166, *Codes for the representation of names of countries — The International Organization for Standardization, 3rd edition, part 1* ISO 3166-1

ISO 21090, *Health informatics — Harmonized data types for information interchange*

ISO/HL7 21731, *Health informatics — HL7 version 3 — Reference information model — Release 4*

ITU-T X.660 | ISO/IEC 9834-1, *Information technology — Open Systems Interconnection — Procedures for the operation of OSI Registration Authorities: General procedures and top arcs of the ASN.1 Object Identifier tree*

IETF RFC 3066, *Tags for the Identification of Languages*

## 3 Terms, definitions and abbreviated terms

### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21090 and the following apply.