



# SLOVENSKI STANDARD

## SIST ENV 12922-1:2003

01-oktober-2003

---

### Upravljanje z medicinskimi slikami – 1. del: Storitveni razredi shranjevanja

Medical Image Management - Part 1: Storage Commitment Service Class

Verwaltung medizinischer Bilddaten - Teil 1: Erweiterte Unterstützung für die Speicherung medizinischer Bilddaten in einem Archiv

Gestion d'images médicales informatiques - Partie 1: Classe de service Stockage

**(standards.iteh.ai)**

Ta slovenski standard je istoveten z: **ENV 12922-1:1997**

<https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12cc3d8/sist-env-12922-1-2003>

#### **ICS:**

35.240.80	Uporabniške rešitve IT v zdravstveni tehniki	IT applications in health care technology
-----------	--	---

**SIST ENV 12922-1:2003**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST ENV 12922-1:2003](#)

<https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003>

EUROPEAN PRESTANDARD  
PRÉNORME EUROPÉENNE  
EUROPÄISCHE VORNORM

**ENV 12922-1**

November 1997

ICS 35.240.70

Descriptors: medicine, data processing, information interchange, medical images, specifications

English version

**Medical Image Management - Part 1: Storage Commitment  
Service Class**

Gestion d'images médicales informatiques - Partie 1:  
Classe de service Stockage

Verwaltung medizinischer Bilddaten - Teil 1: Erweiterte  
Unterstützung für die Speicherung medizinischer Bilddaten  
in einem Archiv

This European Prestandard (ENV) was approved by CEN on 1 November 1997 as a prospective standard for provisional application.

The period of validity of this ENV 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 ENV can be converted into a European Standard.

CEN members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

[SIST ENV 12922-1:2003](https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003)

<https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003>



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

# Table of Contents

<b>TABLE OF CONTENTS</b> .....	<b>2</b>
<b>FOREWORD</b> .....	<b>3</b>
<b>INTRODUCTION</b> .....	<b>4</b>
<b>1. SCOPE</b> .....	<b>4</b>
<b>2. NORMATIVE REFERENCES</b> .....	<b>4</b>
<b>3. DEFINITIONS AND ABBREVIATIONS</b> .....	<b>5</b>
3.1. DEFINITIONS .....	5
3.2. ABBREVIATIONS .....	5
<b>4. NORMATIVE TECHNICAL REQUIREMENTS</b> .....	<b>6</b>
<b>ANNEX A - OVERVIEW OF THE DICOM STORAGE COMMITMENT SERVICE CLASS (INFORMATIVE)</b> .....	<b>7</b>
A.1. STORAGE COMMITMENT SERVICE CLASS OVERVIEW .....	7
A.1.1. Models Overview.....	8
A.1.2. Conformance Overview.....	8

**ITeH STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST ENV 12922-1:2003

<https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003>



## Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 251 "Medical informatics", the secretariat of which is held by IBN.

The preparation of this European Prestandard was undertaken by CEN/TC251/PT4-019 and covered by the European Commission under voucher BC/CEN/93/17.6.

This European Prestandard is closely related to the MEDICOM (Medical Image Communication) standard. It references several parts of the MEDICOM Standard, and defines a supplement to it.

The content of this European Prestandard has been produced with the cooperation of ACR (the American College of Radiology) and NEMA (the National Electrical Manufacturers Association).

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ENV 12922-1:2003](https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003)

<https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003>

## Introduction

The DICOM (Digital Imaging and Communications in Medicine) standard was developed by the ACR-NEMA committee in order to accomplish standardised communication of medical image and related data by either on-line or off-line means. CEN/TC251 has been taking an active part in the work in DICOM and has commented on and influenced the contents.

The MEDICOM Standard is very closely aligned with DICOM, and references several of the parts of DICOM. When the MEDICOM standard was established, it was decided that CEN and ACR-NEMA would jointly work to further develop the standards.

This European Prestandard is the first DICOM/MEDICOM supplement that comes out of this joint work. It is the result of joint work of CEN/TC251/PT019 and ACR-NEMA Working Group VI. This cooperation has produced a DICOM supplement and this European Prestandard that references the DICOM supplement.

One of the key requirements of Medical Image Management is the ability of an application to specify that datasets be stored safely in such a way that they can be retrieved subsequently. This facility is provided by the DICOM Storage Commitment Service Class specified in documents referenced by this European Prestandard. It may be used in various ways. In particular, it supports a scenario in which one device may request the safe keeping of datasets which have been previously transmitted by one or more devices. It also supports a scenario in which a device requests another device to implement safe storage of one or more datasets currently available from one or more devices.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

### 1. Scope

[SIST ENV 12922-1:2003](https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003)

<https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003>

This European Prestandard specifies network services to control the safe storage of medical images and related data in a networked and media interchange environment. It is an extension of the MEDICOM standard.

This European Prestandard does not cover the issue of data ownership. More specifically it does not provide management of master copies of data. The term "Storage Commitment" implies that it must be possible at a later time (within the time frame specified in the Conformance Statement of the implementation) to retrieve the data. However, it does not imply that the location where the data was initially stored is the only location from which the data can be retrieved.

### 2. Normative References

This European Prestandard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

#### CEN/CENELEC Internal Regulations

1991	Part 3 - Rules for the drafting and presentation of International Standards (PNE Rules)
------	---

ISO 7498	1984 Information Processing systems - Open Systems Interconnection - Basic Reference Model
----------	--

CEN/TC251/N94-069

1994 Medical Image and Related Data Interchange Format Standards - MEDICOM  
NOTE: This reference will change with the changing status of the MEDICOM standard.

NEMA PS3-2	1993	Digital Imaging and Communications in Medicine, Part 2 - Conformance.
NEMA PS3-3	1993	Digital Imaging and Communications in Medicine, Part 3 - Information Object Definitions.
NEMA PS3-4	1993	Digital Imaging and Communications in Medicine, Part 4 - Service Class Specifications.
NEMA PS3-5	1993	Digital Imaging and Communications in Medicine, Part 5 - Data Structure and Encoding.
NEMA PS3-6	1993	Digital Imaging and Communications in Medicine, Part 6 - Data Dictionary.
NEMA PS3-7	1993	Digital Imaging and Communications in Medicine, Part 7 - Message Exchange.
NEMA PS3-8	1993	Digital Imaging and Communications in Medicine, Part 8 - Network Communication Support for Message Exchange.
NEMA PS3	1995	Supplement 8, Storage Commitment

iTeH STANDARD PREVIEW  
(standards.iteh.ai)

### 3. Definitions and Abbreviations

#### 3.1. Definitions

For the purpose of this European Prestandard the following definitions apply:

**Conformance Statement:** a formal statement associated with a specific implementation of the Standard. It specifies the Service Classes, Information Objects, and Communication Protocols supported by the implementation

**Service Class:** A structured description of a service which is supported by co-operating Application Entities using specific Commands acting on specific class of Information Object

**Service/Object Pair Class:** the union of a specific set of DICOM Message Service Element and one related Information Object Definition which completely defines a precise context for communication.

#### 3.2. Abbreviations

ACR-NEMA	The joint committee of the American College of Radiology and the National Electronic Manufacturers Association
AE	Application Entity
CEN	Comité Européen de Normalisation (The European Committee for Standardization)
DICOM	Digital Imaging and Communications in Medicine

Page 6  
ENV 12922-1:1997

DIMSE	DICOM Message Service Element
IOD	Information Object Definition
MEDICOM	Medical Image Communication
OSI	Open Systems Interconnection
PACS	Picture Archiving and Communication System
SCP	Service Class Provider
SCU	Service Class User
SOP	Service Object Pair
UID	Unique Identifier
LUT	Look Up Table

## 4. Normative Technical Requirements

Implementations claiming conformance to this European Prestandard shall meet the requirements specified in the following documents:

CEN/TC251/N94-069

1994 Medical Image and Related Data Interchange Format Standards - MEDICOM

NOTE: This reference will change with the changing status of the MEDICOM standard.

NEMA PS3

1995 Supplement 8, Storage Commitment

**ITeH STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST ENV 12922-1:2003](https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003)

<https://standards.iteh.ai/catalog/standards/sist/3dfe3021-27f2-4b11-9661-69c0d12ce3d8/sist-env-12922-1-2003>



## Annex A - Overview of the DICOM Storage Commitment Service Class (Informative)

This annex provides a brief overview of the DICOM Storage Commitment Service Class on which this European Prestandard is based.

Figure 1 presents an overview of the existing Parts of DICOM. The DICOM supplement referenced by this European Prestandard contains the following parts:

- An addendum to DICOM Part 3 containing the Storage Commitment Information Object Definition (IOD)
- An addendum to DICOM Part 4 specifying the Storage Commitment Service Class
- An addendum to DICOM Part 6 defining the new data elements introduced by the Storage Commitment IOD

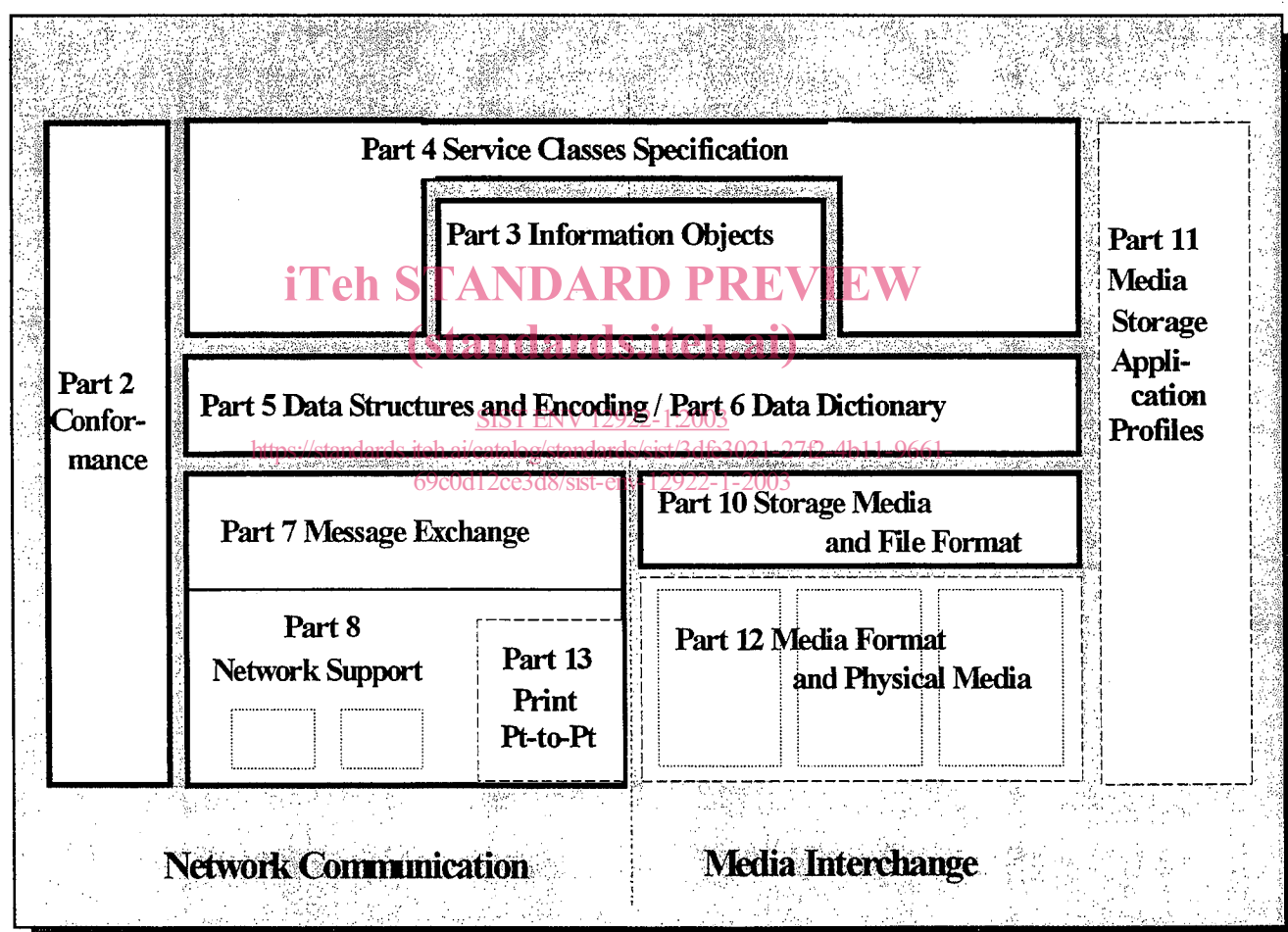


Figure 1 Overview of DICOM Parts

### A.1. Storage Commitment Service Class Overview

The Storage Commitment Service Class defines an application-level class-of-service to control the safe storage of SOP Instances (images and other information such as overlays, curves, modality LUTs, etc.). The purpose of the Storage Commitment Service Class is to enable an Application Entity (AE) acting as a Service Class User (SCU) to request another Application Entity (AE) acting as a Service Class Provider (SCP) to control the safe storage of Service Object Pair (SOP) Instances (i.e. that the SOP Instances can be retrieved at some later time). The AE