



European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

CEN/ISSS WS/BIIGL11

UUID

GUIDELINE

Business Domain: All

Business Process: All

Document Identification: CEN/ISSS WS/Guideline 11

Version: 1.0

Release: 2009-11-05

Date of approval: 2009-11-05

TABLE OF CONTENTS

1	Introduction	3
1.1	Purpose	3
1.2	Summary	3
2	UUID classes and elements	4
3	Description	5
3.1	Algorithm	5
3.1.1	UUID algorithm	5
3.2	UUID example	5

1 Introduction

The CEN/ISSS Workshop on business interoperability interfaces for public procurement in Europe (CEN/ISSS WS/BII) is established in order to

- Identify and document the required business interoperability interfaces related to pan-European electronic transactions in public procurement expressed as a set of technical specifications, developed by taking due account of current and emerging UN/CEFACT standards in order to ensure global interoperability;
- Co-ordinate and provide support to pilot projects implementing the technical specifications in order to remove technical barriers preventing interoperability.

To facilitate implementation of electronic commerce in a standardized way, thereby enabling the development of standardized software solutions as well as efficient connections between business partners without case by case specification of the data interchange, the workshop agreed to document the required business interoperability interfaces as profile descriptions. The end goal is to reduce the cost of implementing electronic commerce to a level that is economical for small and medium size companies and institutions.

The main focus of the profile description and the associated transaction data models is to address generally expressed business requirements applicable throughout the European market. Although the profile description and associated transaction data model are designed to meet generally expressed requirements, it is still the responsibility of the users to ensure that the actual business transactions exchanges meets all the legal, fiscal and commercial requirements relevant to their business.

This guideline is one of a series of documents providing detailed guidance on the purpose and use of some key elements of the transaction data models developed by CEN/ISSS WS/BII.

All cardinalities shown in this document represent elements and associations at from the full data models; see 'Profile Architecture' for further information.

1.1 Purpose

The purpose of this guideline is to specify the use of Universally Unique Identifiers (UUID).

1.2 Summary

- UUID should be used whenever possible.
- In NES, UUID may be stated at document level in library level documents.
- UUID is an instance identifier and, if used, must be generated every time a document is generated or copied.
- When used at line level, the UUID can identify a line across all document instances. This may be use, for example, in RDBMS where no double keys should be created in a line table, but instead only a primary key defined by UUIDs.
- The recipient of a document with a UUID is obliged to detach the document's document level UUID.
- The recipient of a document with a UUID at line level or deeper inside the document is not obligated to detach the UUID unless it is used as a reference to another document.

2 UUID classes and elements

Universally Unique Identifier (UUID) is contained in the element UUID at document level in the BII full data model transactions.

3 Description

A document instance ID (UUID) is generated by a source business system.

In BII, UUIDs occur only at document level and only in library level documents; basic documents do not contain UUIDs.

If a document contains a UUID, other documents can refer directly to it as an exact instance without further qualification.

When sending copies of documents, new UUIDs must be generated for each copy instance.

When a document is reformatted or its storage location moved, its UUID must be transferred into the new format or destination without alteration.

3.1 Algorithm

A UUID is a 128 bit number represented in hexidecimals. It is a standardized Unique ID which is described in the Internet Task Force RFC 4122. The formal specification of a UUID is (expressed in Barcus-Naur Format) as follows:

3.1.1 UUID algorithm

```
UUID          = time-low "-" time-mid "-"
                  time-high-and-version "-"
                  clock-seq-and-reserved
                  clock-seq-low "-" node
time-low      = 4hexOctet
time-mid      = 2hexOctet
time-high-and-version = 2hexOctet
clock-seq-and-reserved = hexOctet
clock-seq-low = hexOctet
node          = 6hexOctet
hexOctet      = hexDigit hexDigit
hexDigit =
    "0" / "1" / "2" / "3" / "4" / "5" / "6" / "7" / "8" / "9" /
    "a" / "b" / "c" / "d" / "e" / "f" /
    "A" / "B" / "C" / "D" / "E" / "F"
```

The "node" field is a number which the sender can make unique i.e. something that has been assigned to the sender by an organisation that guarantees unique IDs. The number must be 12 hexidecimals long, i.e. shorter than 16^{12} . An example could be a Mac address on a network card, or an EAN location number that is modified to match the format. Further information about UUID is available at:
["http://www.ietf.org/rfc/rfc4122.txt"](http://www.ietf.org/rfc/rfc4122.txt)

3.2 UUID example

<cbc:UUID>6E09886B-DC6E-439F-82D1-7CCAC7F4E3B3</cbc:UUID>