TOOP Policy for the use of identifiers

Version 1.0

Status: in use

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Description of changes | Author |
| 0.9 | 2018-05-14 | Initial version based on PEPPOL Policy for the use of identifiers 3.1.0 | Philip Helger |
| 1.0 | 2019-03-17 | Updated version based on PEPPOL Policy for use of identifier 4.0 | Philip Helger |

**Statement of originality**

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

**Statement of copyright**



*This deliverable is released under the terms of the Creative Commons Licence accessed through the following link: http://creativecommons.org/licenses/by-nc-nd/4.0/.*

*You are free to:*

***Share*** *— copy and redistribute the material in any medium or format.*

*The licensor cannot revoke these freedoms as long as you follow the license terms.*

# Contributors

**Organisations**

BRZ (Bundesrechenzentrum)[[1]](#footnote-1), Austria, www.brz.gv.at

**Persons**

Philip Helger, BRZ

# ****Table of contents****

[Contributors 3](#_Toc3728069)

[Table of contents 4](#_Toc3728070)

[1 Introduction 6](#_Toc3728071)

[1.1 Audience 6](#_Toc3728072)

[1.2 References 6](#_Toc3728073)

[1.3 XML Namespaces URIs used 6](#_Toc3728074)

[2 Introduction to identifiers 7](#_Toc3728075)

[2.1 Scope 7](#_Toc3728076)

[2.1.1 The policy of a federated scheme for identifying Parties 7](#_Toc3728077)

[2.1.2 The policy for identifying Documents and Services used in the TOOP Network 7](#_Toc3728078)

[2.1.3 Semantic scope 8](#_Toc3728079)

[2.2 Participant vs. Party Identification 8](#_Toc3728080)

[2.3 Common Policies 9](#_Toc3728081)

[POLICY 1 Usage of ISO15459 9](#_Toc3728082)

[POLICY 2 Identifier Value casing 10](#_Toc3728083)

[3 Policy for TOOP Participant Identification 11](#_Toc3728084)

[3.1 Format 11](#_Toc3728085)

[POLICY 3 Use of ISO15459 structure 11](#_Toc3728086)

[POLICY 4 Coding of Identifier Schemes 11](#_Toc3728087)

[3.2 Identifier Scheme values 11](#_Toc3728088)

[POLICY 5 Participant Identifier Meta Scheme 12](#_Toc3728089)

[POLICY 6 Numeric Codes for Identifier Schemes 12](#_Toc3728090)

[POLICY 7 Participant Identifiers for DNS 12](#_Toc3728091)

[POLICY 8 XML attributes for Participant Identifiers in SMP responses 13](#_Toc3728092)

[POLICY 9 XML attributes for Electronic Address IDs (EndpointID) in UBL documents 13](#_Toc3728093)

[POLICY 10 XML attributes for Participant Identifiers in the Envelope (SBDH) 14](#_Toc3728094)

[4 Policy for TOOP Party Identification 15](#_Toc3728095)

[4.1 Format 15](#_Toc3728096)

[POLICY 11 Use of ISO15459 structure 15](#_Toc3728097)

[POLICY 12 Coding of Identifier Schemes 15](#_Toc3728098)

[POLICY 13 XML attributes for Party Identifiers in UBL documents 15](#_Toc3728099)

[5 Policies on Identifying Document Types supported by TOOP 16](#_Toc3728100)

[POLICY 14 Document Type Identifier scheme 16](#_Toc3728101)

[POLICY 15 Customization Identifiers 16](#_Toc3728102)

[POLICY 16 Specifying Customization Identifiers in UBL documents 16](#_Toc3728103)

[POLICY 17 Document Type Identifier Value pattern 16](#_Toc3728104)

[POLICY 18 Specifying Document Type Identifiers in SMP documents 17](#_Toc3728105)

[POLICY 19 Document Type Identifier Values 18](#_Toc3728106)

[6 Policy for TOOP Process Identifiers 19](#_Toc3728107)

[POLICY 20 Process Identifier Scheme 19](#_Toc3728108)

[POLICY 21 Process Identifier Value 19](#_Toc3728109)

[POLICY 22 Specifying Process Identifiers in SMP documents 19](#_Toc3728110)

[7 Policy on Identifying Transport Profiles in TOOP 20](#_Toc3728111)

[7.1 SMP 20](#_Toc3728112)

[POLICY 23 Transport Profile Values 20](#_Toc3728113)

[POLICY 24 Specifying Transport Profiles in SMP documents 20](#_Toc3728114)

[8 Governance of this Policy 21](#_Toc3728115)

# Introduction

This document is heavily based on the PEPPOL Policy for the use of identifiers 4.0 [PEPPOL].

## Audience

This document describes a TOOP policy and guidelines for use of identifiers within the TOOP network. The intended audience for this document are organizations wishing to be TOOP enabled for exchanging electronic invoices, and/or their ICT-suppliers. More specifically it is addressed towards the following roles:

* ICT Architects
* ICT Developers
* Business Experts

## References

|  |  |
| --- | --- |
| [TOOP] | <http://www.toop.eu/> |
| [PEPPOL] | <https://github.com/OpenPEPPOL/documentation/blob/master/TransportInfrastructure/PEPPOL-EDN-Policy-for-use-of-identifiers-4.0-2019-01-28.pdf> |
| [TOOP\_CodeList] | <https://github.com/TOOP4EU/toop/tree/master/Code%20Lists> |
| [ISO 15459] | <http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=51284>  <http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43349> |
| [ISO 9735 Service Code List (0007)] | <http://www.unece.org/trade/untdid/download/r1241.txt> |
| [ISO 6523] | <http://www.iso.org/iso/catalogue_detail?csnumber=25773> |
| [OASIS UBL] | <http://docs.oasis-open.org/ubl/os-UBL-2.1/UBL-2.1.html>  <http://docs.oasis-open.org/ubl/os-UBL-2.1/UBL-2.1.zip> |
| [OASIS UBL22] | <http://docs.oasis-open.org/ubl/os-UBL-2.2/UBL-2.2.html>  <http://docs.oasis-open.org/ubl/os-UBL-2.2/UBL-2.2.zip> |
| [OASIS ebCore] | <http://docs.oasis-open.org/ebcore/PartyIdType/v1.0/CD03/PartyIdType-1.0.html> |
| [UN/CEFACT] | <http://www.unece.org/cefact/> |

## XML Namespaces URIs used

|  |  |
| --- | --- |
| **Prefix** | **Namespace URI** |
| cac | urn:oasis:names:specification:ubl:schema:xsd:CommonAggregateComponents-2 |
| cbc | urn:oasis:names:specification:ubl:schema:xsd:CommonBasicComponents-2 |

# Introduction to identifiers

Identifiers are information elements that establish the identity of objects, such as organizations, products, places, etc. The TOOP project uses many identifiers in both its transport infrastructure and within the documents exchanged across that infrastructure. Two of the significant identifiers are those for Parties/Participants (organizations, persons, etc.) and Services (business profiles, document types, etc). These are the “who” and the “what” of TOOP business document exchanges.

This document outlines the policy for using the correct identifiers specifically for these two areas but it also introduces principles for any identifiers used in the TOOP environment. Implementers failing to adhere to these policies seriously jeopardize the interoperability of the information being exchanged. This policy should form a requirement of any TOOP participation agreements.

## Scope

### The policy of a federated scheme for identifying Parties[[2]](#footnote-2)

Parties in the TOOP Network play the role of Participants. There are sender and receiver Participants in any exchange, but the Service Metadata Publisher (SMP) only publishes services defined for the receiver Participant. The technical name for this identifier in the TOOP Network is the Participant Identifier.

Within each business document there are also Parties taking on business roles such as customer and supplier, etc. Clearly there may be relationships between these Parties and the Participant Identifier. Sometimes the Supplier Party is the receiver Participant for an Order document. Another example is that an Invoice may contain an identifier for EndpointID that equates to the receiver Participant in the SMP. But neither of these are reliable rules. Business standards (such as EN 16931) and agreements (such as BII profiles) do not (deliberately) include any ‘envelope’ information linking the document content to the transport infrastructure. The relationship between identifiers within Documents and identifiers used in the transport infrastructure is not defined in the specifications.

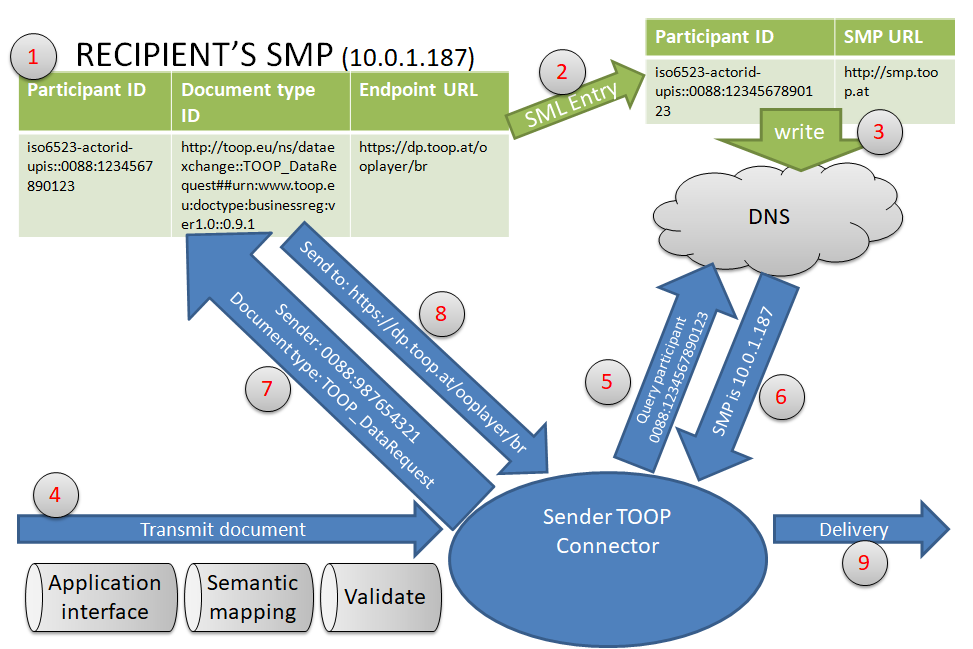
So whilst there is a relationship between these various Parties, we have no policy on how this should be done. This policy relates to the common use of different identification schemes to identify the appropriate Party within the context required. In other words, identifiers may have different values but the method by which they are defined should be consistent.

Many schemes already exist for identifying Parties. TOOP has no intention of developing yet another. Our strategy is to recognize a range of different identification schemes and provide a code list of those recognized schemes based on international standards.

### The policy for identifying Documents and Services used in the TOOP Network

The TOOP Network requires a Participant sending a document to identify both the receiving Participant and the service that will receive the document. The sender (or their Access Point provider) achieves this by searching the Service Metadata Locator (SML) filled Domain Name System (DNS) to find the relevant Service Metadata Publisher (SMP) that can identify the endpoint URL[[3]](#footnote-3) within the recipient’s Access Point (AP). This endpoint URL is the service address where the document is received. Therefore it is important to define precisely what documents and services can be handled by the receiving Participant.

The diagram below shows the relationship of these information elements.



### Semantic scope

This document covers the following areas:

* Participant identification
  + Identification of a technical entity in the TOOP Network
  + Can be used in transport documents and (where needed) in business documents
* Party identification
  + Identification of a business entity
  + Usually only used in business documents
* Document type identification
* Process identification
* Transport profile identification

## Participant vs. Party Identification

The following aspects are addressed in this document:

1. The TOOP code list of Party Identification schemes used in business documents.
2. The TOOP code list of Participant Identification schemes used in metadata as well as in business documents.

TOOP does not implement its own scheme for identifying Parties. Instead it supports a federated system for uniquely identifying parties following the ISO 15459 format scheme[[4]](#footnote-4) for unique identifiers. This requires defining a controlled set of “Issuing Agency Codes”[[5]](#footnote-5) for identification schemes (also known as “party identifier types”[[6]](#footnote-6) or “Identification code qualifier”[[7]](#footnote-7) or “International Code Designators”[[8]](#footnote-8) or “Party ID Type”[[9]](#footnote-9)) required by TOOP implementations.

Each TOOP Party identifier to be used in the federated system is a combination of the Issuing Agency Code and the value given by the Issuing Agency.

* For TOOP, it will be part of the TOOP SMP Provider agreement that SMP Providers have suitable governance of their identification schemes when they enter, update and delete information on their SMP.
* Within the content of business documents, each TOOP Participant will be responsible for using the appropriate TOOP Party Identifier.

This section defines the policies for the formatting and the population of values for Party Identifiers used by TOOP.

Note for UBL documents: It should be pointed out here that this policy covers only use Party/PartyIdentification/ID and Party/EndpointID. Other party or participant identifiers within UBL documents are out of scope for this policy.

## Common Policies

1. Usage of ISO15459

Participant Identifiers should adhere to the following constraints:

* MUST be at least 1 character long (excluding the identifier scheme)
* MUST NOT be more than 50 characters long (excluding the identifier scheme)
* MUST only contain letters and numeric digits from the invariant character set of ISO-8859-1

Party Identifiers should adhere to the following constraints:

* MUST be at least 1 character long (excluding the identifier scheme)
* MUST NOT be more than 50 characters long (excluding the identifier scheme)
* MUST only contain characters from the invariant character set of ISO-8859-1

Document Type Identifiers should adhere to the following constraints:

* MUST be at least 1 character long (excluding the identifier scheme)
* MUST NOT be more than 500 characters long (excluding the identifier scheme)
* MUST only contain characters from the invariant character set of ISO-8859-1

Process Identifiers should adhere to the following constraints:

* MUST be at least 1 character long (excluding the identifier scheme)
* MUST NOT be more than 200 characters long (excluding the identifier scheme)
* MUST only contain characters from the invariant character set of ISO-8859-1

Transport Profile Identifiers should adhere to the following constraints:

* MUST be at least 1 character long (excluding the identifier scheme)
* MUST NOT be more than 50 characters long (excluding the identifier scheme)
* MUST only contain letters, numeric digits, the minus sign (‘-‘) or the underscore sign (‘\_’) from the invariant character set of ISO-8859-1

Applies to: all above mentioned types of identifiers in all TOOP components

1. Identifier Value casing

All Participant Identifier values have to be treated case insensitive even if the underlying scheme requires a case sensitive value.

All Party Identifier values have to be treated case insensitive even if the underlying scheme requires a case sensitive value.

All Document Type Identifier values have to be treated case sensitive.

All Process Identifier values have to be treated case sensitive.

All Transport Profile Identifiers have to be treated case sensitive.

Applies to: all identifiers in all TOOP components

Note: all identifier scheme values are case sensitive (see POLICY 5, POLICY 14 and POLICY 20)

**Examples:**

Participant Identifier value “0088:abc” is equal to “0088:ABc”

Participant Identifier value “0088:abc” is NOT equal to “0010:abc”

Document Type Identifier value

urn:oasis:names:specification:ubl:schema:xsd:Invoice-2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:TOOP.eu:2017:poacc:billing:3.0::2.1

is NOT equal to

URN:OASIS:NAMES:SPECIFICATION:UBL:SCHEMA:XSD:INVOICE-2::INVOICE##URN:CEN.EU:EN16931:2017#COMPLIANT#URN:FDC:TOOP.EU:2017:POACC:BILLING:3.0::2.1

Process Identifier value

urn:fdc:TOOP.eu:2017:poacc:billing:01:1.0

is NOT equal to

URN:FDC:TOOP.EU:2017:POACC:BILLING:01:1.0

# Policy for TOOP Participant Identification

Participant identifiers relate to technical entities and are used in transport level document as well as in business documents.

## Format

1. Use of ISO15459 structure

Participant Identifier values used in TOOP are comprised of:

- An Identifier Scheme

- The value provided by this Identifier Scheme

Applies to: all Participant identifiers in all TOOP components

**Example:**

Identifier Scheme: EAN International

Identifier Scheme according to [TOOP\_CodeList]: 0088

Value provided by the Identifier Scheme: 1234567890128

1. Coding of Identifier Schemes

All Identifier Schemes for Participant Identifiers are to be taken from the normative version of [TOOP\_CodeList].

This list is currently maintained by TOOP. This maintenance is necessary because CEF did not yet publish a list for usage in EN 16931.

Applies to: all Participant identifiers in all TOOP components

## Identifier Scheme values

The values for the initial TOOP identifier Scheme Code list were taken from the PEPPOL Identifier Scheme code list but it may be extended to cover use by all TOOP participants and includes other known Identifier Schemes.

It is significant that this list will need ongoing extension under governance procedures currently being developed (see section on Governance). To ensure sustainability and proper governance it is proposed to include only Issuing Agency Codes (IACs) in the following order of priority:

1. International recognized standard schemes, then
2. International de-facto accepted schemes, then
3. Nationally defined schemes

The actual values for numeric International Code Designators were based on the following allocation criteria:

1. ISO 6523 International Code Designator (if known), or
2. ISO 9735 Identification code qualifier (if known), or
3. An incremental number starting from 9900 (issued by TOOP)

Even though these numeric values are based on ISO code sets, they form a separate TOOP code list because they contain additional values. Therefore the Issuing Agency for all numeric codes is TOOP and not ISO 6523.

The normative version of the code list is available at [TOOP\_CodeList].

Note: rows marked as deprecated should not be used for newly issued documents, as the respective identifier issuing agency is no longer active/valid. Deprecated Issuing Agency Codes may however not be reused for different agencies as existing exchanged documents may refer to them.

1. Participant Identifier Meta Scheme

The TOOP Participant Identifier Meta Scheme is:

iso6523-actorid-upis

Applies to: all Participant Identifiers in all TOOP components

Note: this Meta Scheme is always case sensitive – only the Participant Identifier value is case insensitive (see POLICY 2).

Note: the Participant Identifier Meta Scheme may be omitted in documents because it is constant.

1. Numeric Codes for Identifier Schemes

The numeric ISO 6523 code set as used in TOOP include additional code values not part of the official ISO 6523 code set and so cannot be referred to as the official ISO 6523 code set[[10]](#footnote-10). The codes starting with “99” are extending this code set and are called “extended values”. For convenience the term “ISO 6523” is used for all codes and indicates the origin of many code values used.

Applies to: all participant identifiers in all TOOP components

A normative list of all TOOP Participant Identifier Schemes and metadata can be found at [TOOP\_CodeList]. Note: entries marked as deprecated should not be used for newly issued documents, as the respective Participant Identifier Scheme is no longer active/valid. Deprecated scheme IDs may however not be reused for different Participant Identifier Schemes as existing exchanged documents may refer to them.

1. Participant Identifiers for DNS

Participant identifiers – consisting of scheme and value – are encoded as follows into a DNS name:

<hash-of-value>.<scheme>.<SML-zone-name>

Applies to: the resolution of TOOP Participant Identifiers for SMP clients

Note: in comparison to PEPPOL, TOOP uses the OASIS SMP specification v1.

Explanation:

|  |  |
| --- | --- |
| <hash-of-value> | Is the string representation of the SHA256 hash value, of the lowercased identifier value (e.g. 0088:abc).  The **UTF-8** charset needs to be used for extracting bytes out of strings for SHA256 hash value creation.  Lowercasing must be performed according to the **en\_US** locale rules (no special character handling).  Note: it is important, that the SHA256 hash value is generated **after** the identifier value has been lowercased because according to POLICY 2 participant identifiers have to be treated case insensitive. “String representation” means the encoding of each SHA256 hash-byte into 2 characters in the range of [0-9a-f] (e.g. byte value 255 becomes string representation “ff”). |
| <scheme> | Is the identifier scheme value (“iso6523-actorid-upis” in TOOP) and is added “as is” into the DNS name[[11]](#footnote-11).  A scheme identifier may only contain the following characters: only contain the following characters: [a-z], [0-9], [-].  A scheme identifier SHOULD be as short as possible, and MUST NOT exceed 25 characters. |
| <SML-zone-name> | Is the DNS domain name of the SML zone (e.g. “toop.acc.edelivery.tech.ec.europa.eu.” – mind the trailing dot). |

**Example:**

The Participant Identifier 0088:123abc with the Meta Scheme iso6523-actorid-upis in the SML DNS zone toop.acc.edelivery.tech.ec.europa.eu. is encoded into the following identifier:

Y7DZFXAF3D4CJZ4KCGRXTEC6TWVCGA4KY7ZWA5BOIF6MSWD4TDRQ.iso6523-actorid-upis.toop.acc.edelivery.tech.ec.europa.eu.

The result must be the same if the identifier 0088:123ABC is used, as identifier values are treated case insensitive.

1. XML attributes for Participant Identifiers in SMP responses

The “scheme” attribute must be populated with the value "iso6523-actorid-upis" (see POLICY 5) in all instances of the “ParticipantIdentifier” element.

Applies to: XML documents used in the SMP

**Example 1:**

The following example from an SMP exchange denotes that the SMP Endpoint is identified using the ISO 6523 ICD value in the TOOP set of Participant Identifier Schemes. This in turn has a numeric value of 0088 meaning that the party has a GLN number with the value of 7300010000001.

<ParticipantIdentifier scheme="iso6523-actorid-upis"  
>0088:7300010000001</ParticipantIdentifier>

**Example 2:**

The following example denotes that the SMP Endpoint is identified using the ISO 6523 ICD value in the TOOP set of Participant Identifier Schemes. This in turn has a numeric value of 0002 meaning that the party has a French SIRENE identifier with the value of 542034942.

<ParticipantIdentifier scheme="iso6523-actorid-upis"  
>0002:542034942</ParticipantIdentifier>

1. XML attributes for Electronic Address IDs (EndpointID) in UBL documents

The “schemeID” attribute MUST be populated in all instances of the “EndpointID” element when used within a “Party” element. The only valid values are defined in the [TOOP\_CodeList] as “ICD value”.

Extended values starting with “99” as indicated by POLICY 6 MAY be used.

Applies to: all business documents used in TOOP with UBL syntax mapping

**Example:**

<cac:Party>

<cbc:EndpointID schemeID="0088">7300010000001</cbc:EndpointID>

</cac:Party>

1. XML attributes for Participant Identifiers in the Envelope (SBDH)

The “Authority” attribute must be populated with the value "iso6523-actorid-upis" (see POLICY 5) in all instances of the “Identifier” element.

Applies to: all instances of the TOOP Business Message Envelope (SBDH)

**Example 1:**

The following example denotes that the Sender Identifier of the Business Envelope is identified using the ISO 6523 ICD value in the TOOP set of Participant Identifier Schemes. This in turn has an alphanumeric value of 0088:7300010000001 meaning that the party has a GLN number with the value of 7300010000001.

<Sender>

<Identifier Authority="iso6523-actorid-upis">0088:7300010000001</Identifier>

</Sender>

**Example 2:**

The following example denotes that the Receiver Identifier of the Business Envelope is identified using the ISO 6523 ICD value in the TOOP set of Participant Identifier Schemes. This in turn has an alphanumeric value of 0088:7300010000001 meaning that the party has a GLN number with the value of 7300010000001.

<Receiver>

<Identifier Authority="iso6523-actorid-upis">0088:7300010000001 </Identifier>

</Receiver>

# Policy for TOOP Party Identification

Party identification relates to business entities and is only used in business documents.

## Format

1. Use of ISO15459 structure

Party Identifier values used in TOOP are comprised of:

- An optional Identifier Scheme

- The value provided by this Identifier Scheme

Applies to: all Party identifiers in all TOOP components

Note: the Identifier Scheme MAY be omitted if it can be reasoned within the context.

**Example:**

Identifier Scheme: EAN International

Identifier Scheme according to ISO 6523: 0088

Value provided by the Identifier Scheme: 1234567890128

1. Coding of Identifier Schemes

All Identifier Scheme for Party Identifiers are to be taken from the normative version of the ISO 6523 ICD list.

Applies to: all Party identifiers in all TOOP components

1. XML attributes for Party Identifiers in UBL documents

The “schemeID” attribute SHOULD be populated in all instances of the “ID” element when used within a “PartyIdentification” element when used within a “Party” element. The only valid values are defined in the [ISO 6523] code list as the numeric “International Code Designator” (ICD) value.

Extended values starting with “99” as indicated by POLICY 6 MUST NOT be used.

Applies to: all business documents used in TOOP with UBL syntax mapping

Note: the Party Identification is not involved in a TOOP Document Exchange – it is contained for business usage only.

**Example 1:**

The following example denotes that the ISO 6523 ICD value is 0088 meaning it’s a GLN number with the value of 7300010000001.

<cac:PartyIdentification>  
 <cbc:ID schemeID="0088">7300010000001</cbc:ID>  
</cac:PartyIdentification>

**Example 2:**

The following example denotes that the ISO 6523 ICD value is 0002 meaning it’s a French SIRENE number with the value of 542034942.

<cac:PartyIdentification>  
 <cbc:ID schemeID="0002">542034942</cbc:ID>  
</cac:PartyIdentification>

# Policies on Identifying Document Types supported by TOOP

As outlined in POLICY 2 document type identifier values have to be treated case sensitive.

The identifier format is an aggregated format that covers the following identifier concepts:

* **Syntax specific Identifier**  
  This identifies the syntax (e.g. XML) and format (e.g. UBL Invoice) of the document that is being exchanged in the service. E.g. for XML documents, the root element namespace (the namespace of the schema defining the root element) and document element local name (the name of the root element) are concatenated using the “::” delimiter to define the syntax of the XML document.
* **Customization Identifier**  
  An identification of the specification containing the total set of rules regarding semantic content, cardinalities and business rules to which the data contained in the business document conforms.
* **Version Identifier**  
  This identifies the version of a document type following the versioning conventions of that specific document syntax and format.

1. Document Type Identifier scheme

The TOOP document type identifier scheme to be used is:

toop-doctypeid-qns

Applies to: all Document Type Identifiers in all components

Note: this scheme identifier is always case sensitive

1. Customization Identifiers

The Customization Identifier is defined in the relevant TOOP specification.

A Customization Identifier MUST NOT contain whitespace characters.

Applies to: all Document Type Identifiers in all components

**Example:**

urn:eu.toop.request.registeredorganization

1. Specifying Customization Identifiers in UBL documents

The value for “CustomizationID” element in the UBL document instance must correspond to the Customization ID of the Document Type Identifier.

Applies to: all business documents used in TOOP with UBL syntax mapping

**Example:**

<cbc:CustomizationID>urn:eu.toop.request.registeredorganization</cbc:CustomizationID>

1. Document Type Identifier Value pattern

The format of a Document Type Identifier Value is:

<syntax specific id>##<customization id>::<version>

<version> is used to reflect the version of the underlying format standard (e.g. the UBL version).

Applies to: all Document Type Identifiers in all components

The Document Type Identifier Value pattern is based on a concatenation of a syntax specific identifier and an optional subtype identifier in the layout:

<syntax specific id>[##<subtype Identifier>]

Everything between ”[“ and “]” denotes an optional part and ## is a string literal.

The <syntax specific id> for XML based documents is a concatenation of the document element namespace URI and the document element local name, separated by a double-colon:

<document element namespace URI>::<document element local name>

The <subtype Identifier> is the combination of customization ID and version.

Therefore, the final structure of the pattern is:

<syntax specific id>##<customization id>::<version>

When representing document type identifiers in URLs, the document identifier itself will be prefixed with the scheme identifier (see POLICY 14) following two colons:

<scheme identifier>::<syntax specific id>##<customization id>::<version>

This string must be percent encoded if used in a URL.

**Example:**

The following example denotes a Document Type that is a TOOP Request for registered organization data using data model 1.40.

urn:eu:toop:ns:dataexchange-1p40::Request##urn:eu.toop.request.registeredorganization::1.40

|  |  |
| --- | --- |
| **Syntax specific ID** | urn:eu:toop:ns:dataexchange-1p40::Request |
| **XML document element namespace URI** | urn:eu:toop:ns:dataexchange-1p40 |
| **XML document element local name** | Request |
| **Customization ID** | urn:eu.toop.request.registeredorganization |
| **Version** | 1.40 |

1. Specifying Document Type Identifiers in SMP documents

The value for the “scheme” attribute must be “toop-doctypeid-qns” (see POLICY 14) and the element value must be the document type identifier itself.

Applies to: all XML documents used in the SMP

**Example:**

<DocumentIdentifier scheme="toop-doctypeid-qns">

urn:eu:toop:ns:dataexchange-1p40::Request##urn:eu.toop.request.registeredorganization::1.40

</DocumentIdentifier>

1. Document Type Identifier Values

All valid Document Type Identifier Values are defined in [TOOP\_CodeList].

Applies to: all Document Type Identifiers in all components

Rows in [TOOP\_CodeList] marked as "deprecated" should not be used for newly issued documents. It is important to note that this is a dynamic list. Over time new services will be added. Developers should take this into account when designing and implementing solutions for TOOP services.

# Policy for TOOP Process Identifiers

Process Identifiers define the orchestrations in which business documents are exchanged. A Process Identifier Value may also be referenced as “profile identifier”.

As outlined in POLICY 2 TOOP process identifiers have to be treated case sensitive.

1. Process Identifier Scheme

The TOOP Process Identifier Scheme is:

toop-procid-agreement

Applies to: all Process Identifiers in all components

Note: this scheme identifier is always case sensitive

1. Process Identifier Value

All valid Process Identifier Values are defined in [TOOP\_CodeList].

Process Identifier Values MUST NOT contain whitespace characters.

Applies to: all Process Identifiers in all components

**Example:**

urn:eu.toop.process.datarequestresponse

Rows in [TOOP\_CodeList] marked as "deprecated" should not be used for newly issued documents. It is important to note that this is a dynamic list. Over time new services will be added. Developers should take this into account when designing and implementing solutions for TOOP services.

1. Specifying Process Identifiers in SMP documents

The value for the scheme attribute should be “toop-procid-agreement” (see POLICY 20) and the element value must be the process identifier itself.

Applies to: XML documents used in the SMP

**Example:**

<ProcessIdentifier scheme="toop-procid-agreement">urn:eu.toop.process.datarequestresponse</ProcessIdentifier>

# Policy on Identifying Transport Profiles in TOOP

## SMP

The TOOP Transport Infrastructure supports different transport protocols. Each endpoint registered in an SMP is required to provide a transport profile identifying the used transport.

1. Transport Profile Values

All valid Transport Profile Values are defined in [TOOP\_CodeList].

Applies to: all XML documents used in the SMP

Rows in [TOOP\_CodeList] marked as "deprecated" should not be used for newly issued documents. It is important to note that this is a dynamic list. Over time new services will be added. Developers should take this into account when designing and implementing solutions for TOOP services.

1. Specifying Transport Profiles in SMP documents

The Transport Profile identifier must be placed in the “transportProfile” attribute of the SMP “Endpoint” element.

The value of the “transportProfile” attribute is case sensitive.

Applies to: all XML documents used in the SMP

**Example:**

<Endpoint transportProfile="bdxr-transport-ebms3-as4-v1p0">

...

</Endpoint>

# Governance of this Policy

This policy needs maintenance to ensure it supports new versions of the standards, extensions to other identification schemes, new services etc.

This policy document together with the code lists for Identifier Schemes, Document Type Identifiers, Process Identifiers and Transport Profiles is maintained by the TOOP Transport Infrastructure Coordinating Community (TICC).

To ensure sustainability and proper governance of Identifier Schemes it is proposed to include only Identifier Schemes in the scope of:

1. It should be verified, whether an inclusion in the official ISO 6523 code list is possible
2. International recognized standard schemes (e.g. CEN, ISO, UN/ECE)
3. International de-facto accepted schemes (e.g. OASIS)
4. Nationally defined schemes

It shall be ensured that each Identifier Scheme provider:

1. Recognizes any organisation wishing to allocate unique Party identifiers as part of TOOP. An individual organisation or company wishing to issue unique identifiers shall do so through officially recognized umbrella organisations such as their trade associations, network provider or a public or state agency;
2. Has defined rules so that a unique party identifier is only re-issued after the previously issued unique identifier has ceased to be of significant to any user. The length of such period should be dependent upon the environment in which the unique identifier will be used.

These rules mirror those of an ISO 15459 registration Authority and will support the option to transfer the responsibility that authority as part of the TOOP sustainability programme.

1. English: Austrian Federal Computing Centre [↑](#footnote-ref-1)
2. By federation we mean that each agency maintains their own identification schemes. Our policy recognizes and identifies these schemes and does not attempt to replicate them. [↑](#footnote-ref-2)
3. Note: the endpoint URL is not the same as the Endpoint ID in the business document. [↑](#footnote-ref-3)
4. ISO 15459-4 Individual items, see [ISO 15459] [↑](#footnote-ref-4)
5. ISO 15459 terminology, see [ISO 15459] [↑](#footnote-ref-5)
6. CEN/BII terminology [↑](#footnote-ref-6)
7. ISO 9735 Service Code List (0007) terminology [↑](#footnote-ref-7)
8. ISO 6523 terminology [↑](#footnote-ref-8)
9. OASIS ebCore terminology [↑](#footnote-ref-9)
10. ISO 6523 is currently under revision after a 25 year working period; the new version will meet requirements imposed by technological development. [↑](#footnote-ref-10)
11. Case changes may be done but are not required, as the underlying DNS system is case insensitive. [↑](#footnote-ref-11)