DIGITAL BUSINESS NETWORKS ALLIANCE™

Policy for Using Identifiers

Version 1.0

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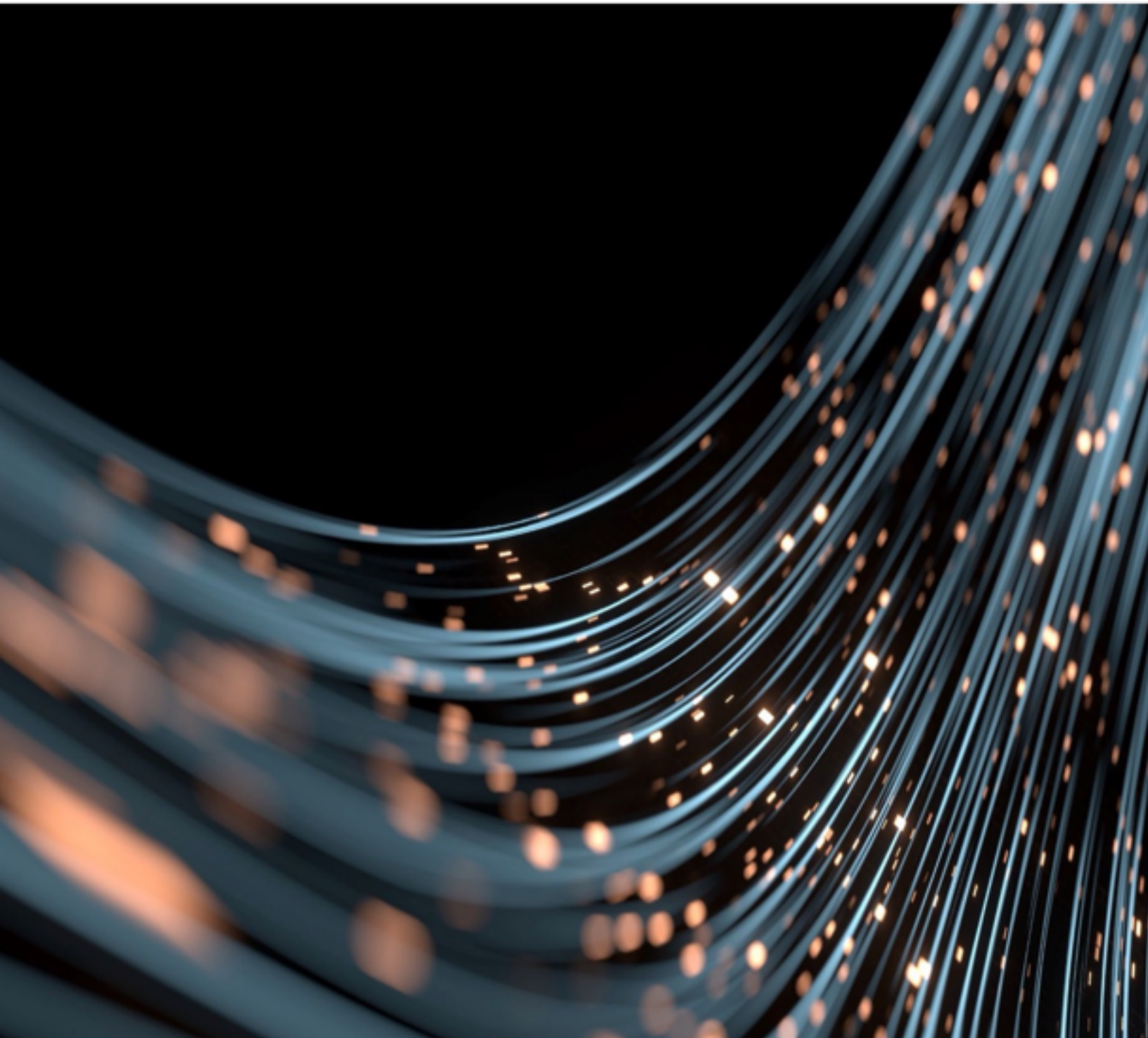

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2 Version History

Revision date	Version	Change description	Editor
07/25/2023	1.0	Initial version	BPC Market Pilot Technical Committee

3 Introduction

3.1 Scope

This policy specifies the use of the following identifiers used in the DBNAlliance network:

- Business Identifiers
  - Unique identification of entities that are either the original sender (Corner 1) or the intended recipient (Corner 4) of a business document.
- Service Provider Identifiers
  - Unique identification of Access Point service providers (Corners 2 and 3), SMP service providers, SML service providers, and Registrars in the DBNAlliance network.
- Business Document Type Identifiers and Business Process Identifiers
  - Unique identification of Business Document Types as well as the business processes to which a given business document belongs.

Other identifiers and identifier schemes not specified above (such as invoice identifiers, purchase order numbers, etc.) are outside of the scope of this document.

This document is a normative policy applying to the whole of the DBNAlliance network. Any and all actions and activities, including but not limited to, policies, procedures, specifications and implementations regarding the DBNAlliance network MUST conform to this document.

3.2 Conformance

The keywords ‘MUST’, ‘MUST NOT’, ‘REQUIRED’, ‘SHALL’, ‘SHALL NOT’, ‘SHOULD’, ‘SHOULD NOT’, ‘RECOMMENDED’, ‘MAY’, and ‘OPTIONAL’ in this specification are to be interpreted as described in RFC2119 and RFC 8174 when, and only when, they appear in all capitals, as shown here.

3.3 Terms and Definitions

For the purpose of this specification, all terms shall have the definitions defined in the document Terms and Definitions of the DBNAlliance version 1.0.

3.4 Disclaimers and Copyright

Views expressed here are not necessarily those of, and should not be attributed to, any particular DBNAlliance participant or organization. They are not intended to provide business or legal advice, nor are they intended to promote or advocate a specific action, payment strategy, or product. Readers should consult with their own business and legal advisors.

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4 Business Identifiers

4.1 Introduction

Business Identifiers serve to uniquely identify a legal entity, such as a party to an invoice exchange or other business transaction. The DBNAlliance itself does not issue Business Identifiers, but instead makes use of identifiers issued by other agencies. These issuing agencies ensure that the identity of a legal entity has been verified when issuing and assigning identifiers, as well as ensure that an identifier is only assigned once (uniqueness).

This document exclusively defines the policy for using Business Identifies when exchanging information in the DBNAlliance network. This facilitates that information is correctly routed through the network and that all involved parties to an information exchange can be unambiguously identified. The main application of this policy is therefore the components involved in the business document exchange, such as SML, SMP, AS4 and XHE. Companies often use alternative conventions for identifying business partners in their business systems, such as by using vendor numbers or customer numbers, and business document type specifications MAY specify alternative means of identifying parties within the business documents themselves.

4.2 Business Identifier Schemes

To ensure sustainability and proper governance, Business Identifiers used in the DBNAlliance network's exchange framework MUST belong to one of the named Identifier Schemes in the table below. The Scheme Identifiers in the table uniquely associates an identifier with the Identifier Scheme to which it belongs and MUST be used together with the identifier itself when representing Business Identifiers in the DBNAlliance network's exchange framework.

The scheme identifiers MUST always be treated as case-insensitive.

All Business Identifiers MUST always be represented using alphanumeric characters only, meaning that only the numbers 0 to 9 as well as the characters "a" to "z" in the recognized English alphabet can be used in the representational form of Business Identifiers. Consequently, any non-alphanumeric characters MUST be removed before representing a Business Identifier in the context of the DBNAlliance exchange framework.

For example, while EINs are often written as "12-3456789", when representing these in the DBNAlliance exchange framework, the non-alphanumeric character "-" must be removed, leaving just the characters "123456789".

Scheme Identifier	Issuing Agency	Identifier Scheme Name	Format Notes
GLN	GS1	Global Location Number	A 13-digit number.
DUNS	Dun & Bradstreet	Data Universal Numbering System	A 9-digit number.
EIN	IRS	Employer Identification Number	A 9-digit number.
SSN	IRS	Social Security Number	A 9-digit number.

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Scheme Identifier	Issuing Agency	Identifier Scheme Name	Format Notes
LEI	GLEIN	Legal Entity Identifier	Exactly 20 alphanumeric characters.
CA	CRA	Canadian Business Number (CBN)	A 9-digit number.
MX	SAT	Registro Federal de Contribuyentes (RFC)	12 or 13 alphanumeric characters.

4.3 Representing Business Identifiers

Technical specifications used in the DBNAlliance network's exchange framework SHOULD provide detailed specifications of their use of Business Identifiers and how to represent these.

Specifications using the UN/CEFACT Core Component Technical Specification (CCTS) SHOULD use the Identification Scheme Identifier of the Identifier Type to convey the Scheme Identifier as in the following non-normative examples:

> *When using with the CCTS-modeled XHE specification, the GLN number 1234567890123 can be represented as:*
>
> ```
> <ID schemeID= "GLN">1234567890123</ID>
> ```
>
> *Similarly, in the CCTS-modeled SMP specification, the same GLN number can be represented as:*
>
> ```
> <ParticipantID schemeID="GLN">1234567890123</ParticipantID>
> ```

In situations where the Scheme Identifier and the Identifier value must be represented together in a single string, such as in a URL value and in the Common Name of a certificate, specifications SHOULD use the

```
{identifier scheme}::{participant ID}
```

format as specified in section 3.6.3 of the OASIS SMP 2.0 specification.

> *The non-normative example representation of the GLN number 1234567890123 is consequently:*
>
> ```
> GLN::1234567890123
> ```


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5 Business Document Type and Business Process Identifiers

5.1 Introduction

All Business Document Type specifications and Business Process specifications MUST specify a single, unambiguous identifier to be used when referencing the specification in the DBNAlliance network. All references to Business Document Types and Business Processes in the DBNAlliance network MUST use the identifier as specified in their respective Business Document Type and Business Process specifications.

5.2 Business Document Type Identifiers

5.2.1 Use of "bdx-docid-qns" for XML document types

XML Business Document Type identifiers SHOULD be created using the *bdx-docid-qns* scheme specified in section 3.7.1.2 of the OASIS SMP 2.0 specification. When creating the subtype identifier of the bdx-docid-qns scheme, the following convention MUST be used:

```
dbnalliance-{specification version number}-data-{descriptive name}
```

The following scheme identifier MUST be used when describing a bdx-docid-qns identifier:

```
bdx-docid-qns
```

As a non-normative example:

> *When defining version 1.0 of the minimum-required data model for a UBL 2 invoice business document type, the subtype identifier could be defined as*
>
> ```
> dbnalliance-1.0-data-Minimum
> ```
>
> *The root namespace of a UBL 2 invoice, as defined in the OASIS UBL specification, is:*
>
> ```
> urn:oasis:names:specification:ubl:schema:xsd:Invoice-2
> ```
>
> *and its document element local name is:*
>
> ```
> Invoice
> ```
>
> *The full Business Document Type Identifier, when formatted using the bdx-docid-qns scheme, would therefore be:*
>
> ```
> urn:oasis:names:specification:ubl:schema:xsd:Invoice-
> 2::Invoice##dbnalliance-1.0-data-Minimum
> ```
>
> *And when describing in an SMP service reference:*

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```
<smb:ID schemeID="bdx-docid-qns">
urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice##dbnalliance-1.0-data-Minimum
</smb:ID>
```

5.2.2 Use of "bdx-docid-json" for JSON document types

JSON Business Document Type identifiers SHOULD be created using the *bdx-docid-json* specified in section 3.7.1.3 of the OASIS SMP 2.0 specification. When using the bdx-docid-json scheme, a subtype identifier MUST be used as part of the identifier, and the subtype identifier MUST created using the following convention:

```
dbnalliance-{specification version number}-data-{descriptive name}
```

The following scheme identifier MUST be used when describing a JSON Identifier scheme identifier:

```
bdx-docid-json
```

As a non-normative example:

> *When defining version 1.0 of company master data business document type, the subtype identifier could be defined as*
>
> ```
> dbnalliance-1.0-data-CompanyMasterData
> ```
>
> *The root schema for the company master data JSON document type may have been defined as:*
>
> ```
> https://dbnalliance.org/specs/CompanyMasterData.json
> ```
>
> *The full Business Document Type Identifier, when formatted using the bdx-docid-json scheme, would therefore be:*
>
> ```
> https://dbnalliance.org/specs/CompanyMasterData.json##dbnalliance-1.0-
> data-CompanyMasterData
> ```
>
> *And when describing in an SMP service reference:*
>
> ```
> <smb:ID schemeID="bdx-docid-json">
> https://dbnalliance.org/specs/CompanyMasterData.json##dbnalliance-1.0-
> data-CompanyMasterData
> </smb:ID>
> ```

5.2.3 Other document type schemes

Business document types that cannot be described using any of the above business document type identifier schemes MUST create both an identifier and an identifier scheme.

When creating the identifier, the following convention MUST be used:

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```
dbnalliance-{specification version number}-data-{descriptive name}
```

The identifier scheme MUST be a short and concise description of the data format of the business document type (for example, “edi-x12”, “csv”, etc.).

As a non-normative example:

> *When defining version 1.0 of a core X12 EDI 820 message, the identifier could be defined as*
>
> ```
> dbnalliance-1.0-data-edi820-core
> ```
>
> *And the scheme identifier could be defined as:*
>
> ```
> edi-x12
> ```
>
> *When describing in an SMP service reference:*
>
> ```
> <smb:ID schemeID="edi-x12">dbnalliance-1.0-data-edi820-core</smb:ID>
> ```

5.3 Business Process Identifiers

When creating Business Process Identifiers, the following convention MUST be used:

```
dbnalliance-{specification version number}-process-{descriptive name}
```

> *As a non-normative example, the version 1.0 of business process specification describing a simple invoicing process could be identified as:*
>
> ```
> dbnalliance-1.0-process-SimpleInvoicing
> ```

5.4 No scheme identification for Business Processes

It is implied that all Business Processes are those that are defined for the DBNAlliance. Their respective identifiers will consequently all belong to the same scheme, namely the DBNAlliance.

Therefore, all CCTS-modeled documents (such as SMP, XHE and UBL) MUST NOT use the `schemeID` attribute with a Business Process identifier.

6 Identifying Participants

All Participants in the DBNAlliance network MUST be identifiable using a unique and unambiguous Participant Identifier. The Participant Identifier MUST be a Business Identifier as specified in section 4 in this document and MUST be issued to the legal entity to which the Participant pertains.

7 Identifying Service Providers

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All Access Point and SMP service providers in the DBNAlliance network MUST be identifiable using a unique and unambiguous Service Provider Identifier. The Service Provider Identifier MUST be a Business Identifier as specified in section 4 in this document and MUST be issued to the legal entity to which the service provider pertains.

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