

Cyber-Identity for organisations – Unique identification of business entities

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Unique Identifiers

- Numeric, alphanumeric or other kind of string to designate an entity
- Uniqueness: n:1 or 1:1 relationship of identifier – entity
- Persistence: No change of relationship during lifetime of entity (and beyond)
- Examples: National VAT and Commercial Reg Nr, GTIN, D-U-N-S, EasyNumber, Crefo, ...
- Focus on/restriction to business identifiers

Unique Identifiers

Basic structure of organisation identification schemes (ISO 6523)

scheme
identifier

**Identification of an organisation
within an identification scheme**

Identification of an
organisation part

Example: EAN 13 Code/GTIN

0160

76 10800

98288 3

refers to a specific type of bottle from **Coop**

Example: Zefix (Swiss Commercial Registry) Nr.

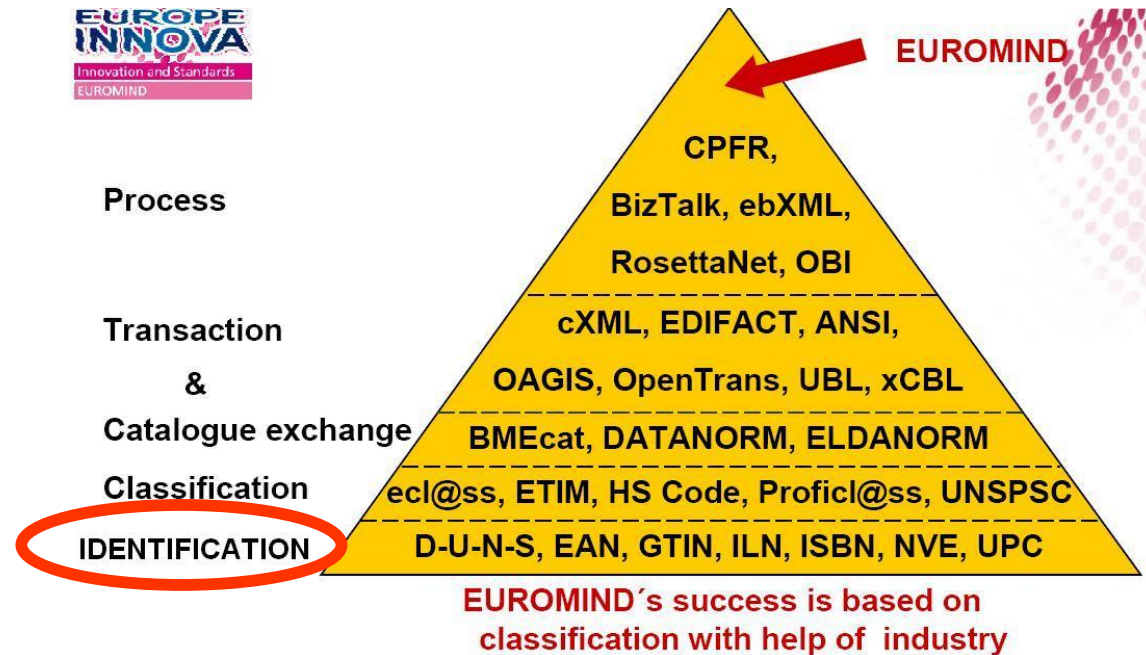
0169

CH-020.3.900.058-8

refers to ABB Ltd.

Unique Identifiers

Presentation EUROMIND EU project:



→ Unique identifiers as **basis** for all eTransactions

Context & Registries

- In different historically grown (legal) contexts usually different identifiers are used
- Examples:
 - Government: Value Added Tax (VAT)
 - Government: Commercial Registry
 - Supply Chain
 - Business Rating
 - Financial: IBAN

Context & Registries

- ▶ An identifier points to data of entities recorded in one (or more) registry(s)
- ▶ An identifier is used to designate this data, i.e. within a specific **context**



Context & Registries - Development

- Driven by Telematics (Internet)
- Also by Intra-EU market constitution, globalisation and process integration
- ▶ Contexts have grown together and are overlapping!



Meta-Identification

- Harmonisation by implementing one single identification scheme is not possible on a global scale
- Solution: Meta-identification system, „an identifier for an identifier“
- Problem: Which meta-identification system is appropriate, one or several and how to combine them?

Meta-Identification Systems

- Domain Name System (DNS) – example.com
- Uniform Resource Identifiers (URI), esp. Names (URN) – urn:isbn:0-395-36341-1
- International Code Designator (ICD) ISO 6523 - **0002552120784**
- Object Identifier (OID) ISO 9834-1 - 1.3.6.1.4.1.2
- ISO 15459 (Unique Identifiers [in the supply chain])
- ...

Example – AS2

- AS2 is a specification to do EDI over the Internet (IETF RFC 4130)
- AS2-To/From headers: Unique Identifiers, but no further specification
- AS2-From: 1234567890123 – 13 digits
- GS1 GLN, D&B D-U-N-S+4, or other identifier??? Unclear!
- <meta-system>:<GLN>:1234567890123 vs. <meta-system>:<DUNS>:1234567890123 is clear!

CWA 15576 - eInvoicing

- „Recommendation to allow coded identifiers as an alternative to the current unstructured clear text identifications“ for the EU VAT directive
- Use of unique identifiers for parties, goods and services in eInvoices instead of clear-text
 - ▶ Adjustment of directive
 - ▶ **‘Best practice procedures’ to assist in developing applications - business & VAT administrations**

Example – X.509 Certificates

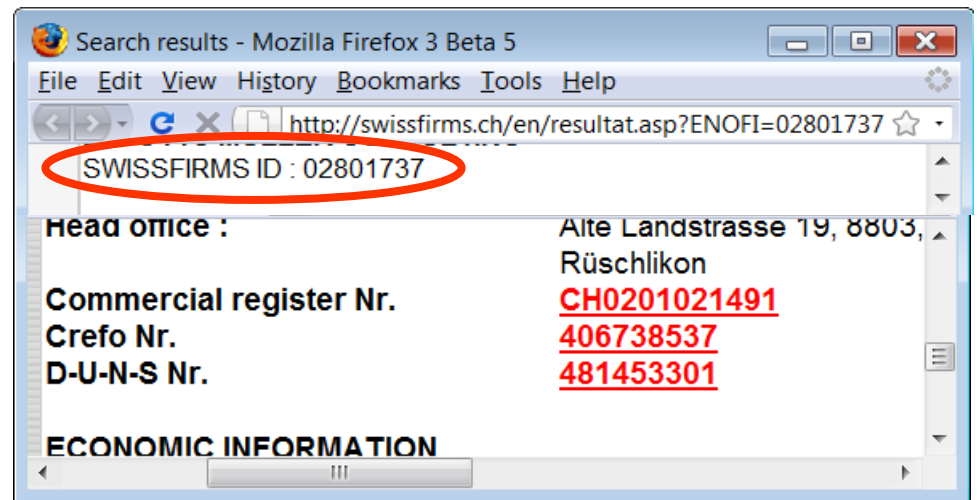
- Persistent worldwide unique identification is a prerequisite for a security infrastructure in an open user group, e.g. for PKI
- Inclusion of unique identifiers facilitates processing of X.509 certificates
- E.g. eInvoicing in Spain: Certificates contain VAT number

```
CN = AC Camerfirma Certificados Camerales
O = AC Camerfirma SA
SERIALNUMBER = 02743287
L = Madrid (see current address at www.camerfirma.com/address)
E = ac_camerfirma_cc@camerfirma.com
C = ES
```

SN	02873004B
C	ES
CN	<Nombre del suscriptor>
E	<mail del titular>
SN	<NIF>
Surname	<Apellidos>
Given name	<Nombre>
1.3.6.1.4.1.17326.30.2	<tipo de documento identificador>
1.3.6.1.4.1.17326.30.3	ES<número de documento identificador>
1.3.6.1.4.1.18838.1.1 (AEAT)	<NIF del representante>
O	<Nombre organización>
OU	<Departamento del titular>
T	<Nombre del representante>

Mapping of identifiers

- Mapping of Identifiers designating the same entity
- Standardisation of mapping also requires
Meta-
Identification



Targets for Workshop

- Recommendation/best practices for of meta-identification systems
- Interoperability of identification schemes
- Federation approach – As few hierarchy as possible
- BASIC description of legal and procedural registration requirements
- BASIC technical and organisational requirements for registries: Security, availability, ...
- Using existing identification schemes, registries and proven standards for meta-identification – not reinventing the wheel

Business Plan

- Interoperability as driver (chapter 3 „background“)
- Main promoters: Mueller-Consulting, Kompass (Coface Group) (chapter 4 Proposers...)
- Objectives (chapter 5)
 - Identifiers
 - Registries
 - Coordinate (meta-)identification
- Time frame: → October 2009, 3 more meetings (chapter 7)

Deliverables

- CEN Workshop Agreement (CWA),
3 parts
- Part 1: Collection of requirements
- Part 2: Inventory of applications
- Part 3: Use cases, specific issues and
recommendations

Questions?



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