CEN

CWA 16073-1

**WORKSHOP** 

January 2010

### **AGREEMENT**

ICS 03.100.10; 35.240.60

English version

### Business Interoperability Interfaces for Public procurement in Europe - Part 1: Profile overview

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

# Contents

rorev	VOI.U	C
1	Definitions and abbreviations	
1.1	Definitions	
2	The profile concept	8
2.1	General	8
2.2	Compliance	8
2.3	Profile migration	8
3	Pre-award profiles	10
3.1	General	10
3.2	Business processes in scope	12
3.3	Profiles and their Business Collaborations	15
3.4	Business Partners and authorised roles	15
3.5	Choreography of Profiles potential usage	
3.6	Business document and Transaction Data Model correspondence	
3.7	Mapping of profiles potential usage according to the Tender Procedures	19
3.8	Profiles sequence diagram	21
3.9	Open procedure	23
3.10	Profiles sequence diagram Open procedure Restricted procedure Negotiated procedure	25
3.11	Negotiated procedure	26
3.11.1	1 With contract notice publicatiॡnn	26
3.11.2	2 Without contract notice publication	27
3.12	Competitive Dialogue	27
3.13	Competitive Dialogue  Dynamic Purchasing Systems  Framework agreements  Post-award profiles  Business processes in scope  Sourcing  Profiles and their Business Collaborations  Ordering, fulfilment and billing	28
3.14	Framework agreements	29
4	Post-award profiles	30
4.1	Business processes in scope	30
4.2	Sourcing	31
4.2.1	Profiles and their Business Collaborations	33
4.3	Ordering, fulfilment and billing	34
4.3.1	Profiles and their Business Collaborations	36
5	Special business functions	37
5.1 5.2	Profiles and their Pusiness Callaborations	3/
0.Z c	Support profiles	oc
6 6.1	Congrel	ət
6.2	Profiles and their Rusiness Callaborations	۵۰ع
o.∠ 7	Appex	40
, 7.1	Δημον Δ (normative): Glossary	41
7.1 7.2	Ordering, fulfilment and billing Profiles and their Business Collaborations Special business functions General Profiles and their Business Collaborations Support profiles General Profiles and their Business Collaborations Annex Annex Annex A (normative): Glossary Annex B (normative): Profile architecture Annex C (normative): Profiles and transaction data models	41
7.2 7.3	Anney C (normative): Profiles and transaction data models	41
ı .J	Allies O (normalive). I follies and transaction data models	41

#### **Foreword**

This CWA is part 1 of a multi-parts CWA. It has been prepared by the CEN/ISSS Workshop on Business Interoperability Interfaces for Public procurement in Europe (WS/BII)

The multi-parts CWA has been officially approved at the final WS/BII Plenary Meeting on 4 November 2009.

The current document is: Part 1 - Profile Overview

The different parts of the multi-parts CWA are:

- Part 0: Introduction
- Part 1: Profile overview
- Part 2: UBL-UN/CFFACT convergence
- Part 3: Toolbox Requirements
- Part 4: Evaluation guitelines for testing and piloting

Here is the list of the companies, which have officially endorsed the multi-parts CWA:

A.N.C.R.T.I. - Romania

BMF - Austria

Bos | Bremen online services GmbH & CockG - Germany

Cel e-Procurement FOD Personeel en Organisatie – Belgium

CONSIP S.p.A - Italy

CSI Piemonte - Italy

Danske Regioner - Denmark

Document Engineering Services Ltd. – United Kingdom

D.G. Patrimonio del Estado/Ministerio de Economia – Spa

EDI & Business Integration MACH ApS - Denmark

ENEA – Italy

GS1 Europe - Netherlands

IBM - Denmark

INFOCERT spa - Italy

Innovasion - Denmark

International Surety Association (ISA) - Holland

JustSystems EMEA Limited – United Kingdom

KSZF - Hungary

Logica - Denmark

Microsoft Denmark ApS - Denmark

Ministère des Travaux Publics – Luxembourg

Ministerie van Economische Zaken - Holland

National IT and Telecom Agency - Denmark

NEXUS IT - Spain

Norstella foundation - Norway

#### CWA 16073-1:2010

Norwegian eProcurement Secretariaat – Norway

PricewaterhouseCoopers Enterprises Advisory – Belgium

Supplier e-enablement & P2P Manager eProcurement Scotl@nd Programme Office – United Kingdom

SFTI - Sweden

SKI - Denmark

UNISYS - Belgium

University of Koblenz-Landau – Germany

# Contributors:

Name	Organisation	Country
Aduman Dogag Amina Al Morabet Ana Maria Damsa Ansgar Mondorf Arianna Brutti Bergthor Skulason Bernard Longi Chris Mora Japana	SRDC Ltd	TR
Amina Al Morabet	Unisys Belgium	BE
Ana Maria Damsa	Agency for the inf. socie srv	RO
Ansgar Mondorf	University of Koblenz	DE
Arianna Brutti	ENEA	IT
Bergthor Skulason	NITA	DK
Bernard Longi	UN/Cefact TBG6	-
Chris-Mora Jensen	[Info:vasion]	DK
Claudiu Simion	A.S.	RO
Douglas Hill	GS1 Europe	DK
Fabio Cavraro	Infocert spa	IT
Fabio Signorotti	Consip spa-	IT
Fulia Tunger	SRDC Ltd	TR
Georg Birgisson	Eykur ehf. – WG1 editor	-
Irene Anderson	Legal fin. and adm service.	SE
Jan Mærøe	DIFI	NO
João Rodrigues Frade	PricewaterhouseCoopers Belgium on behalf of the European Commission, Directorate-General for Informatics (DIGIT)	EU
Jostein Fromyr	Edisys – WG1 chair	-
Kerstin Wiss Homdahl	SFTI	SE
Lars Parkbing	SFTI	SE
Manuel Cano	Nexus IT	ES
Marie Wimmer	University of Koblenz	DE
Markus Schett	Wp2 Peppol	AT
Martin Forsberg	Ecru Consulting/SFTI	Q SE
Norbert Tomandi	Bbg/Peppol	-
Oriol Bausá	Invinet Sistemes	ES
Peter Borresen	ebConnect - BII chair	BII
Peter Dam Bové	SKI A/S	DK
Philip Helger	Austria Federal Comp. Ctr	AU
Sciano Raffaele	Consip / NEF – fin. dept	IT
Stefan Kramer	Bbd/Peppol	-
Sven Rasmussen	Lunox	DK

Sverre Bauck	DIFI	NO
Sören Lennartsson	Salar/SFTI	SE
Tuncay Namli	SRDC Ltd	TR
Vania Rostagno	CSI Piemonte	IT

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN: AENOR, AFNOR, ASRO, BSI, CSNI, CYS, DIN, DS, ELOT, EVS, HZN, IBN, IPQ, IST, LVS, LST, MSA, MSZT, NEN, NSAI, ON, PKN, SEE, SIS, SIST, SFS, SN, SNV, SUTN and UNI.

This document is a preview denetated by this

### Scope

The objective of Workgroup 1 of the BII workshop is to: provide specification of message content and business processes that facilitates business interoperability interfaces related to pan-European electronic transactions in public procurement.

To facilitate implementation of electronic commerce in a standardized way, thereby enabling the development of standardized software solutions as well as efficient connections between trading 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.

A profile description a technical specification describing

- the choreography of the business process(es) covered, i.e. a detailed description of the way the business partners callaborate to play their respective roles and share responsibilities to achieve mutually agreed goals with the support of their respective information systems,
- the electronic business transactions exchanged as part of the business process and the sequence in which these transactions are exchanged,
- the business rules governing the execution of that business process(es), its business collaborations and business transactions, as well as any constraints on information elements used in the transaction data models
- the information content of the electronic business transactions exchanged by pointing to a given data model for each of the business transactions.

As well as determining what business transactions are used, the profile restricts their content in terms of elements and the cardinality of elements. The key tandardization aspect of the profile description is thus on the organisational and semantics interoperability levels rather than on syntax within the technical interoperability level. Consequently, the business transactions within a profile can be structured based on different message standards/syntax as long it contains all the necessary data elements.

Although the profile descriptions and transaction data models provided by CEN BII will be neutral of syntax, the workshop has agreed to provide specifications of how is data models may be mapped to defined syntaxes. This is done in order provide the market with implementable specifications.

It should be noted that the profile description does not attempt to address issues related to topics such as:

- the actual transmission of the electronic messages,
- security and confidentiality of the message exchange,
- integrity, authentication and auditing of information content or
- the process of implementing a solution based on the profile description

These issues have however been addressed by other deliverables of the CEN/ISSS WS/BII (see section 2 for reference to relevant documents).

The main focus of the profile description and the associated transaction data models 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 CWA provides an overview of the profile descriptions developed by CEN/ISSS WS/BII. The individual profile descriptions and their associated transaction data models are made available at <a href="http://spec.cenbij.eu/Profiles/IndexWG1.html">http://spec.cenbij.eu/Profiles/IndexWG1.html</a>.

#### 1 Definitions and abbreviations

#### 1.1 **Definitions**

Definitions relevant to this CWA are provided in the BII Glossary provided as Annex A.

this document is a preview denetated by EUS

## 2 The profile concept

### 2.1 General

The technical specification of the architecture applied as the basis for the development and specification of profiles by CEN/ISSS WS/BII is referenced in Annex B.

In order to support the exchange of business documents in an open and interoperable manner, the profiles within CEN/ISSS WS/BII will be described with an aim to function as an "agreement". This is done in order to lower one of the main barriers to the efficient and effective implementation of electronic procurement; the need to entering in to bilateral agreements with each business partner. By providing precise and detailed profile descriptions an organisation implementing a profile from CEN/ISSS WS/BII can claim compliance to it. By doing so the organisation is committed to all aspects of the profile and thus limiting the need for further bilateral agreements.

### 2.2 Compliance

As further described in the following sections, it is not expected that an organisation will implement all profiles referenced in this CWA. Compliance to the CWA is thus measured against the individual profile. Furthermore it is expected that the profiles of CENISSS WS/BII will be implemented in software solutions. Compliance requirements are thus expressed as equirements on the software solution implementing the profiles.

Compliance to a profile is measured against the three key aspects of the profile:

- **Choreography**; compliance is measured against the sequence of collaborations and transactions in the profile.
  - Every software solution claiming compliance to a profile is expected to be able to support all business collaborations and business transactions while the profile.
- **Data content**; compliance is measured against the "core" transaction data model nominated by the profile.
  - Every software solution claiming compliance to a profile is expected to be able to process and understand all elements defined as part of the relevant core transaction data models referenced by the profile.
- **Business rules**; compliance is measured against the rules stated at profile, collaboration and transaction level of the profile.
  - Every software solution claiming compliance to a profile is expected to adhere to all business rules stated within the profile description and the referenced transaction data model.

### 2.3 Profile migration

It is expected that the users of this CWA represent a heterogeneous community of large companies, medium and small companies. Recognising this, the Profiles have been designed as a set of logical modules that may coexist within one single implementation without major maintenance trouble.

Over time, an organisation may want to change their Profile. Therefore, such transition should be as smooth and inexpensive as possible. This means that the Profile containing most functions should contain all functions of the other Profiles. The functions of the Profile containing fewer functions should be contained in all other Profiles. This could be visualised as a Russian Doll type of approach.

The above point may not enable a full upstream Profile interoperability (i.e. the ability of Profiles with fewer functions to interoperate with Profiles with additional functions) since the Profiles with more functions may introduce additional rules at all levels (i.e. organisational, required data in messages or other controls). However, it does ensure that the transition to another Profile is nothing but extending the functions of the initial implementation. On the other hand, full downstream Profile interoperability (i.e. the ability of Profiles with additional functions to interoperate with Profiles with fewer functions) is without doubt enabled.

The Collaborations can be understood as the Use-Cases of a software product implementation. As business rules are added, more alternative-flows are created. However, the fundamentals do not change. This means