CEN ISSS workshop BII

CWA XXXX-0:2009

Business Interoperability Interfaces for Public procurement in Europe – Part 0: Introduction

Contents

Foreword

This CWA is part 0 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.

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, IBN, IPQ, IST, LVS, LST, MSA, MSZT, NEN, NSAI, ON, PKN, SEE, SIS, SIST, SFS, SN, SNV, SUTN and UNI.

The current document is: Part 0 - Introduction

The different parts of the multi-parts CWA are:

- Part 0: Introduction
- Part 1: Profile overview
- Part 2: UBL-UN/CEFACT convergence
- Part 3: Toolbox Requirements
- Part 4: Evaluation guidelines 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 & Co. KG – 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 – Spain

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

Norwegian eProcurement Secretariaat – Norway

PricewaterhouseCoopers Enterprises Advisory – Belgium

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

SFTI – Sweden

SKI – Denmark

UNISYS – Belgium

University of Koblenz-Landau – Germany

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

- Coordinate and provide support to pilot projects implementing the technical specifications in order to remove technical barriers preventing interoperability

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Introduction

To facilitate the internal market and to achieve the Lisbon Objective of making Europe the most knowledge competitive society by 2010, electronic working, based on the development of interoperable public electronic procurement and business (eProcurement and eBusiness) solutions are essential.

On the European level the European Commission made the development of eProcurement an objective in both the 2002 and the 2005 eEurope Action Plans (eEurope 2005: An information society for all[1]. The eEurope Action Plans not only targeted public sector procurement by electronic means, but encourage small and medium size enterprises (SME's) to "Go Digital".[2] This also included the development of interoperable eBusiness solutions for transactions, security, electronic signature and procurement.

In the coming years an increasing number of e-busines systems will be using features from XML, striving for interoperability.

The interoperability interfaces are seen on multiple levels. On the business level it includes agreement of business processes and semantic document models. On syntax level it includes usages of XML documents compliant with schemas from eBusiness standards like UN/CEFACT XML and OASIS Universal Business Language 2.0. On the Technical level it implies common requirements for document conformance, usage of digital signatures and document transport infrastructure.

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[1] European Commission, COM(2002)263, *eEurope 2005: An information society for all*, http://ec.europa.eu/information_society/eeurope/2005/index_en.htm

[2]   European Commission, *SMEs Europe's future -* eEurope SMEs GoDigital Conference Report, http://ec.europa.eu/information_society/topics/ebusiness/godigital/docs/conference_report_smes.pdf

1   Scope

This CWA addresses the next step of standardization for the data exchange within an infrastructure shared by business partners. The focus is the semantics of the public procurement business processes built by xml based vocabularies specified by UBL 2.0 and UN/CEFACT core components. This is expressed in the CWA profile descriptions. A profile description is a technical specification describing:

- The choreography of the business processes
- The business rules governing the execution of these business processes
- The information content of the electronic business transactions exchanged by exchanged by pointing to a given data model for each of the business transaction

The data models in this CWA are syntax neutral, but include proposed syntax mappings for UBL 2.0 for the post awarding business processes. The workshop has presented change requests to the UN/CEFACT TBG6 (Architecture, Engineering and Construction) group in order to facilitate syntax mappings of the pre awarding business process and contributed to the convergence between UBL and UN/CEFACT XML by producing a gap analysis between the relevant UBL documents and the UN/CEFACT core component library and in the development of Cross Industry documents within UN/CEFACT TBG1 (Supply Chain).

This CWA does not provide any XML schemas; it provides specifications for tools to support the implementation of profiles. That is a toolbox specifying requirements of how to achieve technical interoperability e.g. the management of documents on technical level, conformance testing, governance, digital signature and message transport infrastructure.

The CWA does not provide any of the specified tools as operational artifacts, but addresses only the specifications. The tools provided by the CENBII workshop are for demonstration purpose only and are not a part of the CWA.

This CWA specifies a new and open infrastructure for public procurement processes that does not require bilateral agreements. To make them work in reality they need to be implemented in conformed ways. This requires structured testing and piloting. The CWA provides project templates for functional testing and piloting and recommendation of how to process this.

The target audience for this specification is owners of public processes, operators and providers of public procurement systems, including public procurement agencies. Operators and providers of B2B procurement systems can take advantage of the specification as well. The specification requires technical knowledge within the XML and network technology as well as business experience within procurement.

2   Background

National and European authorities have been promoting the use of electronic processes in public procurement for decades because increased efficiency and transparency will give improved and more efficient use of public procurement budgets that annually are amounting to some TEUR 1.5 (GEUR 1500). Electronic processes involving different systems and various partners depend on the use of common standards for information exchange between systems; however, it should be emphasised that there are different levels of openness that can be created by the use of technology standards. Increasing use of electronic systems is calling for higher levels of openness:

Level of openness	Automated exchange of information between different systems	Require shared standards
Internal level	Of an owner or a cooperating group	Within an organization
National level	of trading partners in a country	and common implementation of standards for national business applications, including national VAT and other excises.
European level	of trading partners in different countries	and common implementation of standards for different national business applications and cross border information to authorities, like VAT and other excises.

Interoperability require common use of standards; there are several groups, like finance, health insurance, customs, that are maintaining and using agreed versions of standards for pan-European communication between members of the group. Trade is regulated by national legislation on accounting, VAT and other excises, and electronic exchange of trade data has been implemented by use of standards that are implemented and maintained on national level. The intention with this CWA is to create specifications that can be specified and maintained on European level, and thereby contribute to increased electronic exchange of trade information across European borders.

Increased use of standards for electronic transfer of information in public procurement processes meets the following challenges:

- The existence of different standards creates uncertainty about which common one to migrate to.
- Differences between national implementations of common standards
- Lacking functionality covering cross-border requirements.

CEN BII has addressed these challenges by:

- Describing business process profiles in a way that is independent of but consistent with existing e-Business standards within OASIS and UN/CEFACT.
- Examining cross border trade and to open for identification and description of differences between implementations of system elements governed by national legislation.
- Identifying additional specification of requirements and functionality needed for exchange of information used in different countries under constraints of their legislation and procedures.
- Preparing a tool-box for how to use the profiles for implementation.
- Describing how to test and pilot applications using the profiles.

2.1   UN/CEFACT and OASIS cooperate on ebXML

The United Nations Economic Commission for Europe (UNECE) announced in 2004 that the UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT) and the Organization for the Advancement of Structured Information Standards (OASIS) have reaffirmed their commitment to cooperating on ebXML. They entered an agreement at both the strategic and tactical levels, which would ensure that each party

endeavour to maintain clarity in its work programme and effective communications with a view to avoid duplication of effort.

In a joint statement, UN/CEFACT and OASIS stressed that the proposed cooperation agreement should improve understanding and clarify the public perception of how the two entities work together (http://www.unece.org/oes/MOU/mou_OASIS.pdf).

The OASIS/UBL initiative was born out of a desire to provide XML document standards for the ebXML framework. Later on, UN/CEFACT agreed to build eBusiness standards based on ebXML core component specification.

The UN/CEFACT Plenary in June 2006, within the context of the UN/CEFACT-OASIS Cooperation Agreement, recognised UBL 2.0 as appropriate first generation XML documents for eBusiness. A number of UN/CEFACT member countries and industry associations are providing support to this important initiative.

It is currently intended to ensure that future versions of UBL are fully compliant with relevant UN/CEFACT eBusiness specifications (including those relating to ebXML, which have become ISO Technical Specifications in the ISO 15000 series).

The CENBII workshop has assisted the two standards to converge under the UN/CEFACT umbrella.

2.2   Process by CEN/ISSS

The CEN/ISSS Workshop on eProcurement has produced CWA 15236:2005 "Analysis of standardization requirements and standardization gaps for eProcurement in Europe" (ftp://ftp.cenorm.be/PUBLIC/CWAs/e-Europe/eProc/cwa15236-00-2005-Feb.pdf), and this noted the benefit of a common approach to procurement transactions, albeit in an environment where many potentially relevant standards exist. The document also describes legal issues that remain to be solved; they are especially related to national legislations on VAT and accounting where paper originals still are required (CWA 15236:2005 subclause 1.1.5); legislated use of paper is unhelpful to the demand for electronic solutions.

One of the main objectives of the CEN BII Workshop is to contribute to UBL-UN/CEFACT convergence by providing a standardized approach to the practical implementation of the relevant specifications. This will help to gauge the consequences of this convergence on current projects.

It should be noted that additional activities are now under way in Europe concerning electronic invoicing, and these are expected to contribute to both ISO 20022 invoice related standards and those in UN/CEFACT (the cross-industry invoice - CII). These and other initiatives call for organized follow-up of the conclusion of the CWA.

3 Deliverables

The CEN WS BII deliverables are means to facilitate effective public procurement solution with focus on cross-border interoperability and closing the gap between systems built on UN/CEFACT and OASIS/UBL 2.0; they can be used to create interoperability between users of the two standards.

The CWA contains the following deliverables:

- a set of profile descriptions (message contents and business processes) for public procurement processes. The descriptions will in detail show their fields of application so that the needed ones can be selected (Part 1).
- GAP analysis describing the differences and mapping between UN/CEFACT CCL as well as ISO 20022 Invoice related requirements and the BII Workshop requirements.The mapping will show how messages from the standards can be used to support interoperability by use of the profiles (Part 2).
- A toolbox for how to use the profiles for implementation. The toolbox will guide the implementation of profiles for owners of systems based on one of the two standards (Part 3).
- Description of testing and pilot projects for applications using the profiles. Methodology and guidelines for testing and piloting are essential for all implementations, so also for interoperability by use of the profiles. Such documentation is therefore a main part of the deliverable (Part 4).

Annex A (informative):
Glossary

BII	Business Interoperability Interfaces
TEUR	Terraeuro – 10^{12} Euro
GEUR	Gigaeuro - 10^{9} Euro
OASIS	Organization for the Advancement of Structured Information Standards
UBL	Universal Business Language
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
TBG1	UN/CEFACT TBG for Supply Chain
TBG6	UN/CEFACT TBG for Architecture, Engineering and Construction