E-INVOICE

BUSINESS JUSTIFICATION

FOR THE UPDATE OF THE UNIFI (ISO 20022) FINANCIAL REPOSITORY

Name of the request:
E-Invoice.

Submitting organization:
UN/CEFACT TBG5

The International Trade and Business Procedures Group (TBG) responsible for Finance standardization and trade facilitation is commonly known as TBG5. TBG5 forms part of the parent group UN/CEFACT which is an international standards body which manages a long-term program of work to support the development of trade facilitation and electronic business solutions. The scope of this work extends across a comprehensive number of vertical trade domains globally, of which Finance is just one. TBG5 already has a MoU in place with TC68 and SWIFT for purpose of co-operation and convergence between the two international standards bodies, where the prime interest in the tactical medium term is to achieve interoperability between ISO20022 (UNIFI) and ISO15000 (ebXML).

Scope of the registration request:

Considered relevant to this justification are the information flows covering the buying and selling business processes and their related information exchanges between the Supplier and Customer. The financial instruments in scope of this process are the payments between the Financial Institutions acting on behalf of the Customer and Supplier. In the first instance the objective of this justification is to ensure efficient and interoperable matching of semantic data elements between the exchange of supply chain messages and the subsequent payment flow. What is commonly called the ‘three way match’ between Invoice, Despatch advice and Payment messages. Secondly, pressure from the European Regulator may make it necessary to extend what is standardised under ISO20022 to ensure interoperability with the SEPA schemes; where e-Invoicing may become a regulated service across Europe. As an international Financial Services standard ISO20022 should be able to support the necessary business processes to enable payment reconciliation in the accounts receivable processes as well as a number of innovative services extending across the accounts payable and receivable processes.
KEY PROCESSES RELEVANT TO THE CORE INVOICE KERNEL

Successful automation of these processes requires consistent specification of key “core payment kernel” type information across invoice formats to facilitate process integration within and between buyer and seller organisations. Throughout the rest of this justification the core information considered necessary to perform the semantic three-way match is known as the “core invoice kernel”. No assumptions are to be made (other than good business practice) about how the internal systems at any party (e.g. buyer, seller or bank) are designed or work; these systems are treated as 'black boxes'.

The following aspects are out of scope:

- negotiation of terms and conditions of trade
- message transport and security
- security, privacy, data protection and retention rules

Essentially the role of the Financial Institution in this process will vary according to competitive and commercial forces. However in one sense it is envisaged that it could act simply as a service provider, while at the other it may offer a full suite of e-Invoice services based upon ISO20022.

Purpose of the registration request:

Electronic invoicing is seen by many stakeholders as a critical source of innovation between Financial Institutions and Clients. Recent developments in this area have established a complex set of stakeholders and interested parties, including Regulators, Corporate Clients, Banks, Service Providers and Standards Groups. The central purpose therefore of this request is; to foster collaboration between stakeholders, specifically in the area of e-invoice standards; to develop a harmonised business process model driving interoperability between the ISO20022 and ISO15000 repositories; to minimise divergent efforts and ensure a focus
on international/global standards; to deliver an interoperable message set in XML; and to indicate to the regulators/authorities innovative and collaborative developments in this space.

The major drivers/stakeholders of activity on this subject today include (but are not limited too):

- European Commission project to deliver e-Invoicing cross border within the EU to lever SEPA and contribute significantly to the Lisbon Agenda.

- EBA Association project to investigate e-Invoicing and look into the case for the creation of a common EU e-Invoicing Scheme, Rulebook, and Standards.

- ACBI specifically in regard to the Invoice Financing work under ISO20022.

- Nordic region adoption of e-Invoice formats, including Finvoice, UBL, and UN/CEFACT.

- SWIFT in relation to the TSU phase 2 activity.

The advantage of this Justification is that it will serve as the ISO activity to bring these and other stakeholders together to define a common International Core Invoice kernel which will avoid divergences, minimise wasted resource, and reassure the European Regulators that International standards deployed for SEPA can be successfully extended and interoperable with stakeholders beyond the financial services industry and in business processes extending up and down the value chain.

Community of users:

- Interested parties/users to this work in ISO20022 include, but is not limited too; Financial Institutions; Clients (corporate and retail); Authorities and Governments; and Service Providers (such as Value Added Networks and ERP providers).

Benefits:

  - Expected benefits include, but are not limited too;

    - Financial Institutions – Harmonised business process models, data sets and XML message instantiations between core payment services and developing innovative services extending into the customer to bank space.

    - Clients – Harmonised business process models, data sets and XML message instantiations between core trade processes and service offerings in the e-invoice space. Improved supply chain interoperability and therefore reduced cost and complexity both vertically and horizontally within value chains.

    - Service Providers – Clearer differentiation between the collaborative and competitive space. That is to say service offerings would be built upon common standards, allowing competitive extensions to those core models and processes. Improved interoperability and therefore integration opportunities both vertically and horizontally within value chains.

    - The potential economic gains of a common e-invoice standard are so large that they could make a significant and genuine contribution to the Lisbon process to make the EU a more competitive economy1

---

1 EUROPEAN COMMISSION Internal Market and Services DG SEPA Incentives
The invoice is one of the most important trade documents, it is the link between the supply chain and the financial value chain and is central to almost all business processes, making only minor efficiency improvements across the 15-17 million SMEs in Europe alone has the potential to save billions of €’s.

Adoption of these messages is highly likely to be driven by the European Regulator in much the same way as we have witnessed with SEPA. The risk of not doing this work in ISO20022 is that an alternative, perhaps non-interoperable format may be adopted.

**Timing and development:**
- The initiation of the work to define common standards is rather urgent, a significant consequence likely if it is delayed is divergence and fragmentation between International standards and market solutions;
- ISO20022 compliant models, business components and message components are expected to be ready by the end of third quarter 2008;
- The submitting organisation has already been in contact with and has the support in principle from:
  - EACT – European Association of Corporate Treasurers, specifically under the CAST activities related to the invoicing process
  - UN/CEFACT TBG 1 and 2 for the purpose of achieving interoperability between ISO20022 (UNIFI) and ISO15000 (ebXML)
  - SWIFT for the purpose of achieving interoperability between the repositories of ISO20022 and between ISO20022 (UNIFI) and ISO15000 (ebXML)
  - TWIST for the purpose of creating an international, neutral and open focal point for collaboration
  - SAP for the purpose of collaborating to reduce divergence in the area of e-invoicing standardization
  - A number of Global Banks as members of TBG5, for example HSBC, Deutsche Bank, Standard Bank etc.
  - A number of Corporates as members of TBG, for example Fiat, IKEA, EXON etc.
  - ACBI as a member of TBG5 and developer in ISO20022 of the Invoice Finance submission.
- The submitting organisation would like to (try to) involve the following development (standards organization(s), industry groups, user representatives, vendor representatives, service providers, regulatory bodies, market infrastructures, etc.);
  - Authorities and government, particularly the buy/sell side of central government; authorities representing tax/customs (WCO) and international shipping (Port Authorities); and the regulators where appropriate.
  - Other ERP providers such as IBM, PeopleSoft, JD Edwards etc.
Other International groups such as GS1, ACORD, PDEX, CIDEX etc.

- Any other known standards initiative(s) involved in an effort to address the same requirements;
  - TWIST
  - OASIS/UBL
  - FINVOICE

- The submitting organisation has a certain amount of modelling and methodological expertise, but would look to the ISO20022 RA to assist in the transformation of ISO15000 process models into an ISO20022 conformation submission;

- Assistance required from the RA is envisaged to be assistance in setting up the required modelling environment/tools, provide necessary electronic version(s) of the UNIFI dictionary and copies of related existing UML models, and provide guidance to ensure UNIFI compliance of the candidate models;

- TBG5 is committed to initiate and/or participate in the future message maintenance.

Contact persons:
Stig Korsgaard, Danish Bankers Association (chair TBG5).

Intellectual Property Rights (IPR):
UN/CEFACT TBG5 confirms its knowledge and acceptance of the UNIFI IPR policy for contributing organizations, as follows.

"Organizations that contribute information to be incorporated into the ISO 20022 Repository shall keep any Intellectual Property Rights (IPR) they have on this information. A contributing organization warrants that it has sufficient rights on the contributed information to have it published in the ISO 20022 Repository through the ISO 20022 Registration Authority in accordance with the rules set in ISO 20022. To ascertain a widespread, public and uniform use of the ISO 20022 Repository information, the contributing organization grants third parties a non-exclusive, royalty-free license to use the published information”.

Testing
The submitter understands that the ‘pilot testing’ of the UNIFI messages may be necessary, once the process for this testing is defined by the RMG the submitter will be better placed to respond how this may be conducted.
## UN/CEFACT e-Invoice Business Justification – Disposition of comments

<table>
<thead>
<tr>
<th>Country/Organisation</th>
<th>Comment</th>
<th>Disposition</th>
</tr>
</thead>
</table>
| Finland              | E-Invoice harmonization is one of the most important factors that will enable corporations and institutions make their processes more efficient. Defining a common content for European e-invoice is a crucial step towards more automated processes and straight through processing (STP). Therefore Finland will support the UN/CEFACT, TBG5, Business Justification with the following comments:  
  1. It is necessary to be aligned with other ongoing e-invoice projects in Europe (such as EC’s Workstream 4) and be aware of the other existing projects. It is also essential to utilize all the expertise there is of using e-invoice (for example Finvoice 1.2 and UBL 2.0 in the Nordic area etc.)  
  2. Electronic Payment Initiation (ePI) must be included in the e-invoice since it is vital to the several bank systems and payment automation processes.  
  3. Within the project it would be useful to define how for example e-order and e-invoice are linked together in the payment process to support the whole value chain.  
  4. With the final solution the small and medium sized corporations (SME’s) and private persons (that usually use the e-invoice solution in the internet bank) should be included. | TBG5 welcomes the support of Finland. In more detail responding to the comments TBG5 would like to make the following remarks.  
  1. TBG5 accepts that the e-Invoice work needs to be inclusive of other activities. Specifically TBG5 is working collaboratively; with the European Commissions activity on e-Invoicing (the chair of TBG5 is a member of that activity); with ACBI on their invoice financing work in ISO20022 to ensure a joined up approach; and with EACT and their CAST projects via an MoU for the purposes of co-operation on matters of joint interest; and SWIFT is an active member of TBG5, where the chair of the TSU supported the formation of the Business Justification.  
  2. TBG5 acknowledges that the ePI forms part of the business requirements space and will be considered as input as part of the requirements gather phase of the work. EPI was also taken as a basis for the Core Payments Kernel, and therefore should be included from the ISO20022 perspective.  
  3. The broader scope of e-Procurement is considered less likely to be in scope of ISO20022. However it is acknowledged that any e-Invoice solution needs to be developed in the context of the wider procurement process.  
  4. The way in which the ISO20022 standard is implemented is beyond scope of the business justification. However it is well understood that any e-Invoice solution must be accessible to SMEs and that by... |
<table>
<thead>
<tr>
<th><strong>reached without the need for extra investments from private and SME segments.</strong></th>
<th><strong>developing an ISO standard it can be widely, and cost effectively, adopted by service providers in the commercial market place.</strong></th>
</tr>
</thead>
</table>
| **France** | **France supports the BJ e-invoice.** France would encourage any other work to complete this starting point (taking into account all events and documents able to modify the content of e-invoice). The aim is to present an e-invoice ready to be paid. As it was mentioned at the RMG meeting in New-York, this BJ will require to ensure the consistency between the invoice and its payment. The creation of a specific Evaluation Team logged in the SEG Trade, composed of payment experts and trade experts, could be a good solution. | **TBG5 welcomes the support of France. In more detail responding to the comments TBG5 would like to make the following remarks.**

1. **One of the key drivers for the Business Justification is to ensure interoperability, at a business semantic level, between the ISO20022 payments space and its related elements in the e-Invoice.**

2. **The proposal of using the Trade SEG with an evaluation group composed of Trade and Payments experts is worthy of merit. One may however also need to consider corporate and public sector representation.** |
| **SWIFT** | **1. SWIFT is correct; strictly speaking, interoperability would be between the UNIFI and UN/CEFACT repositories. UN/CEFACT provide the requisite requirements to register content in the UNIFI repository, which would be under the domain and procedures of iso20022 to maintain. This is same model as has been used by the RMG in submitting the iso20022 c2b payment initiation messages to UN/CEFACT for registration within their domain.**

2. **Regards the scope comments the interaction between buyer and seller is in scope so far as it effects the data content of the invoice, or payment process; possible change requests to the iso20022 payment messages may result; Accounts payable and receivable are in scope to the extent that they place requirements on the invoice content to enable reconciliation. Although** |
<table>
<thead>
<tr>
<th></th>
<th>Does this submission propose to review, and possibly enhance, the existing UNIFI payments messages; Are the “Accounts Payable” and “Accounts Receivable” processes depicted in the schematic in scope or are they considered “black boxes”; Detail on coordination with ACBI and SWIFT.</th>
<th>strictly speaking from a business modelling perspective they are considered out of scope; Regards co-ordination see item 1 under the Finnish comments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Interoperable matching, please elaborate whether the “three way match” operates in a conventional manner or is different under an e-Invoicing arrangement.</td>
<td>The “three way match” operates in a conventional manner for e-Invoicing, accepting that the match is made between specific business components, rather than the entire document. Hence the term interoperable matching, which refers to the concept of business semantic interoperability of components in the UNIFI and UNCEFACT repository.</td>
</tr>
<tr>
<td>4.</td>
<td>The major drivers/stakeholders identified, appear to be all European.</td>
<td>This reflects the current drivers, additionally it is understood that The Clearing House and Federal Reserve in the USA are supportive, and should be considered as stakeholders.</td>
</tr>
<tr>
<td>5.</td>
<td>Additional indication of whether dialogue has been established with UBL, Finvoice, or ACBI with respect to e-Invoicing related matters?</td>
<td>See item 1 under Finnish comments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>E-invoice is a fundamental concept of trade processes and could seem out of the scope of ISO 20022 Repository.</td>
<td>As acknowledged by the Italian comments the Business Justification is focused on semantic interoperability.</td>
</tr>
<tr>
<td>2.</td>
<td>Would suggest clarifying whether the BJ scope is only focused on the invoice data elements useful for STP payments or also on the complete invoice information.</td>
<td>To some extent this will depend on the outcome of the significant developments, particularly in Europe.</td>
</tr>
<tr>
<td>3.</td>
<td>Very useful to know how the TBG1 e-Invoice model will be considered for the definition of the set of messages and business models.</td>
<td>The TBG1 Cross Industry Invoice (CII) is a prime input from the UN/CEFACT and TBG5 is acting as the conduit to ISO20022.</td>
</tr>
<tr>
<td>4.</td>
<td>Among organizations and institutions to be involved for the e-Invoice</td>
<td>ACBI is now aware and welcome to participate in the submission, and TBG5 have discussed with ACBI the wider intent to collaborate with all interested parties.</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>SEPA is a major driver for this submission, but not the only one.</td>
</tr>
</tbody>
</table>
5. Finally, in the BJ there is no reference to the specific SEPA service schemes with which guaranteeing "core invoice kernel" interoperability. The submission is to develop an international standard, which can cater for European requirements, but not at the exclusion of others. In this way it was not considered appropriate to enter into too much detail this regard.