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Call for Participation in the UNeDocs Project

Submitted by the UN/CEFACT Forum Management Group

This document is for information
1. **THE UNEDocs PROJECT**

1. At their meetings held on 29 and 30 January 2005, the UN/CEFACT Bureau and Forum Management Group approved the setting up of a new project to continue the work of the current UNEDocs project jointly undertaken by UNECE and SITPRO and supported by SITPRO and the Government of Switzerland as an integrated part of the Forum’s work plan. The current project work will be transferred with immediate effect to the International Trade and Business Processes Group (TBG) as the Digital Paper Working Group, TBG2. The mandate of this new Group will include the completion and ongoing maintenance of the UNEDocs digital trade documents which will provide a global standard for trade documents in paper or electronic formats.

2. The UNEDocs standard will simplify international trade and increase security in the international supply chain through the exchange of less but better data. The UNEDocs trade documents will implement international standards and best business practice. Traders and administrations of all countries can use the documents both in paper and electronic format depending on their needs, capabilities and the regulatory framework. The purpose of the new project is to open a migration path from current, paper-based information exchange to paperless trade.

3. The UNEDocs document specifications will integrate widely used UN standards for the simplification of trade documents and cross-border trade such as the UN Layout Key (Recommendation 1) and the Trade Data Element Directory Standard (ISO 7372), with Electronic Data Interchange standards such as UN/EDIFACT (Recommendation 25) and the latest (Extensible Markup Language) XML-related standards such as Eletronic Business XML (ebXML) Core Components (ISO 15000-5) and web-based technologies. UNEDocs documents are designed to be implemented with low-cost software and can serve as a platform to connect the user to value-added Web Services.

4. The Digital Paper Working Group (TBG2) will develop the paper and electronic specifications for the core documents used in international trade and will also support national, regional and international projects for Single Window implementations and paperless trade through the development of customized document specifications.

5. The UNEDocs project management team that will lead this new Group consists of:
   - Joint project Team Leads - Michael Dill (DE), Sue Probert (UK)
   - Technical Editor - Jean McInerney (UK)
   - Liaison with the UNEDocs Stakeholders - Markus Pikart (UNECE).

6. UN/CEFACT is now issuing a Call for Experts to participate in this new TBG2 UNEDocs project. Membership is invited from representatives of the Forum Permanent Groups, Country initiatives and key international trade document stakeholders to ensure that the resultant UNEDocs standards obtain the widest possible level of acceptance and thereby achieve the delivery of a set of UN/CEFACT Digital Trade Documents which will offer quantifiable benefits for all member States.

7. The expertise of participants should include specialized competence in the areas of documentary aspects of international trade and transport, trade facilitation and data management. In addition, the project requirements include UN/EDIFACT and XML expertise and understanding of the use of Core Component Technical Specification (CCTS) data modelling tools.
8. The first meeting of the TBG2 Working Group took place at the 6th UN/CEFACT Forum, held from 14 to 18 March 2005 in Kuala Lumpur.

2. STAKEHOLDER GROUP FOR PAPERLESS TRADE

9. The commitment and sustained support by UNeDocs major stakeholders will be essential to the success of the TBG2 Work Group and the implementation of the standard. To this end a Stakeholder Group, composed of trade-policy experts and representatives from the business community, transport, banking and finance, customs and other government agencies, and trade service providers will be convened. This Stakeholder Group should formulate its needs, agree on documentary requirements and provide support to the development and implementation of the document standards.

10. Participants will include the owners of international trade and transport documents such as International Freight Forwarding Association (FIATA), International Air Traffic Association (IATA), International Maritime Organization (IMO), World Customs Organization (WCO), European Union (EU), International Chamber of Shipping (ICS), International Chamber of Commerce (ICC), UN Conference on Trade and Development (UNCTAD) and International Road Transport Union (IRU), who aim to provide an electronic alternative to paper documents, and all other interested parties involved in the development of paperless trade documents.

Annex

UN/CEFACT PROJECT PROPOSAL *

I. Objectives

1. UNECE and SITPRO, together with supporting organizations, have invested significant resources and expertise in the development of the first two phases of the project, namely the proof of concept and version 0.4 of the UNeDocs international document set. This proposal is to integrate all the existing project materials into a third phase which will concentrate on extending the scope of documents covered and to ensure convergence between UNeDocs and all related UN/CEFACT projects and the work of any related Technical Committees of The Organisation for the Advancement of Structured Information Standards (OASIS).

2. The overall objective is the development of international paper documents and their equivalent electronic forms for trade, transport, finance, insurance, customs and other regulatory authorities documents.

3. An original UN/CEFACT Plenary decision in May 2002 resolved that UNeDocs should be brought into the Forum under the auspices of the Applied Technologies Group (ATG) as a cross-domain project with the objective of delivering the product to the marketplace. As this decision was never enacted, the Forum Management Group should now resolve to reaffirm the Plenary objective and, as a matter of priority, move the development and delivery of UNeDocs into the policy and executive remit of UN/CEFACT. This approach would strengthen the traditional trade facilitation work within UN/CEFACT and ensure that the significant progress already made on the project is placed into the public domain where UN/CEFACT can, through the Open Development Process, invite comment and views from potential users and implementers of the UNeDocs toolkit.

4. The purpose of bringing UNeDocs into UN/CEFACT is to deliver an internationally agreed simple and low-cost answer for the exchange of trade document data based on an integrated approach to the implementation/development of international trade documentary and e-business standards that allows the business community to use both paper documents and their electronic equivalents to generate and transfer trade, transport, finance, insurance, customs and other regulatory authorities data throughout the international supply chain.

5. For the past few years the business community has been looking to UN/CEFACT to provide the international standard that will combine paper documents and their mapping to electronic equivalents using appropriate technologies. UNeDocs has the potential to deliver this standard and to allow business to accumulate benefits in the faster and more accurate processing of trade-related information, the reduction of administrative burdens and significant cost savings. This, in turn, will encourage more traders, especially from the SME sector and the developing countries, to enter the global marketplace and contribute to economic development and wealth creation.

* This document was developed by the Task Force established by the UN/CEFACT Bureau, approved by the Bureau on 5 January 2005 and endorsed by the Forum Management Group at the 6th UN/CEFACT Forum in Kuala Lumpur, 14 – 18 March 2005.
6. Extra impetus has been added with the recent publication of UN/CEFACT Recommendation 33 – Establishing a Single Window. UNeDocs could provide the tools and methodologies needed for the quick, efficient and cost-effective implementation of the Single Window concept in countries at all stages of economic development. A Single Window, based on the paper and electronic document standards in UNeDocs, would potentially offer to government benefits that are similar to those from the direct application of the standard by business. Given this situation, UNeDocs must be developed by the stakeholders of trade, transport, finance, insurance, customs and other regulatory authorities’ documents and then delivered in the varied and various syntaxes by the technical implementers. The only place where this development and delivery can effectively take place is UN/CEFACT and UNeDocs should join the ‘family’ of standards to secure that the valuable work started can continue (see below under Section VII “Background”).

1.1 Purpose

7. To (a) strengthen the traditional trade facilitation agenda within UN/CEFACT by applying a holistic approach to trade documents, based on the coordination of trade facilitation and electronic-business layers and (b) to enable the development of simple low-cost solutions to support the generation and exchange of standardized paper and/or electronic international trade, transport, finance, insurance, customs and other regulatory authorities’ documents by implementing existing standards and recommendations.

8. The impact of UNeDocs should reach far beyond UN/CEFACT and constitutes one of the Centre’s major future deliverables in the area of trade facilitation.

9. As a UN/CEFACT/Plenary project, UNeDocs impacts ISO TC 154, ISO 15000 Part 5 and on many of the groups in the Forum, as a consequence of which, it is proposed that the UNeDocs project be considered as a International Trade and Business Processes Group (TBG) project.

1.2 Scope

10. A key aspect of the scope of the project will be to develop the data model (class diagram) of the trade, transport, finance, insurance, customs and other regulatory authorities’ documents for the international supply chain, based on the implementation of UN/CEFACT CCTS/ISO 15000 Part 5 and revision 2004 of UNTDED/ISO 7372, from which document data models can be derived which provide the ability to move between paper and digital documents at any point in the international trade transaction and which maximize semantic interoperability. The project can only be achieved through close cooperation between trade, transport, finance, insurance, customs and other regulatory authorities’ document users.
II. Deliverables

11. UNeDocs is a holistic approach to international trade, transport, finance, insurance, customs and other regulatory authorities documents, based on the coordination of the trade facilitation and electronic-business layers.

12. A set of deliverables will be developed for the production of paper and digital document specifications comprising:

- A Business Process Model illustrating where the UNeDocs documents fit into the operation of the International Supply Chain.
- A compliant Common Data Model based on UN/CEFACT Core Components that are linked to the UNTDED/ISO 7372 showing the relationships between key business entities referred to across the UNeDocs documents.
- Any Business Requirements Specification (BRS) and Requirements Specifications Mapping (RSM) submitted from the stakeholders. In the absence of an existing BRS or RSM the processes will be modelled against existing best practices and the forms used in international trade.
- For each document the project will develop:
  - A class diagram, based on any existing related TBG class diagram
  - The layout of the document based on the UN Layout Key
  - Box Completion Guidelines
  - XML specifications (i.e. UN/CEFACT schema, stylesheet)
  - UN/EDIFACT message implementation guide

III. Functional Expertise of Membership

13. The implementation of UNeDocs documentary requirements by e-business experts also requires resources, expertise and inputs from all Permanent Groups of the UN/CEFACT Forum. UNeDocs development requires strong collaboration with the existing relevant TBG Working Groups (WGs) and should take into consideration any work already done or in progress by these work groups.

14. UNeDocs development requires specialised competence in the areas of documentary aspects of international trade, transport, finance, insurance, customs and other regulatory authorities, trade facilitation and data management. In particular, requirements include UN/EDIFACT and XML syntax expertise, XML programming and understanding of the use of sophisticated UML business process and CCTS data modelling tools.

15. The commitment and sustained support of UNeDocs major stakeholders will be essential to the success of the project. To this end a Stakeholder Group composed of trade policy experts and representatives from the business community, transport, banking and finance, customs and other government agencies, and trade service providers will be set up.

16. UNECE, through UN/CEFACT, will therefore convene a Stakeholder Group which should formulate its needs, agree on documentary requirements and coordinate the implementation of the documents standard provided by the project working group.
17. Further research should be undertaken to identify other organizations, internal and external to the UN that could provide valuable contributions to the strategic direction and tactical work programme of the project.

18. All participating experts are expected to contribute to the work based solely on their expertise and to comply with the UN/CEFACT Code of Ethics.

IV. Geographical Focus

19. The focus is national and international increased cross-border and cross-sector trade facilitation.

V. Initial Inputs

20. The initial inputs include:
   - All UNeDocs project deliverables and artefacts to date
   - UN/CEFACT International Trade Reference Model
   - UNTDED (ISO 7372 2004 version)
   - CCTS (ISO 15000 Part 5) and the UN/CEFACT Core Component Library
   - UNECE Recommendations, particularly Rec. 1 (UNLK)
   - UNTDID and UN/CEFACT XML Naming and Design Rules
   - OASIS UBL schemas and UBL/UNeDocs document formatting specifications
   - Existing developments under relevant UN/CEFACT TBG Working Groups.

VI. Statement of resource requirements

21. This project requires governance by a Stakeholder Group, composed of trade policy makers familiar with the documentary aspects of trade and trade facilitation, to formulate the documentary requirements which will be implemented by e-business experts.

22. To ensure commitment and sustained support by that Group, UNECE recommends that UN/CEFACT should provide a platform where these Stakeholders can participate in formulating their needs, and document requirements, and coordinating the implementation of the documents provided by the Forum.

23. UNECE and SITPRO, together with other supporting organizations, have already invested significant resources and expertise into the development of UNeDocs to date. The effective integration of UNeDocs into UN/CEFACT is dependent on the organization of the maintenance and publication process, as well as commitments and the allocation of resources to deliver the next phases of the project according to an agreed work plan.

24. The team which will lead the new UNeDocs project consists of:
   - Joint project Team Leaders - Michael Dill (DE), Sue Probert (UK)
   - Technical Editor - Jean McInerney (UK)
   - Liaison with the UNeDocs Stakeholder Group - Markus Pikart (UNECE).
VII. Background

25. Over the past 30 years, the UN, through its Recommendation No 1 - the Layout Key for Trade Documents (UNLK) - has offered an international standard for the accurate and precise transfer of trade data using paper documents. The enduring beauty of the UNLK is its simplicity: the same data are found in the same place on all forms aligned to the standard. This simple rule makes trade, transport, finance, insurance, customs and other regulatory authorities documents easier to prepare for traders, saving time and money, especially if the documents are printed using laser technology. For recipients of aligned documents, the forms are easier to check and process as the information is presented in a clearly recognized standard format. An additional benefit for Governments is that easy to prepare, user-friendly official documents aligned to the standard can encourage trader compliance with regulations and administrative procedures. Using aligned document standards means official information is generated and provided as part of the trader’s commercial system and records with the minimum of additional burdens.

26. Now the UN stands on the threshold of delivering the next major step forward in trade facilitation for preparing and presenting trade-related data. The development of UNeDocs, the electronic versions of aligned documents, will modernize information flows in the international supply chain. Traders want it to meet the business needs of extended (and often more complex) production and supply chains, and the ever-changing demands of customers for quicker, more certain delivery of goods. Governments need it to encourage greater compliance with official requirements, and to receive trade-related data as early as possible to apply risk assessment techniques for more effective controls, especially in the more security-focused trading environment.

27. The origin of the development of the UNeDocs project by the secretariat can be traced back to a seminal document by J. Raven – WP.4, EDI and International Trade Facilitation, TRADE/WP.4/R.1025, 3 February 1994. In the section on ‘The unfinished agenda’, page 4, he notes:

‘One aspect of the overall facilitation response was to underline the fact that nothing – goods or means of transport – could move faster than the information which controlled it. The realisation of this constraint led to a mounting WP.4 interest and activity in electronic data interchange… It is not surprising, in the light of these interacting influences, that the working party had no time to extend and promote its basic documentary “products”… Aligned Documentary System: A further item on the unfinished agenda is the full maintenance and promotion of the UN aligned documentary system. With all its other distractions the WP.4 has had no opportunity, in the last decade to assess the quality, scope or performance of this basic ECE achievement. It has never examined the implications for aligned documentation of the remarkable history of the ECE Single Administrative Document. It has neither monitored nor maintained the fundamental correspondence between EDIFACT and the aligned system’.

28. In 1999, having identified the potential offered by the Internet technology for trade documents, UNECE provided UN/CEFACT with a contribution on ‘Electronic commerce on the web – form paper to EDI to XML’. At that time UN/CEFACT’s priority was to work with OASIS on the ebXML initiative and it had no available resources to address the proposals made in this document.
29. As a result, in 2000, UNECE started a project based on the following objectives:
   • To address the unfinished agenda of the UN Aligned Trade Document System;
   • To implement existing standards and recommendations for the simplification of document-based information flows;
   • To develop equivalence between paper documents and their electronic counterparts in order to enable the migration to paperless supply-chains;
   • To ensure the availability of solutions accessible to SMEs, developing and transition economies based on widely available and low-cost software platforms.

30. Based on these considerations, the UNECE secretariat undertook a number of consultations with organizations (including ISO, TC 154, FIATA) and universities to identify the potential and interest in reassessing the unfinished agenda. This led to the cooperation between UNECE, GEFEG, EPFL and SECO to do the proof of concept for one FIATA document, using extrabudgetary resources and contributions in kind.

31. Since 1998 SITPRO had been independently working in the UK on a parallel project called ElecTra (Electronic equivalent documents to support UK export traders) with similar, though national objectives.

32. In 2000 SITPRO and the UNECE signed a Memorandum of Understanding to combine these two projects. The result was the establishment of the current UNeDocs project, which is run jointly and supported by UNECE and SITPRO in coordination with a Stakeholder Group. The objectives of this new phase have been to develop business process and data models based on the UN/CEFACT Trade Reference Model to support key international trade processes. In addition, 12 key documents were chosen, for which document data models should be defined, plus syntax implementations/mappings to UNLK, UNEDIFACT and XML. In addition to an international set of these deliverables (the ‘International Document Set’ www.unedocs.org), SITPRO has also been developing a UK implementation version of the resulting toolkit of specifications.

33. A recent UNeDocs UK project development undertaken by SITPRO in conjunction with GEFEG has been the migration of the original UNeDocs data models to become compliant with the Core Component Technical Specifications (CCTS) and the adoption of the ATG2 XSD Naming and Design Rules for automatic CCTS-based XML schema generation.

34. UNECE, to date, has published a set of core UNeDocs international trade, transport, finance, insurance, customs and other regulatory authorities documents (The International Document Set - IDS), and SITPRO has published a UK implementation of IDS. These publications contain the business process and data models, the paper form layouts, the box completion guidelines for the paper document, corresponding UN/EDIFACT message implementation guidelines and specifications to implement the documents in the XML syntax.

35. To maintain and publish all these specifications, UNeDocs uses an advanced UML and data modelling tool. The resulting standard is published in a technology neutral format (MS Word, PDF, XML and HTML) on the Internet at: http://www.unedocs.org

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