ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON TRADE

Centre for Trade Facilitation and Electronic Business (UN/CEFACT)

Twelfth session
Item 4 of the provisional agenda

STAKEHOLDER PERSPECTIVES: STANDARDS DEVELOPMENT ORGANIZATIONS

Draft Proposal by the UN/CEFACT Bureau

This document is one of three background documents for strategic discussions concerning UN/CEFACT stakeholder perspectives of countries, sectors and standards development organizations.

Supporting documentation:
- TRADE/R.650/Rev.4 Mandate, Terms of Reference and Procedures for UN/CEFACT
- E/ECE/1434/Rev.1 Work Plan on ECE Reform
- E/CE/TRADE/C/2006/3 Implementation of the UNECE Reform and Follow-up to the 2006 Session of the Commission
- E/CE/TRADE/CEFACT/2006/10 Recommendations for approval: Consolidated Document Set
- Memorandum of Understanding between the International Electrotechnical Commission, the International Organization for Standardization, the International Telecommunications Union and the United Nations Economic Commission for Europe concerning standardization in the field of electronic business
- Global Facilitation Partnership for Transportation and Trade (GFP): Constitution and Operating Modalities
- Single Window Common Standards and Interoperability
I. Purpose

1. This background note has been prepared to support the third of three working sessions concerned with the importance of UN/CEFACT's activities from three perspectives: (1) countries, (2) sectors and (3) standards development organisations. It is provided as a draft and will be updated to reflect the exchange of views that takes place during this item on the agenda.

2. UN/CEFACT exists within the context of mandates articulated and approved by UN Member States (TRADE/R650/Rev 4). This session takes the opportunity to foster awareness-building about current and envisaged collaboration from various parts of the stakeholder community of standard development organisations, with a view to fostering a sensible overall UN/CEFACT strategy and a timely work programme that can provide relevant products and services to its constituencies.¹

3. During the exchange of views involving Plenary participants, the discussion is expected to focus on broad and specific ways to benefit from the coordination of global expertise, enhance the division of labour and tasks in the standards area, advance steps to reduce duplicate effort and extend collaboration to achieve interoperability in the building blocks that support business and trade. In particular, Plenary participants are encouraged to focus on ways to strengthen the Centre's contribution to this division of labour, particularly on near and medium-term priorities.

4. A short list of topics appears at the end of this background note in order to provide a starting point for input to the working session involving all Plenary participants.

II. Background

5. UN/CEFACT is working on the delivery of standards and recommendations for enabling interoperability for trade facilitation and electronic business. Other Standards Development Organizations (SDOs) are developing necessary infrastructure standards, e.g., network, transport and service definition mechanisms, and message content standards. There are different types of SDOs, ranging from accredited national or international standards bodies, to membership organizations with common interests or objectives. Governments and industry are demanding communication and coordination among these efforts to ensure the most effective use of resources for the accelerated delivery of standards with global relevance.

6. To improve the delivery and deployment of electronic business standards, UN/CEFACT is broadening its strategy for active coordination and collaboration with other SDOs. Building upon the formalized cooperation among IEC, ISO, ITU and UN/ECE on standardization in the field of electronic business (The IEC-ISO-ITU-UN/ECE Memorandum of Understanding on eBusiness Standards Management Group, commonly referred to as the MoU/MG), UN/CEFACT is developing coordination mechanisms, cooperation agreements and project alignment activities with other organizations contributing to the development, convergence, and adoption of global, electronic business standards.

¹ The results of this session will serve as a contribution, together with those of the subsequent sessions, to the Plenary exchange of views about strategy and work programme that will begin to be taken up under Agenda item 6 (see supporting draft document "Towards an Integrated Strategy for UN/CEFACT").
7. The management of UN/CEFACT recognizes the imperative to remove duplication of efforts, focus resources on the highest priority work items and ensure that the UN/CEFACT programme of work is coordinated with the other relevant initiatives. These objectives are essential to delivering value to UN/CEFACT members and to the network of public and private organizations that strive to benefit from the potential of trade facilitation and electronic business.

8. The management of UN/CEFACT is monitoring emerging electronic business technologies and the various initiatives and organizations developing standards relevant to electronic business. This paper discusses the range of organizations developing such standards and introduces key principles for ensuring the efficient and effective delivery of needed standards. With this foundation, a framework for planning, developing and adopting these standards is introduced, along with mechanisms for using this framework to improve coordination and communication among SDOs and with user organizations.

9. The paper will be used to initiate broader dialogue among the members of UN/CEFACT and other SDOs on how UN/CEFACT can be a more effective partner in the coordinated delivery of electronic business standards. Plenary participants will obtain a better understanding of how UN/CEFACT specifications and work programme fit in the larger context of delivering and deploying electronic business standards. UN/CEFACT management will receive guidance for an improved strategy for the coordinated and collaborative delivery of electronic business standards.

III. Collaboration and Challenges

10. UN/CEFACT successfully completed a number of collaborative projects, e.g., ebXML, and is continuing to deliver needed updates to UN/EDIFACT. As UN/CEFACT expanded its programme of work to deliver new methodologies, core components and syntaxes, less attention was applied to stewarding the coordination and communication with relevant initiatives of external organizations.

11. Technological advancements, increasing intersections of “information supply chains”, e.g., automotive, chemicals and material tracking, and needed acceleration in standards development have added to the challenges of delivering cohesive electronic business standards that are adopted.

12. Electronic business standards development projects often focus on defining business processes, service capabilities or information content. These specifications are used to define the processable representations for software implementations. After the delivery of these specifications, insufficient attention and outreach is assigned to the next stages of the standards life cycle: adoption, deployment, usability as part of a set of specifications for information systems and feedback for improvements.

13. The current electronic business standards landscape includes:

- extensive investments in first and second generation EDI standards
- trade sectors demanding accelerated delivery
- methods, techniques and tools still evolving
- overlapping initiatives on infrastructure and message content standards
• insufficient communication and synergy on evolving methods and emerging capabilities
• no incentives and marginal commitments to converge
• insufficient reference implementations
• need for defining and evaluating complete profiles
• interoperability testing largely unavailable

IV. Principles for Success

14. UN/CEFACT has successes in collaborative development of electronic business standards and will expand upon these by applying the following principles:
   - use the guidelines and structure of the MoU/MG for electronic business standards as a primary forum for communication and coordination among SDOs
   - understand and monitor the larger network of SDO’s and initiatives working on standards and technologies relevant to trade facilitation and electronic business
   - update UN/CEFACT procedures to foster outreach and communication with SDOs and potential stakeholders
   - broaden the solicitation for input during the investigation of government and business needs prior to initiating new projects, including the analysis of intersecting information supply chains and emerging standards
   - establish a common framework for defining needed capabilities and documenting applicable initiatives, specifications and standards
   - define metrics for identifying overlaps
   - use the framework and metrics to identify overlaps, gaps and convergence opportunities
   - define procedures to remove overlaps and focus resources on priority work
   - forge agreements and invoke procedures to optimize work programme and collaboration
   - encourage feedback from deployment and use
   - continue to optimize and accelerate

V. Working with Current and Future SDO Partners

15. In addition to ISO, IEC and ITU, there are other SDOs contributing to achieving the UN/CEFACT vision of “Simple, Transparent and Effective Processes for Global Business”. These organizations are delivering infrastructure and sector specifications, many of which UN/CEFACT has adopted or is incorporating in its methodologies and core components.

16. Having a cohesive set of standards and reliable software implementations of these standards in use across an enterprise’s service and trade networks is the goal of public and private organizations. UN/CEFACT will work to ensure that its programme of work is delivering unique value and assigns resource to the priority tasks for achieving defined electronic business capabilities.
17. UN/CEFACT is responsible for understanding the functional, structural and semantic requirements of its members and the broader community of public and private organizations represented by its members.

18. To improve our understanding and cooperation with our current and future SDO partners and those using UN/CEFACT products, an important way forward could involve establishing liaison and cooperation databases. To illustrate the type of information that would be collected, an example view is provided overleaf.
<table>
<thead>
<tr>
<th>Organization and url</th>
<th>Existing UN/CEFACT liaison or cooperation agreement</th>
<th>Work relevant to electronic business capabilities</th>
<th>Deliverables relevant to UN/CEFACT Programme of Work</th>
<th>Joint work items with UN/CEFACT</th>
<th>UN/CEFACT deliverables currently used</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC TC 3 – Information structures, documentation and graphical symbols</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEC TC 57 – Power systems control and associated communications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEC TC 91 – Electronics assembly technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEC TC 93 – Design automation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO / IEC JTC1 – Information technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO TC 46 – Information and documentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO TC 59 – Building construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO TC 68 – Banking, securities and other financial services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO TC 154 – Processes, data elements and documents in commerce, industry and administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO TC 184 – Industrial automation systems and integration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO TC 215 – Health informatics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MoUMG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIDX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAGi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OASIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ebBP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RosettaNet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWIFT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W3C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
19. In support of broader cooperation and project alignment with other SDOs, the Bureau develops cooperation agreements, liaison agreements and guidelines for cooperative projects. The FMG manages the execution of the tasks defined in these cooperative projects and reports to the Bureau and Plenary any issues and progress on deliverables.

20. To improve planning, coordination and deployment, UN/CEFACT could adopt and provide input to the electronic business capabilities framework developed by the eBusiness Standards Convergence Forum and the MoU/MG on electronic business standards. The top level of this framework is provided below.
VI. Some Topics for an Exchange of Views: A Starting Point

21. Plenary participants may wish to focus their attention on the following topics, or contribute others, aimed at providing input and validation about the perspective of standards development organisations and improving UN/CEFACT operations and deliverables:

(a) agreement on a framework for understanding what standards are needed for effective electronic business

(b) mechanisms for identifying and resolving overlaps or gaps in the electronic business standards development efforts by the various SDOs.

(c) mechanisms for fostering collaboration and convergence on a cohesive set of standards for electronic business

(d) effective ways to stay informed on the status of the electronic business standards development efforts

(e) guidance on how the UN/CEFACT specifications fit together to enable electronic business interoperability and promoting broad understanding and adoption

(f) the “life cycle model” for electronic business standards and relevance to improving the UN/CEFACT strategy and work programme:

- Identify government and business needs
- Assess available specifications and relevant projects of other SDOs
- Document requirements
- Develop specification and implementation guidance
- Validate specification and trial implementations
- Incorporate insights from validation and usability assessment
- Publish and establish maintenance infrastructure
- Deliver implementations for use
- Use in practice and provide feedback
- Update standard based on use and feedback