

## Postal Operations Council

### STANDARDS BOARD

Brussels, 30 January 2001

#### **Develop EDI and XML message and procedure to facilitate the exchange and final presentation of International Name and Address Information (request for Status P)**

#### **Proposal by the United States Postal Service (USPS) and the Address Management Project Team of the Direct Mail Advisory Board.**

<b>Subject</b>	<b>References Paragraphs</b>
<p>Proposal for the acceptance of a standard to transmit international name and address data, defined as separate identified elements, among parties, including final presentation on a mail piece, as a new work item (Status P). This project will utilize address elements determined as the output from a separate work item led by a POST*Code team working in conjunction with the CEN, UN/EDIFACT subcommittees and members of the UPU Direct Marketing Advisory Board (DMAB).</p>	<p>1 - 17</p>
<p><b>Decisions expected</b></p> <p>The TSB is requested to agree that:</p> <ul style="list-style-type: none"> <li>- Status P should be given to this subject.</li> </ul>	

### **I Introduction**

- 1) This document is a proposal for a new work item (Status P) to develop standard EDI and XML messages to facilitate name and address information exchange, including final presentation on a mail piece. The goal is to provide standard messages that utilize address elements defined and identified as the output of a separate work item to allow for greater clarity about the nature and characteristics of the name and address information to be transmitted. The standard messages will provide the capability for intelligent rendition of the name and address elements even when the mail piece cannot represent all the available information, in such a way as to preserve address quality and maintain mail piece deliverability.
- 2) This work item falls within the scope of current efforts to create a comprehensive international address standard in both the UN/EDIFACT Subcommittee and in the CEN. The comprehensive standard includes definition and identification of named address elements, transmission of data between parties, rules for presenting data on the mail piece, validation of the address data, and procedures for converting data currently retained in block or line by line formats to the new element by element formats. To be inclusive and complete, both of these efforts will require input

from the member posts of the UPU. Therefore, it is appropriate for this effort to be carried out under the overall auspices of the UPU standardization process in conjunction with the work of the CEN and UN/EDIFACT.

- 3) This document contains all required information for a new work item. The checklist required for a Status P to be granted is reproduced on the next page. For each topic, a reference indicates where the relevant information can be found in the document.

4)

<b>Information to be provided in an application for Status P (new work):</b>	<b>Information can be found in:</b>
Subject, including the title of the proposed standard (proposals must be encouraged from all interested parties, i.e. postal administrations and trading partners).	<b>I</b>
Scope of proposed standard. What it covers and what it excludes.	<b>II</b>
A preliminary assessment of the relationship of the proposed standard to: <ul style="list-style-type: none"> <li>- Other existing standards;</li> <li>- Other standards related projects;</li> <li>- The activities of other international bodies.</li> </ul>	<b>III</b>
A preliminary assessment of the purpose and justification of the proposed standard, including: <ul style="list-style-type: none"> <li>- The technical advantages which would result from the adoption of the proposed standard;</li> <li>- The benefits and potential costs of the proposed standard covering the interests of all member administrations of the UPU.</li> </ul>	<b>IV</b>
Proposal for the development group that should be responsible for the project work related to the development of the standard and the participants of the group.	<b>V</b>
Description for the completion of the next phase. At least the following information should be provided: <ul style="list-style-type: none"> <li>- Responsibility for this phase;</li> <li>- Participants;</li> <li>- Deliverables;</li> <li>- Milestones.</li> </ul>	<b>VI</b>

## Subject and Project Title

- 4) The goal of this project is to establish a standard for the transmission, and formatted presentation on a mail piece, of name and address information that has been defined in terms of separately identified address elements. This will facilitate international name and address information exchange and result in improved address quality and better mail piece deliverability. Further, it will reduce costs for the posts and enhance the value of mail as a consistent and reliable method of communication.
- 5) The proposed title for this work item is “**Develop EDI and XML message and procedure to facilitate the exchange and final presentation of International Name and Address Information**”.

## II Scope of the proposed project

- 6) This project proposes to:
  - Utilize the international address elements identified in a separate work item
  - Develop the capability to utilize a standard order of presentation or template for each country, supporting variations in language, region or content
  - Support by country, the preferred and acceptable character sets (Latin, Arabic, Kanji, Cyrillic, etc.) including diacritics and regional variants
  - Develop EDI and XML messages to provide standard protocols for data transmission of international name and address data
  - Identify standard operations and techniques for the specification of printing rules and rendition instructions to allow formatting of addresses when constraints exist on available space
  - Develop a reference implementation to illustrate the functions of the standard operations
  - Specify where possible those modifications of address elements that the Posts designate as acceptable for the purposes of maintaining address quality and deliverability
  - Define a technique for evaluating address data sets in terms of completeness and correctness when measured against external data files maintained by the Posts or by the UPU
  - Define a technique for evaluating a mailing data set with reference to the proportion of addresses which meet the quality standards of the Posts where these have been specified.

## III An assessment of the relationship of the proposed standard to other existing standards, standards-related projects, and the activities of other international bodies

- 7) A potential international name and address standard is conceivably related to the following:

<i>Related postal standards:</i>	
<b>Standard Reference</b>	<b>Title</b>
S-12	Format of Message Exchanges

- 8) The name and address information Message in Development (MID) in the UN/EDIFACT Subcommittee is PROLST. Members of the direct mail marketing industry with assistance from members of the UPU Direct Mail Advisory Board have been leading this project.

- 9) The CEN project CEN TC 331 WI 015, Postal Services - Address Data Bases has a five part project plan, including definition of address elements, definition of printing rules, transmission of address data among parties, validation of address data against external files, and conversion of existing data to the standard format. The focus is on European addresses.
- 10) The Graphic Communications Association (GCA) is working on an international address standard, Address Data Interchange Specification (ADIS) The ADIS project shares the CEN goals and objectives, with an additional focus on non-address related postal information that may appear on a mail piece. The GCA is represented on the UPU Direct Mail Advisory Board.
- 11) The US Federal Graphic Data Committee (FGDC) also has a project, Address Data Content Standard, in the Subcommittee on Cultural and Demographic Data.
- 12) It is important that this effort is carried out in cooperation with the ongoing international address standardization efforts, including those referenced, in order to minimize any differences in formatting and interpretation among the respective standards publications.

#### **IV Purpose and justification of the proposed standard, including technical advantages, benefits and costs**

- 13) With the growth of international commerce and cross-border mail, it is increasingly important for companies to acquire, maintain and transmit mailing lists using address information from many countries. Accurate information on international address formats is not readily available, and no standards currently exist which allow maintenance of a single database of multinational name and address information in an internationally accepted manner. Many practitioners believe that the use of individually identified and separately stored address elements offers a way to create this needed capability. However, this methodology will not be adopted unless it includes an effective way to reconstitute mailing addresses from the separate elements, meeting different requirements for different situations. This standard, developed by the UPU, would serve as a guideline for companies and Posts for assistance in maintaining, exchanging and printing international address information.
- 14) The project aims to develop messages using two distinct protocols, which we designate as EDI and XML respectively, recognizing that in a generic sense both of these are forms of Electronic Data Interchange, or EDI. When we refer in the specific sense to EDI we mean the protocol used in UN/EDIFACT. When we refer to XML we mean the Extensible Markup Language protocol developed and maintained by the World Wide Web Consortium (W3C). XML includes related standards such as Extensible Stylesheet Language (XSL) and XSL Transformations (XSLT) which will enable a standard definition of certain operations upon name and address elements in the form of a reference implementation for the standard. This is needed to assist users in developing conforming applications for the standard and to minimize ambiguity concerning the content of the standard.
- 15) The reasons for using both EDI in the specific sense indicated and XML as protocols deserve further explanation. EDI in the specific sense is best suited for the transmission of data among parties with complex data processing infrastructures. On the other hand, when name and address data or mailing job data are currently transmitted, even between large companies, this is often done without reference to rigorous standards of any kind. It is unclear whether development of an EDI message in the specific sense will result in adoption rates that are sufficient for a widely accepted

standard. At the same time, XML is achieving rapid growth in the area of Internet data transfers and is becoming a de facto standard in that arena. The best evidence for this is that EDI in the specific sense is starting to evolve in the direction of XML, taking the form of a hybrid often referred to as EDI/XML. However, native XML offers several advantages not available from translation of current EDI messages to work in an XML environment. These advantages include improved ability to constrain data values, better application portability, the availability of inexpensive or free development tools, and the existence of executable functions under XSLT that are defined wholly within the larger XML standard. For these reasons, it is advantageous to define the proposed standard using both the EDI protocol, which will allow for conversion in a straightforward manner to EDI/XML, and in a native XML protocol, incorporating XSL and XSLT for added functionality

## V. The Development Group

16) The development group should consist of members from interested posts, from the POST\*Code “Technological Development” Sub-Project Team, from the appropriate CEN task forces, and from the Address Management Project Team of the UPU Direct Marketing Advisory Board and other interested stakeholders. It should work within the administrative structure of the UPU Standards Board as may be appropriately designated.

## VI. The Next Phase

17) These follow up actions are now proposed:

- Establish a Development Group mandated to work toward the development of a comprehensive international name and address standard.
- Establish formal lines of communication with the POC POST\*Code Project Group.
- Use the results and recommendations from the POST\*Code “Technological Development” Sub-Project Team to:
  - Develop techniques to utilize optional and mandatory address information to achieve a final mail piece presentation using database of the name and address elements individually identified and separately stored
  - Develop methods to reorganize, combine and shorten name and address elements to achieve the best possible final presentation of the data within the constraints set by the mail piece design and the available mailing production technology
  - Develop EDI and XML messages to provide standard protocols for data transmission, including additions, deletions, and changes to data sets
  - Specify where possible those modifications of address elements that the Posts designate as acceptable for the purposes of maintaining address quality and deliverability
  - Define a technique for evaluating address data sets in terms of completeness and correctness when measured against external data files maintained by the Posts and/or by the UPU
  - Define a technique for evaluating a mailing data set with reference to the proportion of addresses which meet the quality standards of the Posts where these have been specified
- Develop, publish and support a procedure that makes the information easy to maintain.
- When complete, make the information available on the UPU Web site and/or other related sites encourage its use by all stakeholders.