

3 Candidate Standards

The following standards specify technical formats for e-procurement documents:

- EDIFACT
- X.12
- EANCOM
- xcBL
- UBL
- CXML
- GS1 XML
- OAGIS 7.2.1
- OAGIS 9.0

There are others, but this list covers the 3 mainstream EDI formats, and the 5 commonest XML-based standards.

3.1

THE ONLY STANDARD THAT SHOULD BE USED

EDIFACT - the Electronic Data Interchange For Administration, Commerce and Transport - is a standard of the United Nations [EDIFACT-UN]. It is standardised by UN/EDIFACT, the United Nations Centre for Trade Facilitation and Electronic Business under the UN Economic Commission for Europe.

EDIFACT has also been standardised by the International Standards Organisation as ISO 9735. It is a plain-text, quote-delimited format, and is one of the two main EDI standards. There are hundreds of documents types specified, including all of those required by the NEHTA E-Procurement Architecture. EDIFACT is used mainly in Europe, whereas the other prominent EDI standard, X12 is used mainly in the United States.

3.2

OWNED BY THE AUSTRALIAN STANDARD AS 4590 OWNED BY RED WAGON

X12
X12 is the American National Standards Institute (ANSI) standard for EDI. The standard x12.6 is the formatting standard for business documents. A recent stable release of X12 is known as release 004010. The body within ANSI that standardises X12 is called ANSI Accredited Standards Committee (ASC) X12 [X12-2007]. It is not freely available for download, and must be purchased from the Data Interchange Standards Association. Business documents are known as Transaction Sets, and have unique numbers, for example, 850 is Purchase Order and 810 is Invoice [X12-UTEX]. There are hundreds of document types for a range of industries' data interchange needs.

3.3

OWNED BY GLOBAL STAN PARAS ONE [GS1]?

EANCOM
EANCOM is the Global Standards One (GS1) EDI standard. It is the standard used widely in the Australian grocery industry, and although GS1 is not a de jure standards body, it is a not-for-profit organisation which has wide experience as an honest broker. EANCOM is a subset of the UN/EDIFACT messages with additional guidelines for implementers. It provides good integration with the EAN bar coding standards, also published by GS1 [EANCOM]. Documents describing formats for business documents are known as Message Implementation Guidelines (MIGs), and are freely available from GS1. They are tailored for use by GS1 national offices in each country in cooperation with local industry users.

3.4 xcBL

OWNED BY "PERFECT COMMERCE"

xcBL stands for XML Common Business Library [XCBL2000, COVER2001]. It is published for royalty-free use by Commerce One, which as of early 2006 is a subsidiary of Perfect Commerce. Perfect Commerce's intentions for its new acquisition are unknown. Its latest version, 4.0, is published as a set of XML Schema files. It was originally based on existing EDI standards, but has been redesigned in its transition from XML DTD to XML Schema. It contains definitions of 44 business documents, covering all of the documents specified in the NEHTA E-Procurement Architecture. xcBL was the basis of standardisation of the UBL document set, and the publishers of xcBL have a commitment to migrate towards UBL document types for future versions of the xcBL standard [XCBL2000].

* 3.5

OWNED BY "TEDIS"?

UBL
Universal Business Language (UBL) is published by the Organization for the Advancement of Structured Information Standards (OASIS) [OASIS2007], a global de facto standards organisation, which is a consortium of businesses and other organisations [UBL-FAQ]. It is most well known for its development, with UN/CEFACT, of eXML - a standard for XML-based E-Commerce. UBL is the subset of the eXML standards that defines business documents, and is developed using the UN/CEFACT Modelling Methodology (UMM) [UMM], and the UN/CEFACT/ISO Core Components Technical Specification. UBL 2.0 is the latest version of the standard. It is extensible, using the UMM where required, to suit national or industry requirements. UBL is most famously implemented as the mandatory format in which all invoices to the Danish government must be transmitted, with paper documents no longer accepted.

3.6

OWNED BY "ARIBA"

CXML
CXML.org offers the cXML XML DTDs for free download and use, but there is little information about the organisation and processes through which the DTDs have been developed. The cXML Web site reveals that Arriba, an e-commerce solutions company in the United States, drives changes to the published DTDs and that it is a closed industry consortium which is not open to new members. The current version is of cXML is 1.2.016 [CXML].

3.7

OWNED BY "GS1"?

GS1 XML
GS1, which publishes EANCOM, also recognises that XML is an increasingly popular format for electronic documents, and has produced a set of XML Schemas to parallel its EDI standards [GS1-XML]. These are designed using a predecessor of the UMM.

3.8

OWNED BY "OAG" / "MERBARS"?

OAGIS 7.2.1
OAGIS is the e-commerce standard published by the Open Applications Group - a not-for-profit industry consortium which acts as an open de facto standards organisation [OAG2007]. It is a member of both WSI (Web Services Interoperability - another industry consortium), and OASIS. The OAGIS standards have been in development over 10 years. They use Business Object Documents (BODs) which combine a verb (such as "process") with nouns (such as "invoice") to produce documents for use in a particular context. The 7.2.1 version of the BOD standards are defined using XML DTDs [OAGIS-7], and are in use in Oracle 11i (the most widely deployed ERP system in the state and territory Health Departments) - although the implementation in Oracle is far from conformance to the standard.