

Amendment 1 to the GII Project description

5 February 2002

GII Project M.3 SG16 Project: electronic commerce

Presentation of the issues

Electronic commerce may be defined as the ability to perform transactions involving the exchange of goods or services using electronic tools and techniques. It may include such actions as advertising, browsing through a catalog, purchasing, negotiating, billing, paying, exchanging commercial or technical documents, and may also feature broker functions. It is thus a very broad domain in which studies, experiments and specific implementations already exist and will be used as background.

Because telecommunication systems are needed for electronic commerce, ITU is concerned with this subject and has been called upon to sign a Memorandum of Understanding (MoU) on electronic business with ISO, IEC and UN/ECE. The coordination of the work for the MoU within ITU-T has been allocated to SG16 in conjunction with GII Project M.3.

The scope of the actions planned in the project will only encompass areas not already covered elsewhere and in which the participants have the expertise for bringing useful complements, such as security features. They will also try to harmonize and generalize specifications that have been designed for limited segments of business activities.

A large part of the communications will certainly go through the Internet, but other transport facilities may also be involved. Security and reliability are essential features for electronic commerce and will have to be carefully studied within the project.

Objectives

To obtain a complete set of standards insuring reliable and secure transactions for electronic business, either by using existing standards or by developing new standards when necessary.

To harmonize the specifications applicable across different segments of business activities.

To make these standards available to all parties involved in electronic business and in particular to developing countries.

Project description

Electronic commerce is a broad application expected to be accessed from a variety of terminals across different networks. Its main requirements are:

- the support of standardized transactions, i.e. presentation of the offer, navigation and selection;
- the exchange of commercial documents such as orders, invoices, contracts;
- the support of delivery, especially with regard to electronic goods;
- a high level of security, adapted to the application being supported;
- means for the support of payments.

The work will be conducted in cooperation by several Study Groups, each for the relevant aspects of electronic commerce that fall within its mandate. It will also involve the work of the other standardization bodies as appropriate. The following activities are envisaged:

- To review existing work applicable to the subject both inside and outside the ITU-T.
- To identify the various types of transactions pertaining to electronic business and their various environments.
- To characterize the functional aspects of electronic commerce.
- To identify the specific telecommunication support requirements applicable to electronic business.
- To develop appropriate security standards applicable to electronic commerce.
- To develop the protocols for the support of electronic commerce.
- To define the interfaces between networks and information appliances appropriate for electronic commerce.
- To develop, when applicable, common standards with the other MoU members.
- To combine efforts with the other MoU members for harmonizing the specifications used by different segments of business activities.
- To establish a list of standards applicable to electronic business.

Lead body

ITU-T SG 16 (Question C/16)

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Collaborating bodies

ITU-T SG 3, 4, 13, 17, ISO, IEC, UN/ECE, IETF, SETCo

ITU-T Questions involved

Study Group	Question	Title of the Question	Rec.
SG 4	Q.9/4	Requirements for the TMN X-interface	
SG 17	Q.12/17	Abstract Syntax Notation One (ASN.1)	
	Q.9/17	Directory services and systems	X.500-series
	Q.10/17	Security services, mechanisms and protocols	
	Q.26/17	Open Distributed Processing (ODP)	
SG 11	Q.4/11	API/object interface and architecture for signalling	
SG 13	Q.16/13	Telecommunication architecture for an evolving environment	Y.130
SG 16	Q.B/16	Multimedia architecture	
	Q.C/16	Multimedia applications and services	
	Q.D/16	Interoperability of multimedia systems and services	
	Q.G/16	Security of multimedia systems and services	
	Q.5/16	Mobility for multimedia systems and services	
SSG – IMT2000	Q.5/SSG	Handbook on IMT-2000	

Relevant existing Standards

RFCs pertaining to HTTP

Recommendations on security features:

- H.234 - Encryption Key management and authentication system for audio-visual services
- X.500 - Open systems interconnection - The Directory: Overview of concepts, models and services
- X.509 - Open systems interconnection - The Directory: Public-key and attribute certificate frameworks
- X.800 series - Security architecture for Open Systems Interconnection
- X.841 - Information technology - Security techniques - Security information objects for access control
- X.842 - Information technology - Security techniques - Guidelines for the use of Trusted Third Party services
- X.843 - Information technology - Security techniques - Specification of TTP services to support the appreciation of digital signatures

X.900 series on Open distributed systems

H.300-series Recommendations on audiovisual terminals:

- H.310 Broadband AV systems and terminals
- H.320 Narrow-band visual telephone systems and TE
- H.321 Adaptation of H.320 terminals for B-ISDN

- H.322 Visual telephone syst. and equip. for LANs of guaranteed QoS
- H.323 Visual telephone syst. and equip. for LANs without guaranteed QoS
- H.324 Visual telephone syst. and equip. for GSTN and mobile
- T.120-series Recommendations on protocols for audio-visual terminals.

Current work activities, deliverables and time-scales

Refer to ITU-T SGs consolidated work plans and to the MEDIACOM 2004 Project.

SG 16 Work plan

- 1) Review existing specifications applicable to electronic business in various environments
- 2) Review activities of the following organizations:
 - Other ITU-T SGs
 - Other participants in the MoU: ISO, IEC, UN/ECE
 - Other SDOs etc., e.g. IETF, UNEDIFACT
- 3) Build list of electronic commerce studies in the ITU-T and other SDOs and produce a map of their inter-relationship
- 4) Assess areas of potential overlap and non-activity and priorities
- 5) Inform relevant organizations of any perceived overlap
- 6) Develop a list of required e-commerce/e-business studies in the ITU-T and resulting Recommendations, using all available input e.g. Annex 1 and Annex 2 to COM 16 R-4
- 7) Identify suitable organization to undertake studies in areas on current non-activity
- 8) Provide, in collaboration with the E-business MoU members, functional descriptions of typical electronic business transactions and their telecommunication requirements
- 9) Make information on existing specifications available on the informal ftp area
- 10) Coordinate with other ITU-T SGs to define their activity within the project
- 11) Participate in the management meetings of the E-business MoU

Organization of the project

The project should be split into several work areas for which the responsibility will be allocated to different SGs. For instance a possible distribution could be:

- Area 1 Coordination
- Area 2 General framework
- Area 3 Security
- Area 4 Protocols
- Area 5 Service management
- Area 6 Supporting software