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 Title: Information technology — Business Agreement Semantic Descriptive Techniques  
 - Part 2: Registration of Scenarios and their Components as Business Objects  
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Introductory note: The attached document is hereby submitted for a three-month letter ballot to the National Bodies of ISO/IEC JTC 1/SC 32. The ballot starts 2002-06-17.

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Secretariat : ANSI

**Information Technology - Business Agreement Semantic Descriptive Techniques - Part 2: Registration of Scenarios and their Components as Business Objects**

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Project Editor Notes

Although this CD ballot document requires more work, SC32/WG1 deemed it advanced enough to go out for CD ballot.

This 15944 Part 2 CD expands on ISO/IEC 15944 Part 1 requirements for registration purposes in support of interoperability and re-use. It therefore identifies and specifies requirements in addition to those stated in ISO/IEC 15944 Part 1. Some requirements have been identified but are not yet specified. There may be other additional requirements. The SC32/WG1 and 15944 Part 2 Project Editor recognizes this and welcomes contributions or CD ballot comments on completion of this work.

During the CD ballot period, the Project Editor is undertaking a quality control check to ensure that all the rules and associated requirements for scoping Open-edi scenarios and specifying Open-edi scenarios and their components are supported in 15944 Part 2 for registration purposes. Contributions or ballot comments identifying such gaps between ISO/IEC 15944 Part 1 and this CD for 15944 Part 2 are welcome.

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO/IEC 15944 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 15944-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information Technology*, Subcommittee SC 32, *Data Management and Interchange*.

ISO/IEC 15944 consists of the following parts, under the general title *Information Technology — Business agreement semantic descriptive techniques*:

- *Part 1: Operational aspects of Open-edi for implementation*
- *Part 2: Registration of scenarios and their components as business objects*
- *Part 3 : Open-edi description techniques*
- *Part 4 : Business transaction scenarios – Accounting and economic ontology*

Annexes A, B1, B2, C1, and C2 to ISO.IEC 15944-2 are for information only.

## 0 Introduction

ISO/IEC 14462 Open-edi Reference Model<sup>1)</sup> section 4.1.2 states:

“Different user groups will generate open-edi scenarios in accordance with the specification given in the BOV related standards. Open-edi shall be specified in conformity to the BOV related standards. Business communities can propose Open-edi scenarios as candidates for standardization and registration into (an) Open-edi scenario repository (ies). Procedures to be used for introducing new Open-edi scenarios in one or more repositories are specified in a BOV related standard.”

This standard is the second part of a multi-part standard that supports the registration of scenarios, scenario attributes and scenario components as "objects". The objective of this standard is the identification, registration, referencing and re-useability of common objects in a business transaction. As stated in ISO/IEC 15944-1, re-useability of scenarios and scenario components is an achievable objective because existing (global) business transactions, whether conducted on a for-profit or not for profit basis, already consist of reusable components unambiguously understood among participating parties. However, such existing "standard" components have not yet been formally specified and registered. The purpose of this standard is to fill this gap.

An open-edi scenario is expected to be generated among user groups in accordance with the specification given in the ISO/IEC 15944-1, and to be submitted as a candidate for a new Open-edi scenario for reuse in the open world. User groups or parties will have a need to reuse an Open-edi scenario as a whole or some component, or to refer just for preliminary negotiation and further reuse purpose.

Open-edi scenario types will have specific or generic characteristics with different granularity, so that the registration scheme should meet those requirements.

Open-edi scenarios include the following components to be described using an Open-edi Description Technique (OeDT)

- Scenario attribute
  - Role
  - Information bundle
- 

1) ISO/IEC 14662 Information technology - Open-edi Reference Model/Technologies de l'information - Modèle de référence EDI-ouvert. The English and French versions of this ISO/IEC standard are publicly available. {See <<http://www.jtc1.org>>}

— Semantic component

## **Information Technology - Business Agreement Semantic Descriptive Techniques - Part 2: Registration of Scenarios and their Components as Business Objects**

### **1 Scope**

This BOV related standard addresses the requirements of producing, updating and registering an Open-edi scenario.

This standard provides requirements for

- Open-edi scenario registration method and procedure
- Information required to register Open-edi scenarios and scenario components
- Role and operation of registration authority of Open-edi scenarios

This international standard defines the procedures to be applied by qualified JTC1 Registration Authority(ies) appointed by the ISO and IEC council to maintain a register of Open-edi scenarios for the purpose of its reusability.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 14662: 1997 Information Technology - Open-edi reference model

IEC/ISO 15944-1: Information technology- Business agreement semantic techniques Part 1: Business operational aspects of Open-edi implementation

ISO/IEC 6523-1:1998 (E) Information Technology - Structure for the identification of organizations and organization parts Part 1: Identification of organization identification schemes

ISO/IEC 6523-2:1998 (E) Information Technology - Structure for the identification of organizations and organization parts Part 2: Registration of organizations identification schemes

ISO/IEC JTC1 Directives pertaining to registration authorities

## 3 Terms and definitions

For the purposes of this part of ISO/IEC 15944, the following terms and definitions apply.

### 3.1

#### **applicant**

a Person (organization, individual etc), which requests the assignment of a register entry and entry label

### 3.2

#### **entry label**

the naming information associated with the identification of a registered Open-edi scenario or sub component of scenario uniquely

### 3.3

#### **business object**

an unambiguously identified, specified, referenceable, registered and re-useable *Open-edi scenario* or scenario component of a *business transaction*

NOTE As an "object", a "business object" exists only in the context of a business transaction.

### 3.4

#### **coded domain**

a domain (1) for which the boundaries are defined and explicitly stated as a rule-base of a Source Authority; and, (2) for which each entity which qualifies as a member of that domain is identified through one or more codes, one of which must be an ID code.

Perhaps "code domain" is more preferred.

NOTE 1 A code domain in turn can consist of two or more coded domains, i.e., through the application of the inheritance principle of object classes.

NOTE 2 Entities that are members of a code domain are referred to as instances of a class.

### 3.5

#### **coded Domain Source Authority**

a Person, usually an organization, which sets the rules governing a coded domain.

NOTE 1 For widely used coded domains the coded Domain Source Authority is often a jurisdiction.

NOTE 2 Specific sectors, (e.g., banking, transport, geomatics, agriculture, etc.), may have particular coded Domain Source Authority(ies) whose coded domains are used in many other sectors.

NOTE 3 A coded Domain Source Authority usually also functions as a Registration Authority but can use an agent, i.e., another Person, to execute the registration function on its behalf.

### 3.6

#### **composite identifier**

an identifier functioning as a single unique identifier consisting of one or more other component identifiers, and one or more other component data elements, whose interworking are rule-based.

NOTE 1 Most widely used composite identifiers consist of the ID of the overall identification/numbering schema, (e.g., ISO/IEC 6532, ISO/IEC 7812, ISO/IEC 7506, UPC/EAN, ITU-R E.164, etc.), which is often assumed, the ID the issuing organization (often based on a block numeric numbering schema), the ID of the entities forming part of members of each issuing organization.

NOTE 2 Identifiers (in business transactions) are for the most part composite identifiers.

### 3.7

#### **computational integrity**

(? Need for a more appropriate term. Definition basically O.K.)

the expression of standards in a form that ensures precise description of behaviour and semantics in a manner that allows for automated processing to occur, and the managed evolution of such standards in a way that enables dynamic introduction by the next generation of information systems. ISO/IEC JTC1 Report on the Business Team on Electronic Commerce Clause 6.2 (JTC1 N5437)

### 3.8

#### **de facto language**

a **natural language** used in a **jurisdiction** which has the properties and behaviours of an **official language** in that **jurisdiction** without formally having been declared as such.

NOTE A de facto language of a jurisdiction is often established through long term use and custom.

### 3.9

#### **definition**

representation of a concept by a descriptive statement which serves to differentiate it from related concepts

[ISO 1087-1:2000 (3.3.1)]

### 3.10

#### **human interface equivalent**

a representation of the semantics of an ID code of a coded domain in a formalized manner suitable for communication to and understanding by humans.

NOTE 1 In most cases there will be multiple human interface equivalent representations as required to meet localization requirements, i.e., those of a linguistic nature, jurisdictional nature and/or sectorial nature.

NOTE 2 Human interface equivalents include representations in various forms or formats, (e.g., in addition to written text those of an audio, symbol (and icon) nature, glyphs, audio, image, etc.)

### 3.11

#### **Information Bundle (IB)**

the formal description of the semantics of the information to be exchanged by Open-edi Parties playing roles in an Open-edi scenario

[ISO/IEC 14662:1997 (4.1.2.2)]

### 3.12

#### **IT-enablement**

the transformation of current standards utilized in commerce, (e.g., code tables), from a manual to computational perspective so as to be able to support computational integrity. ISO/IEC JTC1 Report on the Business Team on Electronic Commerce Clause 6.2 (JTC1 N5437)

### 3.13

#### **IT interface equivalent**

a computer processable identification of [text being drafted including computational integrity]

### 3.14

#### **JTC 1 registration authority**

an organization appointed by the ISO and IEC councils to register objects in accordance with a JTC 1 procedure Standard

### 3.15

#### **name**

designation of an *object* by a linguistic expression

[ISO 1087:1990 (5.3.1.3)]

### 3.16

#### **official language**

an **external constraint** in the form of a **natural language** specified by a **jurisdiction** for use in that **jurisdiction** that applies to **Persons** forming part of and/or subject to that **jurisdiction** for use in **communication(s)** either (1) with that **jurisdiction**; and/or, (2) among such **Persons**, where such **communications** and interchanges pertain to **recorded information** involving **commitment(s)** of whatever nature.

NOTE 1 It is understood that, unless official language requirements state otherwise, for the choice of jurisdiction(s) chosen by the parties where a business transaction is deemed to have taken place, a mutually agreed upon jurisdiction, such Persons are free to choose their mutually acceptable natural language and/or special language for communications as well as exchange of commitments.

NOTE 2 Persons subject to a jurisdiction have the right to communicate with and receive available services in the official language from any institution forming part of that jurisdiction.

NOTE 3 The official language(s) is that required to be used for formal communications as well as provision of goods and services to Persons subject to that jurisdiction, for use in the legal and other conflict resolution system(s) of that jurisdiction, etc., and where applicable, in the exercise of rights and obligations of individuals in that jurisdiction.

NOTE 4 Where an official language of a jurisdiction has a controlled vocabulary of the nature of a terminology, it may well have the characteristics of a special language. In such cases, the terminology to be used must be specified.

NOTE 5 Where the spoken use of a natural language has more than one writing system, for an official language, the writing system(s) to be used are specified.

### **3.17**

#### **Open-edi Description Technique**

a specification method such as a Formal Description Technique, another methodology having the characteristics of a Formal Description Technique, or a combination of such techniques as needed to formally specify BOV concepts, in a computer processable form.

[ISO/IEC 14662:1997 (4.1.1)]

### **3.18**

#### **Open-edi scenario**

a formal specification of a class of business transactions having the same business goal

[ISO/IEC 14662:1997 (3.1.12)]

### **3.19**

#### **principle**

a fundamental, primary assumption and quality which constitutes a source of action determining particular objectives or results.

NOTE 1 A principle is usually enforced by rules that affect its boundaries.

NOTE 2 A principle is usually supported through one or more rules

### **3.20**

#### **registration**

the process of assigning a register entry

### **3.21**

#### **registry entry**

the information within a register relating to a specific Open-edi scenario or component of scenario including linkage information to a scenario content

### **3.22**

#### **role**

a specification which models an external intended behavior (as allowed within a scenario) of an Open-edi Party

[ISO/IEC 14662:1997 (4.1.2.1)]

### **3.23**

#### **rule**

A statement governing conduct, procedure, conditions and/or relations.

NOTE 1 Rules specify conditions that must be complied with. These may include relations among objects and their attributes.

NOTE 2 Rules may be of a mandatory or conditional nature.

NOTE 3 In Open-edi rules formally specify the commitments and role(s) of the parties involved, and the expected behaviour(s) of the parties involved as seen by other parties involved in (electronic) business transactions. Such rules are applied to:

- content of the information flows in the form of precise and computer-processable meaning, i.e. the semantics of data; and,
- the order and behaviour of the information flows themselves.

NOTE 4 Rules must be clear and explicit enough to be understood by all parties to a business transaction. Rules also must be capable of being specified using a using a Formal Description Technique(s) (FDTs).

EXAMPLE A current and widely used FDT is "Unified Modelling Language (UML).

### **3.24**

#### **scenario administration attribute**

a set of attributes to uniquely identify the scenario and the relevant person responsible for the maintenance

### **3.25**

#### **scenario classification attribute**

a set of attributes to distinguish the functionality and adaptability of the scenario

### **3.26**

#### **scenario component**

A reusable set of functional components combined together to satisfy a set of identified open –edi scenario.

### **3.27**

#### **scenario content**

a set of recorded information containing entry identifiers, labels and their associated definitions and related information reposted in anywhere

### **3.28**

#### **scenario contents attribute**

a set of attributes to describe the outline of scenario contents

### **3.29**

#### **Semantic Component (SC)**

a unit of information unambiguously defined in the context of the business goal of the business transaction

An SC may be atomic or composed of other SCs

[ISO/IEC 14662:1997 (4.1.2.2)]

## 4 Symbols and abbreviated terms

<b>FDT</b>	Formal Description Technique
<b>INCO</b>	International Chamber of Commerce
<b>ITTF</b>	Information Technology Task Force (of ISO/IEC)
<b>OeDT</b>	Open-edi Descriptive Technique
<b>RA</b>	Registration Authority
<b>SC</b>	Sub-Committee (in the context of ISO or IEC)

## 5 Principles of registration

The following considerations are introduced to assure the simpleness and convenience of registering scenarios and accessing the information of registered scenarios.

The descriptive techniques and languages are also considered in reflecting the background and characteristics of a generated scenario.

- Registering organization and cultural adaptability
- Information to be included within a registry
- Descriptive technique and code representation

### 5.1 Registering organization and cultural adaptability

Registration Authority (RA) and its operation shall be performed by a hierarchical structure of registration. A hierarchical structure of registration with subordinate levels of organization structure based upon JTC1 registration definition and cultural adaptability (multiple linguistic support concept) are adopted from the viewpoint of diversified laws and regulatory environment. The entry label number shall be assigned by JTC1 RA for unambiguous identification of scenarios to provide interoperability at the international level.

Implementation rules of registration procedures shall be in accordance with JTC1 RA procedures.

Scenario contents to be referenced for reuse of the scenario are supposed to be registered with the various business information documents as well as implementable (executable) computer programs. The linkage information for accessing that information shall be clearly described in the registry entry application.

(Need input from ISO/IEC 11179 and ebXML Registry/Repository)

Languages to be used in this standard are:

- International level: English,
- Multilingual Equivalents

This standard supports and facilitates the use of equivalents in languages other than ISO English. Annex A contains French language equivalents of the terms and definitions and is structured to facilitate the addition of other language equivalents.

In addition, Open-edi standards including this standard recognize that on the whole, parties to a business transaction are free to choose and decide among themselves the language(s) to be used. This can be a natural language or a special language, (e.g., as may be appropriate in a specific industry sector, technical area, scientific discipline, etc.). Agreement on choice of language is important in order to ensure unambiguity in the recorded information exchanged among Persons in a business transaction, particularly with respect to the commitments made. However, depending on the nature of the business transaction (e.g. in terms of goods or services provided, the location of the business transaction, etc.), external constraints in the form of laws or regulations may require the use of an official language (or de facto language). This may result in the requirement of the use of a language other than ISO English (or in addition to English). If this is the case such linguistic requirements shall be specified.

The use of unambiguous, unique and linguistically equivalent identifiers for scenarios and scenario components will facilitate interoperability in the use of different languages in various jurisdictions, and thus will support cultural adaptability.

## **5.2 Information to be included within a registry**

In order to achieve successful registration and reuse of Open-edi scenarios and their components, registration information is required to easily determine the applicability of an Open-edi scenario to a specific business application.

An effective classification scheme of Open-edi scenarios and their components provides attributes that are fundamental for their registration and reuse. Well organized classification attributes provide the best search criteria for retrieving a registered scenario that is the best fit for certain business objectives. Classification attributes unambiguously identify the scope of registered scenarios and their components.

On the other hand, reuse of registered scenarios and their components also requires identification of administrative attributes, e.g., ownership and location from which scenarios and their components can be retrieved. Registration authorities should formally maintain administrative attributes in addition to classification attributes.

In addition, scenario content overview in terms of description and technical requirements is essential in applying the scenarios and their components to a specific implementation environment. Such information provides content attributes.

Clear understanding of the registered scenario descriptions will facilitate reuse of Open-edi Scenarios; therefore the scenario contents shall be described in as formal a manner as possible. Every application for registration of an Open-edi scenario submitted for registration in accordance with this International Standard shall include the following information.

- Administrative information
- Classification information
- Content information

That information shall contain:

- Administrative attributes for Scenario identification and RA management
- Classification attributes for the understanding the contents of scenario.
- Content attributes that includes a scenario overview that summarizes the scenario in narrative form (complete or subcomponent) and a brief explanation of scenario content (scenario attribute, role, information bundle, type of object) The explanation of a scenario overview and its contents should be sufficiently detailed for a potential user of the scenario to determine whether the scenario is of interest. It should be understandable without reference to component specification

### 5.3 Specification Methods

Text to be provided

### 5.4 Formal descriptive techniques

Various formal descriptive techniques (Note: allow for business process specifications that already exist) may be employed to define the class of business requirement and predefined set of scenario components.

OeDTs and various templates as well as classification attributes are encouraged to describe a scenario, which are referenced in this Standard.

Detailed contents of scenario registration items shown in Clause 6 and Annex C (examples) are recommended to be reviewed before submitting the registration form.

## 6 Open-edi scenario/role attributes

### 6.1 Constructs of Open-edi Scenario Registration Information

The registration information that is associated with an Open edi scenario consists of the following three types of registration attributes:

a) Scenario Administration Attributes

A set of attributes to uniquely identify the scenario and the relevant person responsible for the maintenance.

b) Scenario Classification Attributes

A set of attributes to distinguish the functionality and adaptability of the scenario.

c) Scenario Contents Attributes

A set of attributes to describe the outline of scenario contents.

### 6.2 Scenario Administration Attributes

The detailed Scenario registration administration attributes are numbered as A.n or A.n.n, and reference Open-edi scenario component ID codes in 8.2.2.3 (carried over from ISO/IEC 15944-1).

**A.1 OeS Identifier (2010)**

The unique identification number of a scenario assigned by a registration authority

**A.2 Version Number**

The version number of a scenario assigned by a registration authority ; default = 1.0

**A.3 Applicant OeS Name (2020)**

The name that may be commonly used to refer to the scenario in the relevant business community

**A.4 Applicant OeS Language Code**

Linguistic + Language Code

**A.5 Registration Date**

The date when the scenario was successfully registered (Editorial Note : this is a placeholder to be revisited when the registration process is stable)

**A.6 Application Number**

The identification number assigned to the application of registering a scenario

**A.7 Application Date**

The date when an applicant registers a scenario

**A.8 Submitting Person Name**

The Person who applies to register a scenario

**A.9 Submitting Person Contact Information**

**A.9.1 Contact Name**

Name of the Person representative applying to register a scenario

**A.9.2 Contact Mailing Address**

Mailing address of the Person representative applying to register a scenario

**A.9.3 Contact Telephone Number**

Phone number of the Person representative applying to register a scenario

**A.9.4 Contact Facsimile Number**

Facsimile number of the Person representative applying to register a scenario

**A.9.5 Contact email Address**

email address of the Person representative applying to register a scenario

**A.10 Scenario author**

The Person who created a scenario

**A.11 Expected User Community**

The relevant community, industry, country, etc., to which the scenario could be effectively applied

**A.12 Related Regulation (2070)**

The regulation that may govern or restrict the application of a scenario

**A.13 Intellectual Property Right**

The intellectual property right that the creator of a scenario claims, pertaining to the use of the scenario. Note : IPR may be copyright, patent, industrial design [e.g., WIPO document]

**A.14 Restriction**

Specific restrictions of an application community and/or objectives of the scenario

**A.15 Relationship with other Scenarios**

**A.15.1 OeS Inheritance (2080)**

Identification and version of the scenario that is a superclass to this scenario

**A.15.2 OeS Cross-References (2080)**

Identification and version of the scenario(s) that is (are) related to this scenario

**A.16 Narrative Language**

**A.17 Language Code**

**A.18 OeDT Used**

The description language and/or technique that is used to describe the scenario contents, i.e., Open-edi Descriptive Technique (Refer to ISO/IEC 15944-3, *Information Technology – Business Agreement Semantic Descriptive Techniques Part 3: Open-edi description techniques*)

**A.19 Repository Location**

The URL address of the scenario with the repository where the scenario is located

**A.20 Remarks**

**A.20.1 Other Informative Information**

**A.20.2 Public Comments**

### 6.3 Scenario Classification Attributes

There are two types of scenario classification attributes. The first type of scenario classification attribute is described by making an appropriate choice among given alternatives. The second type of scenario classification attribute is described by providing appropriate text in a given format. The text should be written in the Common Description Language for Open-edi registration (English).

Scenario classification attributes provide for selection from an exhaustive list of options for each attribute as specified in table format, or addition of an option for an attribute that is not fully defined. Scenario classification attributes are numbered as B.n, and reference Scope Tag ID Codes in 8.1.2 (carried over from ISO/IEC 15944-1).

#### 6.3.1 Trade models by type

##### B.1 Market Type

**Table 01: Code Representation of Market Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
01	1065	01	Undefined Market Model	No barrier, anyone can participate: identification, authentication, i.e., advanced registration, of buyer is not required.
01	1065	02	Defined Market Model	must be preregistered; must meet qualifications, e.g., advanced registration. Predefined internal and/or external constraints. Also definable process model.

##### B.2 Settlement Type

**Table 02: Code Representation of Settlement Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
02	1070	01	Immediate Settlement Model	A trade model where the entire business transaction process, such as planning, identification, negotiation, delivery of goods or services and payment, is completed in real-time under the Open-edi environment.

02	1070	02	Separate Settlement Model	A trade model where the business transaction is performed under the Open-edi environment, and where the delivery of the good, service, and/or right and/or payment is separated from the agreement process.
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### B.3 Participation Type

**Table 03: Code Representation of Participation Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
03	1060	01	Bilateral Trade Model	A trade model where only buyer and seller are directly involved in a business transaction.
03	1060	02	Mediated Trade Model	A trade model where agent(s) and/or third party can be included in addition to the buyer and seller.

#### 6.3.2 Agents and third parties

### B.4 Agent

**Table 04: Code Representation of Agent Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
04	1110	01	Buyer's Agent	The scenario explicitly supports the role type of buyer's agent in business transactions.
04	1110	02	Seller's Agent	The scenario explicitly supports the role type of Seller's agent in business transactions.
04	1110	99	None	The scenario does not support any role type of agent in a business transaction.

### B.5 Third Party Constraint Type

**Table 05: Code Representation of Third Party Constraint Type**

IT-Interface	Human-Interface Linguistic Equivalents
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Table ID	Scenario Attribute ID	Code	Name	Definition
05	1130	01	Internal Constraint	Use of a third party is by mutual agreement of the buyer and seller
05	1130	02	External Constraint	Use of a third party is mandated
05	1130	99	None	The scenario does not support any role type of a third party.

### B.6 Role Type of third Party

**Table 06: Code Representation of Third Party Role Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
06	1135 (new)	00	Other	The scenario explicitly supports the other role types than those specified below in business transactions.
06	1135	01	Mediator	The scenario explicitly supports the role type of mediator in business transactions.
06	1135	02	Guarantor	The scenario explicitly supports the role type of guarantor in business transactions.
06	1135	03	Escrow	The scenario explicitly supports the role type of escrow in business transactions.
06	1135	04	Notary	The scenario explicitly supports the role type of notary in business transactions.
06	1135	99	None	The scenario does not explicitly supports any role type of third party in business transactions.

### 6.3.3 Process Planning

### B.7 Catalogue Provision (1225)

**Table 07: Code Representation of Catalogue Provision**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition

07	1225	01	Provided	The scenario explicitly supports catalogue provision of merchandize in business transaction.
07	1225	99	None	The scenario does not support catalogue provision of merchandize in business transaction.

**B.8 Order Type**

**Table 08: Code Representation of Order Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
08	1230 (new)	00	Other	The scenario explicitly supports other order types than those specified below.
08	1230	01	Pre-order	The scenario explicitly supports query/response interactions related to product/service availability, terms and conditions, etc.
08	1230	02	Purchase	The scenario explicitly supports the purchase type order process in business transaction.
08	1230	03	Change	The scenario supports the ability of the buyer to amend a purchase type order.
08	1230	04	Cancel	The scenario supports the ability of the buyer to cancel a purchase type or change type order.
08	1230	05	Contract	The scenario explicitly supports the contract type order process in business transaction.

**B.9 Offer Type**

**Table 09: Code Representation of Offer Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
09	1235	00	Other	The scenario explicitly supports other offer types than those specified below.
09	1235	01	Proposal	The scenario explicitly supports the proposal type offer process in business transactions.
09	1235	02	Consign	The scenario explicitly supports the consign type offer process in business transactions.

**B.10 Manufacturing Type**

**Table 10: Code Representation of Manufacturing Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
10	1245 (new)	00	Other	The scenario explicitly supports other manufacturing types than those specified below.
10	1245	01	Predefined	The scenario explicitly supports the readymade type products or packaged services provision in business transactions.
10	1245	02	Definable	The scenario explicitly supports the order made type products or customized services provision in business transactions.
10	1245	03	Off-the-shelf	The scenario explicitly supports standardized products ready for turn-key operation.
10	1245	04	Configurable	The scenario explicitly supports products that may require the buyer to specify configurable options with the seller during Process Negotiation.

**B.11 Liability/Risk Management**

**Table 11: Code Representation of Liability/Risk Management Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
11	1247	00	Other	The scenario supports a protection type other than insurance or deposit.
11	1247	01	Insurance	The scenario supports the insurance protection type. Either the buyer or the seller may insure the payment for the goods or the value of the goods delivered.
11	1247	02	Deposit	The scenario supports the deposit protection type. The buyer deposits money either with the seller or with a third party.

11	1247	99	None	The scenario does not explicitly support any liability/risk management of business transaction.
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### 6.3.4 Process Identification

#### B.12 Resource

**Table 12: Code Representation of Resource Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
12	1280	00	Other	The scenario explicitly supports other value resource than those specified below.
12	1280	01	Good	
12	1280	02	Service	The scenario explicitly supports the provision of services in the business transaction.
12	1280	03	Value	
12	1280	04	Title	
12	1280	05	Ownership	
12	1280	06	License	
12	1280	07	Right	

### 6.3.5 Process Negotiation

#### B.13 Pricing Type

**Table 13: Code Representation of Pricing Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
13	1320 (new)	00	Other	The scenario explicitly supports business transactions of other pricing type than those specified below.
13	1320	01	Buyer's Quote	The scenario explicitly supports business transactions of buyer's quote type pricing, i.e., price is determined by the buyer.

13	1320	02	Seller's Quote	The scenario explicitly supports business transactions of seller's quote type pricing, i.e., the price is determined by the seller.
13	1320	03	Individual Quote	The scenario explicitly supports business transactions of individual quote type pricing, i.e., the seller provides an offer price to a specific buyer in response to a request for a quote.
13	1320	04	Closed Bid	The scenario explicitly supports business transactions of closed bid type pricing (allow only sellers in a club). A bid is against a buyer's specification
13	1320	05	Open Bid	The scenario explicitly supports business transactions of bid type pricing from any seller.
13	1320	06	Auction	The scenario explicitly supports business transactions of auction type pricing.
13	1320	07	Reverse Auction	The scenario explicitly supports business transactions of reverse auction type pricing.
13	1320	08	Price Matching	The scenario explicitly supports business transactions of price matching type pricing, i.e., generally multiple buyers interact with multiple sellers, where agreement on price is dynamically reached.g., stock market.

**B.14 Non-pricing Negotiation Terms**

**Table 14: Code Representation of Non-pricing Negotiation Terms**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
14	1330 (new)	00	Other	The scenario supports non-pricing negotiation terms other than those specified below.
14	1330	01	Negotiable Delivery Terms	The scenario explicitly supports/does not support the negotiation of delivery terms.
14	1330	02	Negotiable Delivery Lot	The scenario explicitly supports/does not support the negotiation of delivery lot.
14	1330	03	Negotiable Packaging	The scenario explicitly supports/does not support the negotiation of packaging of merchandize.

14	1330	99	None	The scenario does not support any non-pricing negotiation terms other than the above mentioned.
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**B.15 Sales Channel Type**

**Table 15: Code Representation of Sales Channel Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
15	1340	00	Other	The scenario supports sales channel types other than those specified below.
15	1340	01	Direct	The scenario explicitly supports business transactions of direct sales channel type.
15	1340	02	Consign-ment	The scenario explicitly supports business transactions of consignment sales channel type.

**6.3.6 Process Actualization**

**B.16 Delivery Type (1360)**

Indicate the predefined INCO terms, (e.g., FOB, CIF) or internet type of product delivery in the scenario.

[Editor’s Note : Open-edited domain is to be determined for Delivery Type prior to issuance of the 15944-2 FCD.]

**B.17 Payment Term Type**

**Table 16: Code Representation of Payment Term Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
16	1365	00	Other	The scenario explicitly supports other payment term types than those specified below.
16	1365	01	Single Payment	The scenario explicitly supports a single payment.
16	1365	02	Multiple Payments	The scenario explicitly supports multiple payments.

**B.18 Payment Method**

**Table 17: Code Representation of Payment Method**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
17	1370	00	Other	The scenario explicitly supports other payment methods than those specified below.
17	1370	01	Credit	The scenario explicitly supports credit type payments.
17	1370	02	Debit	The scenario explicitly supports debit type payments.
17	1370	03	Cash	The scenario explicitly supports cash type payments.
17	1370	04	Funds transfer	The scenario explicitly supports funds transfer type payments.
17	1370	05	Counter product	“barter”

**B.19 Settlement Type**

**Table 18: Code Representation of Settlement Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
18	1380	00	Other	The scenario explicitly supports a type of settlement other than those specified below.
18	1380	01	Advanced Payment	The scenario explicitly supports the advanced payment type settlement.
18	1380	02	Deferred Payment	The scenario explicitly supports the deferred payment type settlement.
18	1380	03	Payment on Delivery	The scenario explicitly supports the payment on delivery type settlement.
18	1380	04	Incremental Payment	The scenario explicitly supports the incremental payment type settlement.

**6.3.7 Process Post-actualization**

**B.20 Warranty Type**

**Table 19: Code Representation of Warranty Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
19	1405	00	Other	The scenario explicitly supports other warranty types than those specified below.
19	1405	01	Warranty	The scenario explicitly supports the warranty of merchandize.
19	1405	02	Refundable	The scenario explicitly supports the refund of merchandize.
19	1405	99	None	The scenario does not explicitly support a warranty type.

**6.3.8 Scenario Management**

**B.21 Successiveness Type**

**Table 20: Code Representation of Successiveness Business Transaction Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
20	1450	00	Other	The scenario explicitly supports other successive business transaction types than those specified below.
20	1450	01	Successive	The scenario supports successive transactions eliminating redundant business negotiation processes already established in a previous transaction. A framework agreement exists between the parties that governs subsequent scenarios.
20	1450	02	Autonomous	The scenario stands alone as a business transaction, i.e., "One-off".

**6.4 Scenario Content Attributes**

The contents of an Open-edi scenario are briefly described with scenario content attributes using free text in the Common Open-edi Description Language (English) and/or using an OeDT. The terminology in the free text description should refer as much as possible to the standard glossary provided by the registration authority of Open-edi scenarios. The scenario content attributes relevant to registration are numbered as C.n, and reference Open-edi scenario component ID codes in 8.2.2.3 (carried over from ISO/IEC 15944-1). Table format is used where appropriate.

**C.1 OeS Purpose (2030)**

Describe the purpose of the scenario.

**C.2 Functional Specification**

Outline a business case description of the scenario.

**C.3 Processing Mode (2600)**

**Table 21: Code Representation of Processing Mode**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
21	2600	00	Other	The scenario explicitly supports other processing modes than those specified below.
21	2600	01	Real-time	The scenario is processed in real-time mode.
21	2600	02	Batch	The scenario is processed in batch mode.

**C.4 Technical Requirement (2600)**

Describe the technical requirement relevant to the business scenario.

**C.5 General Remarks**

Describe information pertinent to scenario registration other than that mentioned above.

**6.5 Role Attributes**

Roles are not autonomous, but are specified within a scenario specification. Information associated with roles that is pertinent to registration of an Open edi scenario consists of registration attributes numbered as R.n, and reference Open-edi scenario component ID codes in 8.2.2.3. Attributes having options are specified in table format.

**R.1 Role Identifier (3005)**

Specify the Role Identifier for each Role in the scenario.

**R.2 Role Name(s) (3010)**

Specify the Role Name(s) for each Role in the scenario.

**R.3 Person Qualification Type**

Persons participating in this Open-edi scenario must be a member of a trading community.

**Table 22: Code Representation of Person Qualification Type**

IT-Interface			Human-Interface Linguistic Equivalents	
Table ID	Scenario Attribute ID	Code	Name	Definition
22	2125	01	Mandatory	The scenario explicitly requires the mandatory qualification of Person.
22	2125	02	Preferred	The scenario explicitly supports the preferred qualification of Person.
22	2125	99	None	The scenario does not explicitly support any qualification of Person.

## 7 Open-edi Information Bundle/Semantic Component Attributes

With reference to UN/CEFACT eBTWG Core Components Technical Specification, Part 1, Version 1.8<sup>2)</sup>, administration and content information are required for registration of information bundles and semantic components.

### 7.1 Information Bundle/Semantic Component Administration Attributes

Administrative information is information about the registration of the information bundle/semantic component, including version information, replacement information, status information, change history and association information.

**Version Information:** Even though at any given point in time only one version of an information bundle/semantic component can be valid, multiple previous versions may have existed and a future version may be in preparation. The version association makes it possible to link the consecutive versions of an information bundle/semantic component. Except for the first version of an information bundle/semantic component, each stored version shall be linked to its previous version. Except for the last version of an information bundle/semantic component, each stored version shall be linked to its next version.

**Replacement Information:** An information bundle/semantic component may be replaced by another information bundle/semantic component at some point in time (e.g. because a duplicate is discovered). The 'Replaced by' association makes it possible to do this. Replacement information makes it possible to document the date of and reason for replacement. If another information bundle/semantic component has replaced an information bundle/semantic component, it shall be linked to the information bundle/semantic component by which it has been replaced. If an information bundle/semantic component replaces one or more other information bundle/semantic component(s), it shall be linked to the information bundle/semantic component(s) it replaces.

**Status Information:** Information about the live status of an information bundle/semantic component is provided by status information attributes.

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<sup>2)</sup> UN/CEFACT Core Components Technical Specification, Part 1 Draft Version 1.8, Feb. 2002

**Change History:** Stored information bundle/semantic components shall include the history of the status lifecycle of each version. This information about all changes that are made to an information bundle/semantic component is maintained using change history attributes.

**Association Information:** An information bundle/semantic component may be associated to multiple other information bundle/semantic components.

The detailed Information Bundle/Semantic Component registration administration attributes are numbered as IB/SC-A.n or IB/SC-A.n.n, and reference Open-edi scenario component ID codes in 8.2.2.3.

**IB/SC-A.1 IB/SC Identification [mandatory] (4010, 5010)**

The unique identification number of an information bundle/semantic component assigned by a registration authority

**IB/SC-A.2 Version Number [mandatory]**

The version number of an information bundle/semantic component assigned by a registration authority

**IB/SC-A.3 IB/SC Name [mandatory] (4020, 5020)**

The unique official name that may be commonly used to refer to the information bundle/semantic component in the relevant business community

**IB/SC-A.4 Submitting Person Name [mandatory]**

The Person who applies to register a information bundle/semantic component

**IB/SC-A.5 Submitting Person Contact Information**

Contact information about the submitting Person shall include the following attributes :

**IB/SC-A.5.1 Contact Name [mandatory]**

Name of the Person representative applying to register an information bundle/semantic component

**IB/SC-A.5.2 Contact Phone Number [mandatory]**

Phone number of the Person representative applying to register an information bundle/semantic component

**IB/SC-A.5.3 Contact Facsimile Number [mandatory]**

Facsimile number of the Person representative applying to register an information bundle/semantic component

**IB/SC-A.5.4 Contact email Address [mandatory]**

email address of the Person representative applying to register an information bundle/semantic component

**IB/SC-A.6 Registrar [mandatory]**

Name of the person responsible who has created the information bundle/semantic component in the repository

**IB/SC-A.7 Registration Authority [mandatory]**

Organization authorized to register the information bundle/semantic component

**IB/SC-A.8 Replacement Information**

For each stored pair of information bundle/semantic components where one information bundle/semantic component replaces the other, the stored information shall specify replacement information to include the following attributes:

**IB/SC-A.8.1 Replacement Description [mandatory]**

Reason for the information bundle/semantic component being replaced

**IB/SC-A.8.2 Replacement Date [mandatory]**

Date from which the replacement is effective

**IB/SC-A.9 Status Information**

Stored information bundle/semantic components shall contain status information to include the following attributes:

**IB/SC-A.9.1 Status [mandatory]**

Status of the information bundle/semantic component (i.e., draft, provisionally registered, registered, to be retired, retired, ...)

**IB/SC-A.9.2 Status Date [mandatory]**

Date on which the status comes into effect

**IB/SC-A.9.3 Status Change Reason [optional]**

Description of why the information bundle/semantic component status has been changed

**IB/SC-A.9.4 Status Change Reference [optional, repetitive]**

External document(s) containing relevant information about the status change

**IB/SC-A.9.5 Status Comment [optional, repetitive]**

Remark about the information bundle/semantic component status

**IB/SC-A.10 Change History Information**

The change history of the status lifecycle of each version of an information bundle/semantic component is a record of all modifications related to each version and shall include the following attributes:

**IB/SC-A.10.1 Change Type [mandatory]**

Nature of the change, such as new information bundle/semantic component, new version, information bundle/semantic component modification, status modification, information bundle/semantic component replacement

**IB/SC-A.10.2 Change Date [mandatory]**

Date on which the modification has been made

**IB/SC-A.10.3 Change Description [mandatory]**

Description of why and how the information bundle/semantic component has been modified

**IB/SC-A.10.4 Request By [mandatory]**

Name of the Person that has requested the modification of the information bundle/semantic component

**IB/SC-A.10.5 Request Date [mandatory]**

Date on which the modification was requested

**IB/SC-A.10.6 Comment [optional, repetitive]**

Remark about the information bundle/semantic component modification

**IB/SC-A.10.7 Reference [optional, repetitive]**

External document(s) containing relevant information about the modification

**IB/SC-A.11 Association Information**

Stored information bundle/semantic components shall include all associations they have with other stored information bundle/semantic components:

**IB/SC-A.11.1 Association Name [mandatory]**

Name of the association

**IB/SC-A.11.2 Association Description [mandatory]**

Descriptive text explaining the meaning of the association

**IB/SC-A.11.3 Association Type [mandatory]**

Type of association (e.g., aggregation, specialization, generalization, simple association ...)

**IB/SC-A.11.4 Association Multiplicity [mandatory]**

Cardinality of the association (i.e., optional/mandatory and repetition)

**IB/SC-A.11.5 Start Date [mandatory]**

Date at which the association becomes valid

**IB/SC-A.11.6 End Date [optional]**

Date from which the association is no longer valid

**IB/SC-A.11.7 Comment [optional, repetitive]**

Relevant information about the association (e.g., reason why it has been removed, ...)

**IB/SC-A.12 Repository Location [mandatory]**

The URL address of the information bundle/semantic component with the repository where the information bundle/semantic component is located

## 7.2 Information Bundle/Semantic Component Content Attributes

Information bundle/semantic components are described using free text in the Common Open-edition Description Language (English) and/or using an OeDT. The terminology in the free text description should refer as much as possible to the standard glossary provided by the registration authority of information bundle/semantic components. The information bundle/semantic component content attributes relevant to registration are numbered as IB/SC-C.n, and reference Open-edition scenario component ID codes in 8.2.2.3.

**IB/SC-C.1 IB/SC Definition [mandatory] (4030, 5030)**

The unique semantic business meaning of the information bundle/semantic component

**IB/SC-C.2 Usage Rules [optional] (4040)**

Stored information bundle/semantic components may include one or more usage rules, describing how and/or when to use the information bundle/semantic component.

**IB/SC-C.3 Comments [optional]**

Additional information about an information bundle/semantic component which is not part of the definition but that is considered relevant for clarification

**IB/SC-C.4 Reference Document [optional]**

A reference (e.g., a Uniform Resource Locator) to external documentation that contains relevant additional information about the information bundle/semantic component

**IB/SC-C.5 Acronym [optional, repetitive]**

An abbreviation or code under which the information bundle/semantic component is commonly known

**IB/SC-C.6 Keyword [optional, repetitive]**

One or more significant words used for the search and retrieval of an information bundle/semantic component

## 8 Registration characteristics

In order to increase reusability of Open-edi scenarios, there is a need to define an accurate registration scheme and procedure. Characteristics of Open-edi scenarios to be used for registration are specified according to the ISO/IEC 15944-1 templates for specifying the scope, attributes, roles, information bundles and semantic components of an Open-edi scenario. ISO/IEC 15944-1 Open-edi scenario characteristics pertinent to registration are categorized in this standard as administration, classification or content registration attributes.

The use of this standard is facilitated by including enhanced versions of the ISO/IEC 15944-1 templates in this standard. For example, many classification parameters are not in the ISO/IEC 15944-1 templates, but have been added to the template in 8.1.2 of this standard. Registration items from the templates in 8.1.2 and 8.2.2.3 are accounted for as administration, classification, or content attributes.

### 8.1 Template for specifying scope of an Open-edi scenario

#### 8.1.1 Introduction to template

- a) This template serves to identify mandatory attributes to be specified in registering the scope of a scenario. The purpose of this template is to capture in systematic, i.e. coded, form key aspects for the scoping of an Open-edi scenario and scenario components for their registration and re-use.
- b) Each scoping attribute shall be specified as applicable or not applicable. These two conditions are to be coded as Yes = 1 and No = 2 Decision Code<sup>3)</sup> This will allow us to :
  - i) support the ISO/IEC JTC1 strategic direction of “cultural adaptability” by allowing for multilingual equivalents of these two codes from a global perspective; and,
  - ii) facilitate computer processability, search-ability and reference-ability of these scoping attributes of Open-edi scenarios.
- c) The assignment of "Scope ID Code" numbers is of a block-numeric nature. For the "Scope ID Codes" the block numeric numbers 1000 to 1999 are reserved. For the "Component ID Code" numbers, {See Clause 8.2.3 below} the block numeric 2000+ has been reserved, i.e., up to "9999".

The purpose here is to ensure that all the numeric identifiers for attribute for:

- i) scoping Open-edi scenarios; and,
- ii) specifying Open-edi scenarios and their components

will be unique, unambiguous and linguistically neutral within ISO/IEC 15944-1 as well as within their use in ISO/IEC 15944 Part 2.

- d) This approach will facilitate unambiguous referencing and registration necessary for re-usability and interoperability of Open-edi scenarios and their components. It will also

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3) When registering Open-edi scenario scoping attributes, a code “3” may be used to indicate a condition of “Not Yet Known”.

facilitate support of localization requirements and use of multiple linguistic equivalencies for these numeric tags, i.e., as multiple equivalent human interface equivalencies.

### 8.1.2 Template<sup>4)</sup>

IT-Interface			Linguistic Human-Interface Equivalents		
Scope Tag ID Code	Decision Code	Table Number	Name (English)	Name (French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
1000			Business goal of business transaction- No External Constraints <sup>5)</sup>		
1010			Business goal of business transaction includes External Constraints <sup>6)</sup>		
1040			Persons (no external constraint)		
1041			Persons: Individual <-> Individual		
1042			Persons: Individual <-> Organization <sup>7)</sup>		
1043			Persons: Individual <-> Public Administration		
1044			Persons: Organization <-> Organizations <sup>8)</sup>		
1045			Persons: Organization <-> Public Administration		
1046			Persons: Public Administration <-> Public Administration		

4) The purpose of the Template is to ensure that all the specification requirements identified in ISO/IEC 15944-1 Clause 6 and 7.2 are captured in a systematic manner. The template structure demonstrates the ability to support multiple human interface linguistic equivalents.

5) It is important in scoping an Open-edi Scenario to specify at the outset whether or not external constraints apply to the business transaction being modelled. If there are no external constraints, i.e. the only constraints are those which the buyer and seller mutually agree to, then such an Open-edi scenario can often serve as a generic re-useable 'lego' block in support of those Open-edi scenarios which do include external constraints.

6) The completion of ISO/IEC 18038 - *Information technology - Identification and Mapping of Various Categories of Jurisdictional Domains* will be of assistance in development of "standard" template attributes for identification of External Constraints.

7) Often referred to as "B2C", i.e. as in "business to consumer". Here it is understood that a "consumer" is an "individual" and not an "organization".

8) Often referred to as "B2B" i.e. as in "business to business".

IT-Interface			Linguistic Human-Interface Equivalents		
Scope Tag ID Code	Decision Code	Table Number	Name (English)	Name (French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
1060		03	Participation Type		
1065		01	Market Type		
1070		02	Settlement Type		
			<b>Agents and Third Parties</b>		
			<b>Business Transaction allows for Agents<sup>9)</sup></b>		
1110		04	Agent Type		
			<b>Business Transaction allows for Third<sup>10)</sup> Parties</b>		
1130		05	Third Party Constraint Type		
1135		06	Third Party Role Type		
			<b>Process Component: All five sets of distinct activities covered.</b>		
			<b>Process Planning</b>		
1225		07	Catalog Provision		
1230		08	Buyer initiated goods/service request – Order Type		
1235		09	Seller initiated goods/service offer – Offer Type		
1245		10	Manufacturing Type		
1247		11	Liability/Risk Management Type		

<sup>9)</sup> It is assumed that business rules and constraints relevant to the ability of the two primary parties (the seller and the buyer), to be able to delegate all of part(s) of their role and associated commitment(s) to Agent(s) will be specified as part of “Role Attributes.”

<sup>10)</sup> It is assumed that Business Rules and Constraints pertaining to the ability of the two primary parties (the seller and buyer), to agree to delegate all or part(s) of their role(s) and associated commitment(s) to a “third party(ies)” will be specified as part of “Role Attributes.”

IT-Interface			Linguistic Human-Interface Equivalents		
Scope Tag ID Code	Decision Code	Table Number	Name (English)	Name (French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
			<b>Process Identification</b>		
1255			Identification for information exchange purposes only (e.g. an address) <sup>11)</sup>		
1260			Identification of Person able to make commitment <sup>12)</sup>		
1265			Identification of Person as “individual”		
1270			Identification of Person as “consumer”		
1280		12	Resource Type		
			<b>Process Negotiation</b>		
1320		13	Pricing Type		
1330		14	Non-pricing Negotiation Terms		
1340		15	Sales Channel Type		
			<b>Process Actualization</b>		
1360			Delivery Type		
1361			INCO Terms		
1362			Internet		
1365		16	Payment Term Type		
1370		17	Payment Method		
1380		18	Settlement Type		
<b>1400</b>			<b>Process Post-actualization</b>		
1405		19	Warranty Type		
1410			Includes records retention		
1415			Includes staying in contact with buyer (e.g., defect and recall notification)		
			<b>Scenario Management</b>		

11) A typical example here is an e-mail address or a P.O. box address.

12) This is usually required for the Negotiation step and certainly for Actualization.

IT-Interface			Linguistic Human-Interface Equivalents		
Scope Tag ID Code	Decision Code	Table Number	Name (English)	Name (French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
1450			Successiveness Business Transaction Type		
<b>1500</b>			<b>Data Component</b>		
1505			Predefined and Structured, i.e. code sets		
1520			Data integrity of any IB		
1525			Retention /latency of any Ibs		
<b>1600</b>			<b>Business Requirements on FSV – No External Constraints</b>		
1610			Service: Information Bundle Integrity		
1615					
1620			Service: Confidentiality of IB contents		
1625			Service: Non-repudiation of receipt		
1630			Service: Proof of Time IB creation <sup>13)</sup>		
1635			Service: Notarization of Ibs		
1640			Service: Quality of Service (QoS)		
<b>1700</b>			<b>External Constraints<sup>14)</sup></b>		

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13) Often referred to as time-stamping services.

14) Addresses work on the issue of jurisdictions as it impacts specification of external constraints on business transactions (being able to identify and reference laws and regulations impacting scenarios and scenario components) addressed in ISO/IEC 18038 - Information technology - *Identification and Mapping of Various Categories of Jurisdictional Domains*".

## 8.2 Open-edi scenario template

### 8.2.1 Purpose

The purpose of an Open-edi scenario template is to ensure that all the information required for the Business Operational View (BOV) of an Open-edi Scenario, its components and all attributes required to be specified (and registered for re-use) is captured in a systematic and explicit manner.

The template is based on an initial set of requirements already identified in Chapter 4.1 of ISO/IEC 14662 *Open-edi Reference Model* to which are added the results of standards development work on the BOV.

The requirement for each aspect (attribute) shall be specified as applicable or not applicable. These two conditions are to be coded as Yes = 1 and No = 2 Decision Code<sup>15)</sup> This will allow us to:

- a) support the ISO/IEC JTC1 strategic direction of "cultural adaptability" by allowing for multilingual equivalents of these two codes from a global perspective; and,
- b) facilitate computer processability, search-ability and reference-ability of these scoping attributes of Open-edi scenarios.

The assignment of "Open-edi Scenario Component ID Code" numbers is of a block-numeric nature. For the "Scope ID Codes" the block numeric numbers 1000 to 1999 are reserved {See Section 8.1 above}. For the "Component ID Code" numbers, the block numeric 2000+ has been reserved, i.e., up to "9999".

The purpose here is to ensure that all the numeric identifiers for attributes will be unique, unambiguous and linguistically neutral within ISO/IEC 15944-1 as well as in their use in ISO/IEC 15944 Part 2.

This approach will facilitate unambiguous referencing and registration necessary for re-useability and interoperability of Open-edi scenarios and their components. It will also facilitate support of localization requirements and use of multiple linguistic equivalencies for these numeric tags, i.e., as multiple equivalent human interface equivalencies.

### 8.2.2 Template Structure and Content

The Open-edi Scenario Template is structured in matrix form and consists of two distinct parts, namely:

- a) those focused on the IT-interface perspective; and,
- b) those focused on the human-interface perspective.

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15) When developing an Open-edi scenario specification, a code "3" may be used to indicate a condition of "Not Yet Known".

**8.2.2.1 IT-interface needs perspective**

From an IT-interface needs perspective, all that is required is that of unique, linguistically neutral and unambiguous identifiers for scenario attributes, and scenario components and their attributes. In order to facilitate use and management a block numeric numbering scheme is used to assign these identifiers<sup>16)</sup> as follows:

c) Scenario Attributes	2000 through 2999
d) Role Attributes	3000 through 3999
e) Information Bundle Attributes	4000 through 4999
f) Semantic Component Attributes	5000 through 5999

Within each of these major blocks there are sub-blocks of numbers reflecting the hierarchy and relationships of sets of attributes.

**8.2.2.2 Human interface needs perspective**

Human interface needs perspectives are on the whole of a linguistic nature. Natural language(s) are used to provide equivalent linguistic expressions understandable for use by human beings. Since human beings use multiple natural languages, the Template matrix is structured to allow for expandability into as many linguistic equivalent terms and name(s) as may be required by users of this standard.

**8.2.2.3 Consolidated Template of attributes of Open-edi scenarios, roles and information bundles**

IT-Interface			Human-Interface Equivalents		
Open-edi Scenario Component ID Code	Decision Code	Table Number	Name (ISO English)	Name (ISO French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
<b>2000</b>			<b>Open-edi Scenario Attributes</b>		
2010			OeS Identifier		
2020			OeS Name(s)		
2030			OeS Purpose		

16) Implementers of Open-edi Scenarios are free to map these identifiers to non-intelligent identifiers in their internal applications, (e.g., as part of their internal behavior).

IT-Interface			Human-Interface Equivalents		
Open-edi Scenario Component ID Code	Decision Code	Table Number	Name (ISO English)	Name (ISO French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
2040			OeS Set of Roles OeS Business Requirements, Rules and Constraints		
2050			OeS Set of Information Bundles OeS Scenario Inheritance Identifier(s) and Cross-References		
2060			OeS Set of Requirements on Open-edi Parties		
2070			OeS Set of External Constraints on Business Requirements, i.e., Laws and Regulations		
2080			OeS Inheritance Identifier(s) and Cross References		
2090			OeS Security Service Requirements		
2100			OeS Communication - Quality of Service Requirements		
2120			OeS Role Requirements and Constraints		
2125		22	Person Qualification Type		
2130			OeS Dependency among Roles in a Scenario		
2140			OeS Dependency among Information Bundles in a Scenario		
2150			OeS Dependency among Semantic Components of different Information Bundles		
2500			OeS Demands on Open-edi Parties		
			<b>OeS Demands on Open-edi Infrastructure</b>		
2600		21	Processing Mode		
<b>3000</b>			<b>Role Attributes</b>		

IT-Interface			Human-Interface Equivalents		
Open-edi Scenario Component ID Code	Decision Code	Table Number	Name (ISO English)	Name (ISO French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
3005			Role Identifier		
3010			Role Name(s)		
3015			Role Purpose		
3020			Role Business Goal(s)		
3025			Role Business Rules and Constraints		
3030			Role Inheritance Identifiers and Cross-References		
3035			Role External Constraints on Business Requirements, i.e., Laws and Regulations		
3040			Role Security Service Requirements		
3045			Role Communications and Quality of Service Requirements		
3050			Role Demands on Open-edi Parties		
3060			Interoperability Demands among Roles		
3065			Role States		
3070			Role Transitions		
3075			Role Events		
3080			Role Actions		
3085			Role Internal Function		
3090			Role Demands on Open-edi Support Infrastructure		
<b>4000</b>			<b>Information Bundle Attributes</b>		
4010			IB Identifier		
4020			IB Name(s)		
4030			IB Purpose		

IT-Interface			Human-Interface Equivalents		
Open-edi Scenario Component ID Code	Decision Code	Table Number	Name (ISO English)	Name (ISO French)	Name (Other)
(1)	(2)	(3)	(4)	(5)	(6)
4040			Business Rules Controlling Content of IBs		
4050			IB External Constraints on Business Requirements, Governing Content of an IB, i.e., Laws and Regulations		
4060			IB contents		
4070			IB recorded information retention – business rules and constraints		
4080			IB recorded information retention – external constraints on business requirements, i.e., laws and regulations		
4085			IB time validity characteristics		
4090			Relationship of semantic components within an IB		
4100			IB security service requirements		
4200			IB Information for Interoperability		
4300			IB Demands on Open-edi Support Infrastructure		
<b>5000</b>			<b>Semantic Component Attributes</b>		
5010			SC Identifier		
5020			SC Name(s)		
5030			SC Definition		
5040			SC Security service requirements		

## **9 Registration Authority and Operations**

### **9.1 Registration authority for Open-edi scenarios**

#### **9.1.1 Appointment**

The JTC1 RA for Open-edi scenarios shall be appointed by the ISO and IEC councils in accordance with the procedure for the appointment of JTC1 Registration Authorities defined in the JTC1 Directives.

#### **9.1.2 Qualification**

Any organization seeking appointment, as the JTC1 RA for Open-edi scenarios shall demonstrate that it meets the qualifications required of JTC1 RAs as defined in the JTC1 Directives, with the following condition.

— It shall confirm that it has sufficient resources to operate an Internet web site in support of this International standard.

#### **9.1.3 RA establishment**

The JTC1 RA for Open-edi scenarios shall operate under contract with the ITTF.

The following conditions are applied for a RA establishment :

— A national member body itself or its commissioned agents, national or regional, can be a RA candidate for JTC1 RA

— A national RA should be qualified and internationally acceptable and have a right to delegate its roles to commissioned national or regional agents

— A RA basically exists for the national or the regional domain area, however a allied RA between/among countries is a possible candidate

— The national member body should be required to indicate a newly established RA to JTC1 SC32

#### **9.1.4 Duties**

The JTC1 RA for Open-edi scenarios shall :

— Act and handle all aspects of registration administration in accordance with this International standard and good business practice.

— Receive and review applications and maintain an accurate register

— Make public access to complete details of all register entries available and provide information's as appropriate.

## 9.2 Applicant for registry

Any organization or individual may submit an application of a scenario to the JTC1 RA for Open-edi scenario.

## 9.3 Application procedure for registration

An application of registry starts with the submission of a new open-edi scenario application for registration and terminates with the registration acceptance. The submission shall conform to the following requirements :

- Identification and authentication of applicant and confirmation of required conformance to this International Standard
- Language adaptability

Use of English for the minimum required description is mandatory, however additional descriptive information in an RA-authorized language may be permitted by the RA.

An application for register of an Open-edi scenario shall be rejected if:

- The scenario to be registered already exists in a register
- The scenario is not executable or referable
- The scenario contains non-publishable information (e.g., classified) or intellectual property right (IPR) restrictions.
- The scenario contains objectionable information from a public order and morals viewpoint

Pre registration procedure

- The RA shall call for public comments before registration, however the RA has no duty to answer to each comment.
- Announcement of registration
- Accepted scenario applications is announced to public after the termination of 6 month public comment due date.

Post registration procedure

- RA shall make access available via electronic mechanism

## 9.4 Operation of Registration Authority

The following items have to be carefully examined and developed as the procedure for registration operation within the RA :

- Response and notification of application of entries

- Validation and routine review of entries and comments on new applications
- Defect notification
- Deletion of register entries

## **10 Maintenance of the register**

The RA shall take appropriate measures to ensure that the information within the register is adequately maintained and is publicly accessible without unreasonable delay. Appropriate measures shall be taken to protect the register.

### **10.1 Confidentiality of information held within the register**

Register entries shall not contain secret, proprietary or non-publishable material. The RA shall make all information within all entries publicly available.

### **10.2 Publication of the register**

The JTC1 RA under the terms of this standard shall maintain a register of all Open-edi scenarios and its packages that it has accepted for registration. The minimum key items registered (the RA can decide and publicly announce) shall be maintained and published in the English language. Technical definitions and Informative contents of the register or individual register entries may be provided in other languages according to the RA recommendations.

The RA shall provide access at a reasonable cost to all information identified above for all registries via electronic networks.

### **10.3 Dispute resolution**

If there is a dispute between an applicant and RAs, the RA shall make reasonable efforts to resolve the dispute. The RA may consult with other RAs and/or the technical group responsible for the technical standard.

### **10.4 Modification, deletion, obsolescence of the registered scenario**

#### **10.4.1 Modification and deletion**

An RA shall accept requests to modify and delete a registered scenario only from the original applicant of the scenario. RA management shall deny any other request for scenario modification and deletion.

#### **10.4.2 Obsolescence**

An RA may be able to obsolete a registered scenario with a six-month 'wait and warn' period if the following conditions occur :

- ten years elapsed since the scenario was registered
- no scenario update activity by applicant Persons or user access

**Annex A (normative): Consolidated list of terms and definitions  
with cultural adaptability : ISO English and ISO French  
lanuguage equivalency (TBD)**



## **Annex B (informative): Classification Schema (TBD)**



## **Annex C1 (informative): Concept of classification attributes for scenarios**

For the practical use of O-e scenarios, it gives significant convenience for the users and registration authorities to categorize the scenario attributes that identify and determine the individual scenario and its property, into three classes as follows:

- Scenario Administration Attributes

A set of attributes to uniquely identify the scenario and the relevant person responsible for the maintenance.

- Scenario Classification Attributes

A set of attributes to distinguish the functionality and adaptability of the scenario.

- Scenario Contents Attributes

A set of attributes to describe the outline of scenario contents.

### **C1.1 SCENARIO ADMINISTRATION ATTRIBUTES**

From the viewpoint of registration scheme for maximizing the re-usability of O-e scenarios once developed, the scenario administration attributes should contain the information in a formal manner to identify a specific scenario and to describe the responsibility of ownership. The scenario administration attributes are anticipated to conform the following requirements to achieve the objectives:

- Containing an identifier to uniquely identify a particular scenario
- Describing the appropriate application community and/or boundary of individual scenario
- Identifying the person responsible for the maintenance of individual scenario
- Describing the restriction relevant to individual scenario
- Containing the information of expired date or effective term of individual scenario

### **C1.2 SCENARIO CLASSIFICATION ATTRIBUTES**

It is desired to be able to commence E-Commerce by simply choosing a particular one from the standardized set of scenarios and applying it to the intended business transaction. In the context, the standard Open-edi scenario is supposed to be a generic class of various specific scenarios. In addition, if the generic scenario class were successfully obtained, it could consist of a small number of mandatory attributes and many conditional and/or optional attributes.

Although such a standardization idea for Open-edi scenarios seems to be a straightforward solution, it is likely to be difficult to distinguish a particular scenario from the others. In particular, the scenario description with many conditional attributes may be so complex that the semantics could not be clearly compiled even if any excellent OeDT is employed. In addition, for those

scenarios having the same attributes but with slightly different domains and the combinatorial, it is not evident whether they all have to be interpreted as single scenario type or not. Even if each scenario could be formally identified, having a unique identifier, many scenarios that are actually identical for semantics may be redundantly registered as standard scenarios. The more confusion expands the more difficulty of discrimination increases.

One of the effective solutions to avoid the confusion is to establish a scenario classification scheme based on well-defined criteria, which may reduce the complexity of conditional attributes as much as possible.

### **C1.2.1 CLASSIFICATION IDEA OF OPEN-EDI SCENARIOS**

The classification for Open-edi scenarios should meet the following requirements:

- **Simplicity:** the classification is plainly and unambiguously defined.
- **Selectivity:** the classification is disjoint and non-redundant.
- **Inclusiveness:** the classification is an all-inclusive of Open-edi scenarios.
- **Stability:** the classification is stable for the environmental changes.
- **Reality:** the classification is realistic for the real business world.

According to the requirements mentioned above, the classification scheme should be conceived from the fundamentals of business transactions in the real world such as market, party, merchandise and payment, not being tied to the existing classification ideas. For the purpose, the following three factors are considered as the typical example of key attributes for the classification of Open-edi scenarios. This classification approach could be extensively applied to complex scenarios in real business world when additional classification factors are taking into account.

#### **C1.2.1.1 Market Type on Business Boundary**

In the real business world, the typical E-Commerce transactions consist of the following business processes.

- A buyer finds a relevant seller(s) through the network by using a certain services and/or tools, such as a portal site and/or a search engine.
- The buyer negotiates the business terms and conditions with the seller(s).
- The buyer receives the merchandise and pays the amount of price to the seller(s) according to the business terms and conditions.

Although the business transaction mentioned above does not explicitly describe the market environment, in the real business world, many business transactions are performed through the relevant markets. For example, in a typical case of financial transactions, which mainly trades a value and/or credit with other persons without the physical delivery of cash or security, the financial markets have significant roles of the business transactions. In such a well-defined market, the buyers and sellers could be free from the individual negotiation efforts of the principal terms and conditions for their business transactions. They would participate to the defined market, accepting the principle terms and conditions at the registration in advance.

Other scenario context, such as authentication procedure, may be also greatly changed depending on whether the defined market exists or not. It seems to be much easier to discuss the classification of Open-edi scenarios if the market type, defined or unbounded, is taken into account. The market type is particularly meaningful in identifying the boundary of business transaction such as the trigger and completion terms.

**C1.2.1.2 Settlement Type in Business Process**

From the viewpoint of business process, it is also considerable that the delivery of merchandise and payment are simultaneously settled through the network, or separately performed through different channels. In the case of simultaneous settlement, the business transaction could be immediately completed if the merchandise and the payment are both valid and acceptable for all of the participants. On the other hand, if the delivery and payment are separately performed through different channels respectively, the business transaction could not be completed before the time when their acceptance and settlement will be confirmed later.

In order to bridge the time difference and/or spatial gap of the delivery and payment, the concrete identification of the business transaction and the authentication of either or both of participants are required for establishing the credit and debit relationship among them relevant to the business transaction. It also implies the difference of scenario constructs depending on the settlement type.

**C1.2.1.3 Participation Type of Role (Business Party)**

Regarding the role of Open-edi, the participation type, direct or mediated is meaningfully distinguished. In many cases, a business transaction is completed when the delivery and settlement are both confirmed between the buyer and seller. However, in some cases of business transactions, such as a real estate transaction through an escrow company, the third participant other than the buyer and seller is involved in the business transaction. In the case, the transaction is completed only when the escrow has confirmed the delivery and settlement according to the terms and conditions of the specific business transaction. Each participation type may have its own scenario construct respectively.

**C1.2.2 TRADE MODEL BASED ON THE CLASSIFICATION IDEAS**

The simplest business process shown in Fig.B1.2-1 is the basic trade model, from which we start the discussion of trade models derived from the classification ideas mentioned in the previous section.

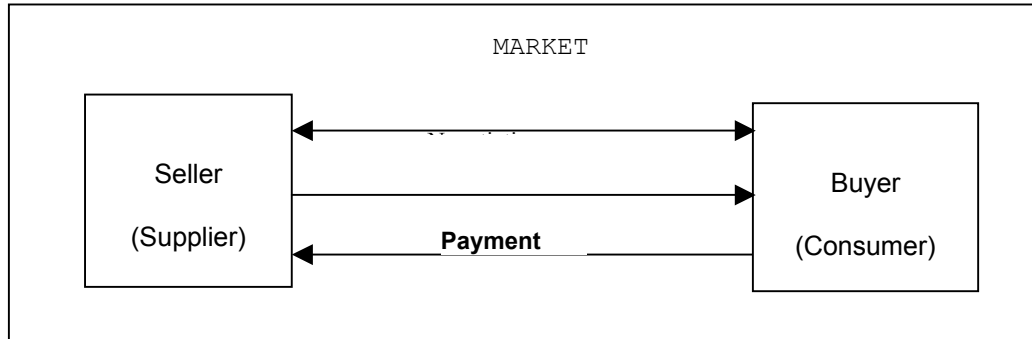


Fig. B1.2-1 Basic Trade Model

The brief description of this Basic Trade Model is as follows:

**Beginning of Trade:** either or both of buyer and seller find the negotiable counter party, by appropriate approaches in a market.

**Trade Scenario:** either or both of buyer and seller shows explicitly or implicitly an acceptable scenario to the counter party, and negotiates the terms and conditions of business transaction. In general, the way of acceptance of a particular scenario may be a part of the terms and conditions.

**Completion of Trade:** the trade will complete when both of the delivery of merchandise and payment are successfully finished.

**Authentication of Participants:** For the confirmation of the settlement of credit and/or debit between the buyer and seller, the authentication of buyer or seller is mandatory in the case that the payment or delivery is performed later than the agreement. If both of delivery and payment are performed later than the agreement, the authentication of both participants is mandatory. On the contrary, if the delivery and payment are simultaneously and immediately performed as well as the agreement, no authentication is required.

#### **C1.2.2.1 Trade Models by Market Type**

Two trade models are derived from the classification of the market type.

**Open Market Model:** a trade model, conforming to the description of Basic Trade Model, which is performed in unbounded market under the Open-edi environment. In this trade model, the buyer and seller begin the business transaction from seeking their counter party by appropriate services and/or tools such as a portal site and search engine. The business scenario to be applied to the transaction is decided upon the individual case. The buyer or seller may simply accept the scenario proposed by the counter party, or they are mutually negotiating.

In order to save the negotiation efforts, it is possible that the buyer or seller is seeking the counterpart specifying a specific scenario in the search criteria at the beginning of the business transaction. However, generally speaking, this type of business scenario should explicitly or implicitly include, as a part of scenario, the negotiation process of the terms and conditions. Thus, the Unbounded Trade Model necessarily requires the coincident agreement of scenario acceptance and the contents of terms and conditions under the scenario acceptance.

**Closed Market Model:** a trade model that the buyer and seller accept the entry terms and conditions of market in advance and then commence the actual business transactions. The administrator of market may be a buyer, seller or the third party. In any case, the scenario type to be applied to this trade model is explicitly established by the market administrator. The buyer and seller participate in the market through an explicit or implicit registration procedure in advance. There may be two types of registration scheme; i.e. an explicit registration is required for either of buyer or seller while the other implicitly participates in the market, or the explicit registration is required for both.

The significance of the Closed Market Model is that the business scenario applied to the market is defined at the individual market. It makes the buyers and sellers free from the negotiation efforts of principal terms and conditions to be applied for the individual transaction. In this trade model, although the authentication of buyer and/or seller is not necessarily required, it may not be excluded that the registration procedure of market requires the authentication of participants in advance. The authentication at registration could save the repeating efforts in the individual business transactions.

### C1.2.2.2 Trade Model by Settlement Type

Two trade models are derived from the classification of the settlement type.

**Immediate Settlement Model:** a trade model that the entire transaction process, such as negotiation, delivery of merchandise and payment, is completed at real-time under the Open-edi environment. One of the typical cases is downloading a software product or music from the vendor site, and paying with e-money or debit account. This trade model is almost equivalent to a casual procurement of merchandise, which is done by cash at a store on the street. The procurement can be completed at the moment when it has been confirmed that the merchandise is acceptable for the buyer and the payment is valid for the seller. The identification of transaction and/or authentication of buyer and/or seller are not required. Rather, from the viewpoint of privacy protection, such a trade model should not be excluded from the Open-edi environment.

**Separate Settlement Model:** a trade model that the business transaction is performed under the Open-edi environment, and that the delivery of merchandise and/or payment is separated from the agreement process. In this trade model, a special consideration should be taken on the scenario construct to bridge the time difference and/or spatial gap among agreement, delivery and payment.

In this trade model, at the first, an explicit identification of the transaction is required for mapping the agreement to the delivery and/or payment performed separately. Secondary, the authentication of buyer and/or seller is required to confirm the relationship of credit and debit among participants that is kept through the transaction process from agreement to delivery and payment. Thirdly, the transition of transaction status should be identified to be able to track the completion of individual activities through the transaction process.

### C1.2.2.3 Trade Model by Participation Type

Two trade models are derived from the classification of the participation type.

**Bilateral Trade Model:** a trade model that the buyer and seller are directly involved in the business transaction. In this trade model, the business relationship is basically closed between the two parties. The transaction is completed when the credit and/or debit settled between the buyer and seller.

**Mediated (Multilateral) Trade Model:** a trade model that a third party mediates the buyer and seller. One of the typical transactions is the business transaction of real estate that an Escrow company mediates the buyer and seller. In this trade model, the role of the third party may have many variations. The transaction scenario is required to explicitly denote the role and responsibility of the third party participating to the business transaction. And, the business transaction should also satisfy the terms and conditions for the completion, which are relevant to the third party, not only the settlement of the debit/credit between the buyer and seller.

## C1.2.3 CLASSIFICATION OF OPEN-EDI SCENARIOS

The classification attributes mentioned in the previous section, Market Type, Payment Type and Participation Type are mutually disjoint. Applying each of them to an axis of 3-dimension, the classification of Open-edi scenarios is obtained such that the requirement of scenario constructs is summarized in Table B1.2-1.

**Tab. C1.2-1 Scenario Classification and Constructs**

Class	Classification Attributes			Scenario Construct
	Market	Settlement	Participation	
<b>a) O-I-B</b>	Open	Immediate	Bilateral	-Basic Bilateral Trade Scenario
<b>b) O-I-M</b>	Open	Immediate	Mediated	-Basic Mediated Trade Scenario
<b>c) O-S-B</b>	Open	Separate	Bilateral	-Bilateral Agreement Scenario -Separate Delivery Scenario -Separate Payment Scenario -Authentication Scenario
<b>d) O-S-M</b>	Open	Separate	Mediated	-Mediated Agreement Scenario -Separate Delivery Scenario -Separate Payment Scenario -Authentication Scenario
<b>e) C-I-B</b>	Closed	Immediate	Bilateral	-Membership Registration Scenario -Defined Bilateral Trade Scenario
<b>f) C-I-I</b>	Closed	Immediate	Mediated	-Membership Registration Scenario -Defined Mediated Trade Scenario
<b>g) C-S-B</b>	Closed	Separate	Bilateral	-Membership Registration Scenario -Defined Bilateral Agreement Scenario -Separate Delivery Scenario -Separate Payment Scenario -Defined Authentication Scenario
<b>h) C-S-M</b>	Closed	Separate	Mediated	-Membership Registration Scenario -Defined Mediated Agreement Scenario -Separate Delivery Scenario -Separate Payment Scenario -Defined Authentication Scenario

**a) O-I-B Class:** a scenario class of business transactions, which is attributed by Open Market, Immediate Settlement and Bilateral Participation. This scenario class consists of single Basic Bilateral Trade Scenario that is conforming to the Basic Trade Model under the Open-edi environment.

**b) O-I-M Class:** a scenario class of business transactions, which is attributed by Open Market, Immediate Settlement and Mediated Participation. This scenario class consists of single Basic Mediated Trade Scenario, which is a complete set of mediated trade processes under the Open-edi environment.

**c) O-S-B Class:** a scenario class of business transactions, which is attributed by Open Market, Separate Settlement and Bilateral Participation. This scenario class consists of the following four components: Bilateral Agreement Scenario, Separate Delivery Scenario, Separate Payment Scenario and Authentication Scenario.

**d) O-S-M Class:** a scenario class of business transactions, which is attributed by Open Market, Separate Settlement and Mediated Participation. This scenario class consists of the following four components: Mediated Agreement Scenario, Separate Delivery Scenario, Separate Payment Scenario and Authentication Scenario.

**e) C-I-B Class:** a scenario class of business transactions, which is attributed by Closed Market, Immediate Settlement and Bilateral Participation. This scenario class consists of the following two components: Membership Registration Scenario and Closed Bilateral Trade Scenario.

**f) C-I-M Class:** a scenario class of business transactions, which is attributed by Closed Market, Immediate Settlement and Mediated Participation. This scenario class consists of the following two components: Membership Registration Scenario and Closed Mediated Trade Scenario.

**g) C-B Class:** a scenario class of business transactions, which is attributed by Closed Market, Separate Settlement and Bilateral Participation. This scenario class consists of the following five components: Membership Registration Scenario, Closed Bilateral Agreement Scenario, Separate Delivery Scenario, Separate Payment Scenario and Closed Authentication Scenario.

**h) C-S-M Class:** a scenario class of business transactions, which is attributed by Closed Market, Separate Settlement and Mediated Participation. This scenario class consists of the following five components: Membership Registration Scenario, Closed Mediated Agreement Scenario, Separate Delivery Scenario, Separate Payment Scenario and Closed Authentication Scenario.

### **C1.2.3.1 Scenario Components**

As mentioned in Table B1.2-1, the scenario components are quite different depending on scenario classes. Those scenario components are described as follows:

#### **Basic Bilateral Trade Scenario:**

This scenario includes all processes of a transaction to begin and complete a Basic Bilateral Trade.

At the beginning of trade, either or both the buyer and seller find the negotiable counter party, by appropriate approaches.

Then, either or both the buyer and seller show explicitly or implicitly an acceptable scenario to the counterpart, and negotiate the terms and conditions of business transaction. The way of acceptance of a particular scenario may be a part of the terms and conditions.

The trade will complete when both the delivery of merchandise and payment are coincidentally and successfully finished.

No authentication of buyer and seller is required because the delivery and payment are simultaneously and immediately performed as well as the agreement of transaction.

**Basic Mediated Trade Scenario:**

This scenario includes all processes of a transaction to begin and complete a Basic Mediated Trade.

At the beginning of trade, either or both the buyer and seller find the negotiable counter party by appropriate approaches or through an appropriate mediator.

Then, either or both the buyer and seller show explicitly or implicitly an acceptable scenario to the counterpart, and negotiate the terms and conditions of business transaction under the mediation of mediator(s). The way of acceptance of a particular scenario may be a part of the terms and conditions.

The trade will complete when both the delivery of merchandise and payment are coincidentally and successfully finished and confirmed by the participants according to the terms and conditions agreed upon the business transaction.

No authentication of buyer and seller may be required because the delivery and payment are simultaneously and immediately performed as well as the agreement of transaction. The mediator is required a certain authentication to qualify the ability of mediation. The qualification depends on the role of mediator.

**Closed Bilateral Trade Scenario:**

This scenario is the core of C-I-B scenario and includes all processes of a transaction to begin and complete a Closed Bilateral Trade of which the principle terms and conditions the participants accepted in advance.

Before participating to the trade, the buyer and/or seller are required to make a membership registration to the defined market and to accept the principle terms and conditions of trade.

Either or both the buyer and seller begin the individual transaction according to the direction provided by the market administrator.

The trade will complete when both the delivery of merchandise and payment are coincidentally and successfully finished and confirmed by the participants according to the terms and conditions defined in the market and/or agreed upon the business transaction.

The qualification of membership is required for the participants. But no authentication of buyer and seller may be required because the delivery and payment are simultaneously and immediately performed as well as the agreement of transaction.

**Closed Mediated Trade Scenario:**

This scenario is the core of C-I-M scenario and includes all processes of a transaction to begin and complete a Closed Mediated Trade of which the principle terms and conditions the participants accepted in advance.

Before participating to the trade, the buyer, seller and/or mediator are required to make a membership registration to the defined market and to accept the principle terms and conditions of trade.

Either or both the buyer and seller begin and negotiate the individual transaction under the mediation of an appropriate mediator according to the direction provided by the market administrator.

The trade will complete when both the delivery of merchandise and payment are coincidentally and successfully finished and confirmed by the participants according to the terms and conditions defined in the market and/or agreed upon the business transaction.

The qualification of membership is required for the participants. But no authentication of buyer and seller may be required because the delivery and payment are simultaneously and immediately performed as well as the agreement of transaction.

#### **Bilateral Agreement Scenario:**

This scenario is the agreement part of O-S-B scenario, which precedes the delivery of merchandise and/or payment of the transaction.

At the beginning, either or both the buyer and seller find the negotiable counter party, by appropriate approaches. Then, either or both of them show explicitly or implicitly an acceptable scenario to the counter party, and negotiate the terms and conditions of business transaction. The way of acceptance of a particular scenario may be a part of the terms and conditions.

In the agreement, it is explicitly described that the delivery and/or payment are separately performed later. A unique identification of the transaction is required for mapping the agreement to the delivery and/or payment performed separately. And, the identification should be unique in the global scope because the open market could not have a well-defined boundary.

The transaction will complete when both the delivery and payment are successfully finished and confirmed by the participants according to the Separate Delivery Scenario and Separate Payment Scenario.

#### **Closed Bilateral Agreement Scenario:**

This scenario is the agreement part of C-S-B scenario, which precedes the delivery of merchandise and/or payment of the transaction.

Before participating to the trade, the buyer and/or seller are required to make a membership registration to the specific market and to accept the principle terms and conditions of trade.

Either or both the buyer and seller begin the individual transaction according to the direction provided by the market administrator.

In the agreement, it is explicitly described that the delivery and/or payment are separately performed later. A unique identification of the transaction is required for mapping the agreement to the delivery and/or payment performed separately. And, the identification should be unique in the market boundary.

The transaction will complete when both the delivery and payment are successfully finished and confirmed by the participants according to the terms and conditions defined in the market and/or to the Separate Delivery Scenario and Separate Payment Scenario.

**Mediated Agreement Scenario:**

This scenario is the agreement part of O-S-M scenario, which precedes the delivery of merchandise and/or payment of the transaction.

Either or both the buyer and seller begin and negotiate the individual transaction under the mediation of an appropriate mediator according to the direction provided by the market administrator.

The trade will complete when both the delivery and payment are and successfully finished and confirmed by the participants according to the Separate Delivery Scenario and Separate Payment Scenario.

In the agreement, it is explicitly described that the delivery and/or payment are separately performed later. In addition, a unique identification of the transaction is required for mapping the agreement to the delivery and/or payment performed separately. And, the identification should be unique in the global scope because the open market could not have a well-defined boundary.

The transaction will complete when both the delivery and payment are successfully finished and confirmed by the participants according to the Separate Delivery Scenario and Separate Payment Scenario.

**Closed Mediated Agreement Scenario:**

This scenario is the agreement part of C-S-M scenario, which precedes the delivery of merchandise and/or payment of the transaction.

Either or both the buyer and seller begin and negotiate the individual transaction under the mediation of an appropriate mediator according to the direction provided by the market administrator.

In the agreement, it is explicitly described that the delivery and/or payment are separately performed later. A unique identification of the transaction is required for mapping the agreement to the delivery and/or payment performed separately. And, the identification should be unique in the market boundary.

The transaction will complete when both the delivery and payment are successfully finished and confirmed by the participants according to the terms and conditions defined in the market and/or to the Separate Delivery Scenario and Separate Payment Scenario.

**Separate Delivery Scenario:**

This scenario is the delivery part of O-S-B, O-S-M, C-S-B and C-S-M scenarios, which is separately performed after the agreement of transaction.

When the delivery of merchandise is separately performed from the agreement of the transaction, the specific terms and conditions of delivery should be explicitly described. The delivery status should be explained in the scenario, as the completion of delivery is a mandatory factor for the completion of the transaction as a whole.

Furthermore, the delivery scenario should keep a stable reference to the precedent agreement scenario to denote the relationship between the separated activities of a transaction.

**Separate Payment Scenario:**

This scenario is the payment part of O-S-B, O-S-M, C-S-B and C-S-M scenarios, which is separately performed after the agreement of transaction.

When the payment is separately performed after the agreement of the transaction, the payment scenario is required to explicitly describe the specific terms and conditions of payment.

The payment status should also be explained in the scenario, as the completion of payment is a mandatory factor for the completion of the transaction as a whole.

Furthermore, the payment scenario should keep a stable reference to the precedent agreement scenario to denote the relationship between the separated activities of a transaction.

**Authentication Scenario:**

This scenario is the authentication part of O-S-B and O-S-M scenarios, which identifies and confirms the agreement and/or the participants relevant to the transaction.

When the delivery of merchandise and/or payment is separately performed after the agreement of the transaction, the authentication scenario is required to explicitly identify and confirm the credit and debit relationship between participants involved in the transaction. The identification should be unique in the global scope because the open market could not have a well-defined boundary.

The authentication scenario should also keep a stable reference to the relevant agreement scenario to denote the relationship among the transaction, the agreement and/or the participants.

**Closed Authentication Scenario:**

This scenario is the authentication part of C-S-B and C-S-M scenarios, which identifies and confirms the agreement and/or the participants relevant to the transaction.

When the delivery of merchandise and/or payment is separately performed after the agreement of the transaction, the authentication scenario is required to explicitly identify and confirm the credit and debit relationship between participants involved in the transaction.

The market administrator provides the authentication scheme of the market. The identification should be unique in the market boundary.

The authentication scenario should also keep a stable reference to the relevant agreement scenario to denote the relationship among the transaction, the agreement and/or the participants.

**C1.2.3.2 Assumption for Scenario Classification**

For the simplicity of discussion, this scenario classification idea has many assumptions. In the real business world, those assumptions should be further compiled to reflect the practical aspects of business transactions.

**Continuous Transaction:**

No discrimination is supposed between a continuous transaction and a spot transaction. The continuous transaction is considered as a repetition of spot transactions of which the terms and conditions are constant or only a variable part is changing.

**Services Transaction:**

The business transaction of services is assumed to be basically same as of goods even if it may have different attributes relevant to the delivery procedure and the status confirmation.

**Auction Transaction:**

An auction transaction is supposed to be a variation of mediated transaction, which requires the competitive participation of two or more buyers for a sale of merchandise.

**Bidding Transaction:**

A bidding transaction is supposed to be a variation of bilateral transaction, which requires the competitive participation of two or more sellers for a procurement of merchandise.

**Credit Payment Transaction:**

A transaction settled by a credit card requires a provision of credit and the authentication of buyer. Thus the transaction type is differed from the transaction by cash, and is supposed to be a kind of Separate Payment Model.

**Regulatory Constraints:**

Actual business transactions may have many types of regulatory constraints than the normative rules explicitly or implicitly involved in the transactions. Each of them is partially or entirely applied to a specific market type, participant type, merchandise type, delivery type and/or payment type. In addition, some of them are particularly effective in a certain country or region and/or in a certain period. However, the scenario classification is considered to be independent from the regulatory constraints.

## Annex C2 (informative) : Definition of terminology

**market type:** a classification concept of market where the market is open (unbounded) or closed (defined) for specific types of business transactions or communities under the Open-edi environment

**settlement type:** a classification concept of settlement where the delivery and payment an Open-edi transaction is simultaneously settled through the network, or separately performed through different channels.

**participation type:** a classification concept of participation of Open-edi parties where intermediate(s) other than either buyer(s) or seller(s) is involved in an Open-edi transaction, or not.

**trade model:** a structured concept that abstracts a generic construct of trade activities relevant to business transaction.

**Basic Trade Model:** a trade model that describes the most fundamental business transaction.

**Open Market Model:** a trade model, conforming to the description of Basic Trade Model, which is performed in an unbounded market under the Open-edi environment.

**Closed Market Model:** a trade model where buyer(s) and seller(s) accept the entry terms of market in advance and then commence the actual business transaction in the market under the Open-edi environment.

**market administrator:** a role that is responsible for the administration of defined market for Open-edi transactions.

**Immediate Settlement Model:** a trade model where the entire business transaction process, i.e. planning, identification, negotiation, actualization (delivery and payment), is completed in real-time under the Open-edi environment.

**Separate Settlement Model:** a trade model that the business transaction is performed under the Open-edi environment, and that the delivery and/or payment are separated from the agreement process.

**Bilateral Trade Model:** a trade model where buyer(s) and seller(s) are directly involved in the business transaction without any involvement of any intermediary party.

**Mediated (Multi-lateral) Trade Model:** a trade model where a third party mediates a specified role(s) or function(s) as mutually agreed to by the buyer(s) and seller(s) for a certain business transaction.

**O-I-B Class:** a scenario class of business transactions, which is attributed by Open Market, Immediate Settlement and Bilateral Trade Model.

**O-I-M Class:** a scenario class of business transactions, which is attributed by Open Market, Immediate Settlement and Mediated Trade Model.

**O-S-B Class:** a scenario class of business transactions, which is attributed by Open Market, Separate Settlement and Bilateral Trade Model.

**O-S-I Class:** a scenario class of business transactions, which is attributed by Open Market, Separate Settlement and Mediated Trade Model.

**C-I-B Class:** a scenario class of business transactions, which is attributed by Closed Market, Immediate Settlement and Bilateral Trade Model.

**C-I-M Class:** a scenario class of business transactions, which is attributed by Closed Market, Immediate Settlement and Mediated Trade Model.

**C-S-B Class:** a scenario class of business transactions, which is attributed by Closed Market, Separate Settlement and Bilateral Trade.

**C-S-M Class:** a scenario class of business transactions, which is attributed by Closed Market, Separate Settlement and Mediated Trade Model.

**Continuous Transaction:** a series of transactions of which the terms and conditions are constant.

**Services Transaction:** a business transaction that services is procured.

**Goods Transaction:** a business transaction that goods is procured.

**Auction Transaction:** a business transaction relevant to auction.

**Bidding Transaction:** a business transaction relevant to bidding.

**Credit/debit Payment Transaction:** a business transaction that is settled by a credit card or debit card.

## **Annex D1 (informative): Example of Electronic Office Supply Procurement**

### **D1.1 Scenario Administration Attributes**

#### **A.1/A.2 : Identification/Version Number**

ACME-01

#### **A.3: Scenario Name**

Electronic Office Supply Procurement from ACME

#### **A.5: Registration Date**

2001-MM-DD

#### **A.6: Application Number**

ACME-service-v1.1

#### **A.7: Application Date**

2000-06-DD

#### **A.8: Applicant Name**

ACME CORPORATION

#### **A.9: Contact Information**

##### **A.9.2 : Contact Mailing Address**

4-x-xx Toyosu, Koto-ku, Tokyo 135-0061 JAPAN

##### **A.9.3 : Contact Telephone Number**

+81-3-5546-xxxx

##### **A.9.4 : Contact Facsimile Number**

+81-3-5546-xxxx

##### **A.9.5 : Contact email Address**

webmaster@acme.ne.jp

#### **A.10: Scenario Author**

ACME CORPORATION

**A.11: Expected User Community**

Registered customers for ACME service

**A.12: Related Regulation**

The Japanese law for specific commercial transactions

(Tokutei Syoutorihiki ni kannsuru Houritu)

**A.13: Intellectual Property Right**

Japanese patent: P2000-xxxxxxA

**A.14: Restriction**

A customer should be a corporation.

**A.15: Relationship with Other Scenarios**

None.

**A.16: Narrative Language**

Japanese

**A.18 : OeDT Used**

UML

**A,19: Repository Location**

<http://www.acme.ne.jp/senario/ACME-service-v1.1>

**A.20: Remarks**

None.

**D1.2 Scenario Classification Attributes**

**B.1: Market Type**

Undefined

Defined

**B.3: Participation Type**

Bilateral

Mediated

**B.4: Agent**

Buyer's Agent

Seller's Agent

**B.6 : Role Type of Third Party**

Mediator

Guarantor

Escrow

Notary

None

Other( )

**B.7: Catalogue Provision**

Provided

None

**B.8: Order Type**

Pre-order

Purchase

Change

Cancel

Contract

**B.9 : Offer Type**

Proposal

Consign

**B.10: Manufacturing Type**

Predefined

Definable

Off-the-shelf

Configurable

**B.11: Liability/Risk Management**

Insurance

Deposit

None

Other( )

**B.12: Resource**

Good

Service

Value

Title

Ownership

Intellectual Property

License

Right

**B.13: Pricing Type**

Buyer's Quote

Seller's Quote

Individual Quote

Closed Bid

Open Bid

Auction.

Reverse Auction

Price Matching

Other( )

**B.14: Non-pricing Negotiation Terms**

Delivery Terms

Delivery Lot

Packaging

Other

None

**B.15: Sales Channel Type**

Direct

Consignment

**B.16: Delivery Type**

FOB

CIF

**B.17: Payment Term Type**

Single Payment

Multiple Payments

**B.18: Payment Method**

Credit

Debit

Cash

Funds Transfer

Other( )

**B.19: Settlement Type**

Advanced Payment

Deferred Payment

Payment on Delivery

Incremental Payment

Other( )

**B.20: Warranty Type**

Warranty

\_ Refundable

\_ None

**B21: Successiveness Type**

x Successive

\_ Autonomous

**D1.3 Scenario Contents Attributes**

**C.1: OeS Purpose**

Electronic procurement for general office supply

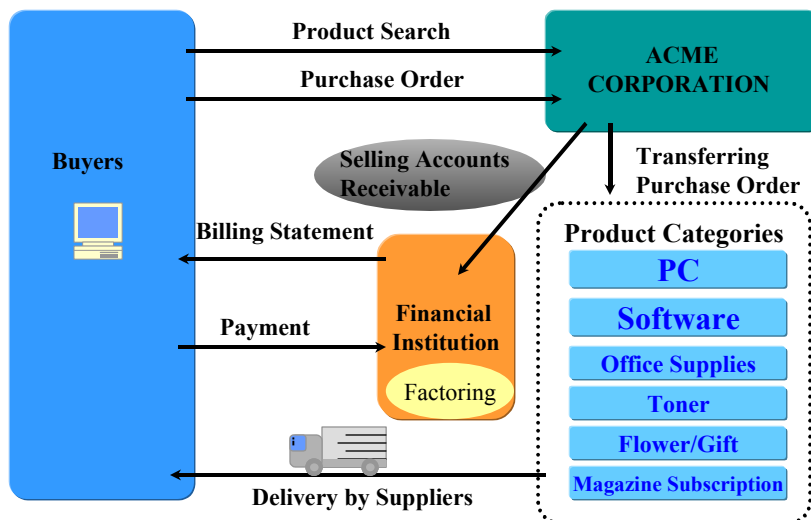
**C.2: Functional Specification**

(1) Basic contact for transactions (offline)

Each potential customer submits the application to use the orderit service.

If the application is accepted, the customer sends additional customer information including that of sending statements.

**Schema of ACME service**



(2) Purchasing (online)

General users login with company id, user id and password.

General users select goods interactively and put them to the list.

General users check quote of selected goods.

General users send the request of purchasing to the approver.

The approver put purchase order if the request is acceptable.

General users can check monthly statement.

General users can refer the purchasing history.

(3) Enterprise Connector (online)

(3a) Selecting goods

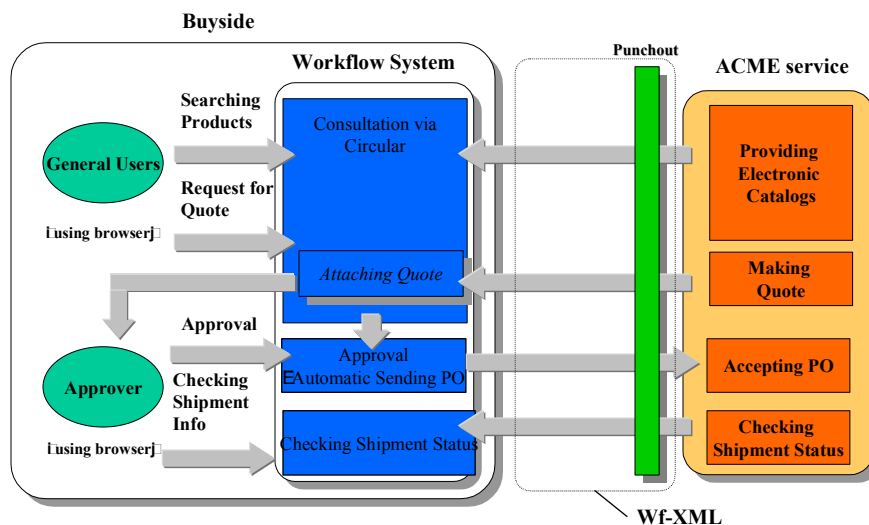
Buyer systems send login information of general users as company id, user id and password.

General users select goods interactively and put them to the list.

General users check quote of selected goods.

The orderit system sends quote information encoded into XML format to the buyer system.

Schema of ACME Punchout service



(3b) Requesting for Quote

Buyer systems send login information and the list of goods. Login information of general users is a set of company id, user id and password.

The orderit system sends the quote information encoded into XML format to the Buyer system.

(3c) Sending Purchase Order

Buyer systems send login information and the quote information. Login information of general users is a set of company id, user id and password.

(3d) Checking the shipment status of Purchase Order

Buyer systems send login information and the identification of Purchase Order. Login information of general users is a set of company id, user id and password.

The orderit system sends the shipment status of Purchase Order encoded into XML format to the Buyer system.

(4) Settlement

Each month, customers receive statements and pay (offline).

Customers can check the statement interactively (online).

**C.3: Processing Mode**

Real-time

Batch

**C.4: Technical Requirement**

Internet access, SSL, Wf-XML

**C.5: General Remarks**

None

**D1.4 Role Attributes**

**R.3: Person Qualification Type**

Mandatory

Preferred

None

## **Annex D2 (informative) : Example of electronic parts business**

### **D2.1 Scenario Administration Attributes**

#### **A.1/A.2: Identification/Version Number**

#### **A.3: Scenario Name**

Electronic Parts Business

#### **A.5: Registration Date**

#### **A.6: Application Number**

#### **A.7: Application Date**

2001-07-01

#### **A.8: Application Name**

Taro Nippon, Japan Information Processing Development Center

#### **A.9: Contact Information**

##### **A.9.2 : Contact Mailing Address**

3-5-8 Shibakoen Minato-ku, Tokyo, Japan

##### **A.9.3 Contact Telephone Number**

+81 3-3432-XXXX

##### **A.9.4: Contact Facsimile Number**

+81 3-3432-XXXX

##### **A.9.5: Contact email Address**

XXXXXXXXXXXXX

#### **A.10: Scenario Author**

Electronics Industry of Japan (EIAJ)

#### **A.11: Expected User Community**

Electronics Industry

#### **A.12: Related Regulation**

Japan Commercial Law, Shitaukeho Law for Small & Medium Enterprise

**A.13: Intellectual Property Right**

**A.13.1: Patent Number**

--

**A13.2: Disclosure Scope**

Full Open (with no charge)

**A.14: Restriction**

--

**A.15: Relationship with Other Scenarios**

Payment Order/settlement Scenarios by CII/EIAJ Joint Project

**A.16: Description Language**

Natural Language Description in Japanese and English

**A.19: Repository Location**

XXXXXXXXXXXXX

**A.20: Remarks**

1. B-to-B EDI
2. Predefined and Continuous Transaction with long term Partnership
3. Direct Trade between one Maker and one customer with no agent
4. Quote, Purchase and Delivery phase EDI
5. Including just in time Delivery
6. Used the messages based on CII standard
7. Fail Transfer EDI (Batch base EDI)

**D2.2 Scenario Classification Attributes**

**B.1: Market Type**

Undefined

Defined



- Definable
- Off-the shelf
- Configurable

**B.11: Liability/Risk Management**

- Insurance
- Deposit
- None
- Other ( )

**B.12 : Resource**

- Good
- Service
- Value
- Title
- Ownership
- License
- Right

**B.13: Pricing Type**

- Buyer's Quote
- Seller's Quote
- Individual Quote
- Closed Bid
- Open Bid
- Auction
- Reverse Auction
- Price Matching
- Other ( )

**B.14: Non-pricing Negotiation Terms**

Delivery Terms

Delivery Lot

Packaging

None

**B.15: Sales Channel Type**

Direct

Consignment

**B.16: Delivery Type**

FOB

CIF

**B.17: Payment Term Type**

Single Payment

Multiple Payments

**B.18: Payment Method**

Credit

Debit

Cash

Funds Transfer

Other ( )

**B.19: Settlement Type**

Advanced Payment

Deferred Payment

Payment on Delivery

Incremental Payment

Other ( )

**B.20: Warranty Type**

Warranty

Refundable

None

**B.21: Successiveness Type**

Successive

Autonomous

**D2.3 Scenario Contents Attributes**

**C.1: Purpose**

Electronic procurement for just-in-time delivery in electronics industry

**C.2: Functional Specification**

TBD

**C.3: Processing Mode**

Real-time

Batch

**C.4: Technical Requirement**

Using CII-Syntax rule (JIS-X7012) and EIAJ Standard messages (EIAJ-EDI)

**C.5: General Remarks**

None

**D2.4 Role Attributes**

**R.3: Person Qualification Type**

Mandatory

Preferred

None

The following section is retained from ISO/IEC JTC 1/SC 32/WG 1 N 209

**B12: Product Type**

Indicate the product form type in business transaction that the scenario supports, choosing appropriate one(s) in the followings:

**Digital Product:** the scenario explicitly supports the digital type products in business transaction.

**Physical Product:** the scenario explicitly supports the physical type products in business transaction.

**Services Provision:** the scenario explicitly supports the services provision in business transaction.

**Financial Product:** the scenario explicitly supports the financial products in business transaction.

**Real Estate:** the scenario explicitly supports the real estate type product in business transaction.

**Intellectual Property:** the scenario explicitly supports the intellectual property type products in business transaction.

**Other Product:** the scenario explicitly supports other type products than the mentioned above in business transaction.