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Registration of Scenarios and their Components

Forward

ISO (the International Organization for Standardization) and IEC (the International Electro technical 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

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC1. Draft International Standards adopted by the technical committee are circulated to national body for voting. Publication as International Standard requires approval by at least 75% of the national bodies casting a vote.

International Standard ISO/IEC15944-2 was prepared by Joint Technical Committee ISO/IEC JTC 1,information technology, subcommittee 32, and Business agreement semantic techniques.

0. Introduction

The Open-edi reference model (ISO/IEC 14662) section4.1.2 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.”

An open-edi scenario is expected to be generated among user groups in accordance with the specification given in the BOV related standard, and to be a candidate as introducing 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 with Open-edi Description Technique (OeDT)

- Scenario attribute
    - Role
    - Information bundle

Registration and management information pertinent to reusability of Open-edi scenario are included in the scenario attribute of each scenarios. That information is;

- Name of the open-edi scenario

- Class (es) of business requirement
- Purpose of Open-edi scenario
- Laws and regulation governing the Open-edi scenario

In order to increase reusability of Open-edi scenarios, there is a need to define an accurate registration scheme and procedure.

1. Scope

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

This BOV related standard addresses the fundamental requirement of registration procedure of produced and updating an Open-edi scenario in repositories and operation, procedure of 'Registration Authority'.

This standard provides adequate scheme for

- Open-edi scenario registration method and procedure
- Role and operation of registration authority of Open-edi scenarios

2. Conformance

Open-edi scenario to be registered is in conformance if the structure, definitions and representation of the description conform to the definition of ISO/IEC 14662 Open-edi reference model and ISO/IEC 15499-1 and this International Standard.

Domain values are in conformance when they are defined and represented in related ISO standard.

3. Normative reference

The following standard contains provisions, which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standard are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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 6523: Data Interchange-Structure for the Identification of Organization

4. Terms, definitions and abbreviation

4.1 Terms and definition

For the purpose of this International Standard, the following terms and definitions apply.

applicant:

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

entry label:

The naming information that identifies a registered Open-edi scenario or sub component of scenario uniquely

Open-edi scenario (adapted from ISO/IEC 14662, 3.1.12):

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

Open-edi Description Technique (adapted from ISO/IEC 14662,4.1.1):

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.

JTC 1 registration authority:

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

scenario component:

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

scenario content:

A set of files (electronic or combination of electronic and paper) containing entry labels and their associated definitions and related information reposted in anywhere

scenario administration attribute:

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

scenario classification attribute:

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

scenario contents attribute:

A set of attributes to describe the outline of scenario contents

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

registration:

The process of assigning a register entry

4.2 Abbreviations

ITTF	Information Technology Task Force (of ISO/IEC)
OeDT	Open-edi Description Technique
FDT	Formal Description Technique
RA	Registration Authority
SC	Sub-Committee (in the context of ISO or IEC)

5. Principle 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 of registration with subordinate level 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 ambiguous identification of scenario to provide interoperability at international level.

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

Scenarios contents to be referenced for reuse of the scenario are supposed to be reposted within applicants with the various business information documents as well as implement able (executable) computer programs. The linkage information for accessing that information shall be clearly described in the registry entry application.

Languages to be used in this standard are:

- International level: English,
- Subordinate level: English + authorized language by subordinate RA organization

5.2 Information to be included within a registry

Clear understanding of the referenced scenario descriptions will reuse open-edi scenarios; therefore the scenario contents shall be described in a formal 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
- Scenario classification attribute
- Overview narrative description

That information shall contain:

- Administrative attribute for Scenario identification and RA management
- Scenario classification attribute for the understanding the contents of scenario.
- A scenario overview that summarize the scenario in narrative form (complete or subcomponent) and a brief explanation of scenario content (scenario attribute, role, information bundle, type of object)

A brief narrative explanation on 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 Descriptive techniques

Various formal descriptive techniques may be employed to define the class of business requirement and predefined set of scenario component

OeDT's and various template as well as classification attribute are encouraged to describe a scenario, which are referenced in ISO/IEC 15944-1and in this Standard.

Detailed contents of scenario registration items shown in next chapter and annex A (example) are recommended to be reviewed before submit the registration form.

6. O-e SCENARIO REGISTRATION ATTRIBUTES

6.1 Constructs of O-e Scenario Registration Information

The registration information that is associated with an O-e 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

There are two types of scenario administration attributes for the description. A certain type of scenario administration attributes is described by making an appropriate choice among the given alternatives. Another type of scenario administration attributes is described by filling an appropriate text in a given format. The text should be written in the Common Description Language for O-e Registration (English).

The detailed scenario administration attributes are as follows:

A01: Identification/Version Number

The unique identification and the version number of scenario assigned by a registration authority.

A02: Scenario Name

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

A03: Registration Date

The date when the scenario was successfully registered.

A04: Application Number

The identification number of scenario assigned by the applicant.

A05: Application Date

The date when the scenario was applied by the applicant.

A06: Applicant Name

The person who applied the scenario.

A07: Contact Information

The contact information (mailing address, phone number, facsimile number, e-mail address, etc.) with the applicant.

A08: Scenario Author

The person who developed the scenario.

A09: Expected Application Domain

The relevant community, industry, country and so on, to which the scenario could be effectively applied.

A10: Related Regulation

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

A11: Intellectual Property Right

The intellectual property right that the scenario establishes.

A12: Restriction

The restriction of application community and/or objectives of the scenario.

A13: Relationship with Other Scenarios

The granularity of the scenario and the relationship with other scenarios.

A14: Description Language/Technique

The description language and/or technique that is used to describe the scenario contents.

A15: Repository Location

The URL address of repository where the scenario was located.

A16: Remarks

The specific remarks of scenario, including the public comments.

6.3 Scenario Classification Attributes

There are two types of scenario classification attributes for the description. A certain type of scenario classification attributes is described by making an appropriate choice among the given alternatives. Another type of scenario classification attributes is described by filling an appropriate text in a given format. The text should be written in the Common Description Language for O-e Registration (English).

The detailed scenario classification attributes are as follows:

B01: Market Type

Indicate the market type that the scenario supports, choosing appropriate one(s) in the followings:

Open: the participants are not required to make the advanced registration

Close: the participant(s) are required in the advanced registration

B02: Successiveness Type

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

Successive: the scenario supports successive transactions eliminating redundant business negotiation processes already established in the past transaction.

Spot: the scenario supports only spot type business transactions.

B03: Protection Type

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

Insurance: the scenario supports the insurance type protection.

Deposit: the scenario supports the deposit type protection.

None: the scenario does not explicitly support any protection of business transaction.

Other: the scenario supports the other type protection than insurance or deposit.

B04: Participation Type

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

Bilateral: the scenario only supports the bilateral business transaction.

Multi-lateral: the scenario supports the multi-lateral business transaction.

B05: Role Type of Third Party

Indicate the role type of third party among participants in business transaction that the scenario supports, choosing appropriate one(s) in the followings:

Buyer's Agent: the scenario explicitly supports the role type of buyer's agent in business transaction.

Seller's Agent: the scenario explicitly supports the role type of Seller's agent in business transaction.

Mediator: the scenario explicitly supports the role type of mediator in business transaction.

Guarantor: the scenario explicitly supports the role type of guarantor in business transaction.

Escrow: the scenario explicitly supports the role type of escrow in business transaction.

Notary: the scenario explicitly supports the role type of notary in business transaction.

None: the scenario does not explicitly supports any role type of third party in business transaction.

Other: the scenario explicitly supports the other role type than the mentioned above in business transaction.

B06: Qualification Type of Parties

Indicate the qualification type of parties in business transaction that the scenario supports, choosing appropriate one(s) in the followings:

Mandatory: the scenario explicitly supports the mandatory qualification of party(s) in business transaction.

Preferred: the scenario explicitly supports the preferred qualification of party(s) in business transaction.

Mediator: the scenario explicitly supports the role type of mediator in business transaction.

None: the scenario does not explicitly supports any qualification of party(s) in business transaction.

B07: Sales Channel Type

Indicate the sales channel type of business transaction that the scenario supports, choosing appropriate one(s) in the followings:

Direct: the scenario explicitly supports business transactions of direct sales channel type.

Consignment: the scenario explicitly supports business transactions of consignment sales channel type.

B08: Pricing Type

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

Buyer's Quote: the scenario explicitly supports business transactions of buyer's quote type pricing.

Seller's Quote: the scenario explicitly supports business transactions of seller's quote type pricing.

Individual Quote: the scenario explicitly supports business transactions of individual quote type pricing.

Closed Bid: the scenario explicitly supports business transactions of closed bid type pricing.

Open Bid: the scenario explicitly supports business transactions of closed bid type pricing.

Auction: the scenario explicitly supports business transactions of auction type pricing.

Reverse Auction: the scenario explicitly supports business transactions of reverse auction type pricing.

Price Matching: the scenario explicitly supports business transactions of price patching type pricing.

Other: the scenario explicitly supports business transactions of other pricing type than the mentioned above.

B09: Non-pricing Negotiation Terms

Indicate the negotiation terms other than pricing in business transaction that the scenario supports, choosing appropriate one(s) in the followings:

Delivery Term: the scenario explicitly supports the negotiation of delivery term in business transaction.

Delivery Lot: the scenario explicitly supports the negotiation of delivery lot in business transaction.

Packaging: the scenario explicitly supports the negotiation of packaging of merchandize in business transaction.

None: the scenario does not explicitly supports any other negotiation than the mentioned above in business transaction.

B10: Catalogue Provision

Indicate if the catalogue of merchandize is provided or not in business transaction that the scenario supports, choosing appropriate one(s) in the followings:

Provided: the scenario explicitly supports catalogue provision of merchandize in business transaction.

None: the scenario does not support catalogue provision of merchandize in business transaction.

B11: Order Type

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

Purchase: the scenario explicitly supports the purchase type order process in business transaction.

Proposal: the scenario explicitly supports the proposal type order process in business transaction.

Consign: the scenario explicitly supports the consign type order process in business transaction.

Contract: the scenario explicitly supports the contract type order process in business transaction.

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.

B13: Manufacturing Type

Indicate the manufacturing type of products in business transaction that the scenario supports, choosing appropriate one(s) in the followings:

Readymade: the scenario explicitly supports the readymade type products or packaged

services provision in business transaction.

Order made: the scenario explicitly supports the order made type products or customized services provision in business transaction.

B14: Delivery Type

Indicate the delivery type of products in business transaction that the scenario supports, choosing appropriate one(s) in the followings:

FOB: the scenario explicitly supports the FOB type delivery or services provision at seller's location in business transaction.

CIF: the scenario explicitly supports the CIF type delivery or services provision at buyer's location in business transaction.

B15: Payment Term Type

Indicate the payment term type of business transaction that the scenario supports, choosing appropriate one(s) in the followings:

One Lump: the scenario explicitly supports the one lump type payment in business transaction.

Installment: the scenario explicitly supports the installment payment type in business transaction.

B16: Payment Method

Indicate the payment method of business transaction that the scenario supports, choosing appropriate one(s) in the followings:

Credit: the scenario explicitly supports the credit type payment in business transaction.

Debit: the scenario explicitly supports the debit type payment in business transaction.

E-cash: the scenario explicitly supports the E-cash type payment in business transaction.

Cash on Hand: the scenario explicitly supports the cash on hand type payment in business transaction.

Remittance: the scenario explicitly supports the remittance type payment in business transaction.

Other: the scenario explicitly supports other type payment than the mentioned above in business transaction.

B17: Settlement Type

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

Advanced Payment: the scenario explicitly supports the advanced payment type settlement in business transaction.

Deferred Payment: the scenario explicitly supports the deferred payment type settlement in

business transaction.

Payment on Delivery: the scenario explicitly supports the payment on delivery type settlement in business transaction.

Incremental Payment: the scenario explicitly supports the incremental payment type settlement in business transaction.

Other: the scenario explicitly supports other type settlement than the mentioned above in business transaction.

B18: Warranty Type

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

Warranty: the scenario explicitly supports the warranty of merchandize in business transaction.

No Warranty: the scenario does not explicitly support the warranty of merchandize in business transaction.

Refundable: the scenario explicitly supports the refund of merchandize in business transaction.

None: the scenario does not explicitly support the warranty type in business transaction.

6.4 Scenario Contents Attributes

The contents of an O-e scenario is briefly described with three scenario contents attributes using free text in the Common O-e Description Language (English) and/or OeDT. The terminology in the free text description should be referred to as much as possible the standard glossary provided by the registration authority of O-e scenarios. The scenario contents attributes are as follows:

C01: Purpose

Describe the purpose of the scenarios.

C02: Functional Specification

Describe the outline of functional specification of scenario.

C03: Processing Mode

Describe the processing requirement relevant to the business scenario:

Real-time: the scenario is processed at real-time mode.

Batch: the scenario is processed with batch mode.

C04: Technical Requirement

Describe the technical requirement relevant to the business scenario.

C05: General Remarks

Describe the specific description other than the mentioned above.

7. Registration authority (RA) and operations

7.1 Registration authority for Open-edi scenarios

7.1.1 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.

7.1.2 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 resource to facilities to operate an Internet web site in support of this International standard;

7.1.3 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

7.1.4 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 pubic access to complete details of all register entries available and provide information’s as appropriate.

7.2 Applicant for registry

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

7.3 Application procedure for registration

An application of registry starts with the submit of a new open-edi scenario application for registration and terminates with the registration acceptance. The following conditions should be reminded to confirm the exactness.

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

Use of minimum required description by English is mandatory, however combination of description by the RA authorized language is determined by the RA.

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

The scenario to be registered is already exist in a register

The scenario is not executable or referable

The scenario contains non-publishable information (designated secret) or patent right use restriction.

The scenario is not appropriate from public order and morals viewpoint

- Pre registration procedure

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

7.4 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

8. Maintenance of the register

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

8.1 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.

8.2 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 of register (the RA can decide and announce for public) 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 make access available at reasonable cost to all information identified above for all registries, via electronic networks.

8.3 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.

8.4 Modification, deletion, obsolesce of the registered scenario

8.4,1 Modification and deletion

The original applicant shall make modification and deletion of the registered scenario only. RA management shall deny any other request of modification and deletion.

8.4.2 Obsolesce

RA may be able to obsolete the registered scenario with 6month’ wait and warn’ period if the following conditions occur

- 10 years elapsed registered scenario

- Void of the applicant organizations or individuals

ANNEX-A: TBD

ANNEX-B1 (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:

d) Scenario Administration Attributes

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

e) Scenario Classification Attributes

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

f) Scenario Contents Attributes

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

B1.1 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:

a) Containing an identifier to uniquely identify a particular scenario

b) Describing the appropriate application community and/or boundary of individual scenario

c) Identifying the person responsible for the maintenance of individual scenario

d) Describing the restriction relevant to individual scenario

e) Containing the information of expired date or effective term of individual scenario

B1.2 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.

B1.2.1 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.

B1.2.1.1 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.

B1.2.1.2 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.

B1.2.1.3 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.

B1.2.2 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.

B1.2.2.1 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.

B1.2.2.2 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.

B1.2.2.3 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.

B1.2.3 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-dimention, the

classification of Open-edi scenarios is obtained such that the requirement of scenario constructs is summarized in Tab. 2-1.

Tab. B1.2-1 Scenario Classification and Constructs

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

B1.2.3.2 Scenario Components

As mentioned in Tab.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. I 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 merchandize 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.

B1.2.3.3 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-B2 (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-C1 (informative): Example of Electronic Office Supply Procurement

C1.1 Scenario Administration Attributes

A01: Identification/Version Number

ACME-01

A02: Scenario Name

Electronic Office Supply Procurement from ACME

A03: Registration Date

2001-MM-DD

A04: Application Number

ACME-service-v1.1

A05: Application Date

2000-06-DD

A06: Applicant Name

ACME CORPORATION

A07: Contact Information

A07-1: ADDR: 4-x-xx Toyosu, Koto-ku, Tokyo 135-0061 JAPAN

A07-2: TEL: +81-3-5546-xxxx

A07-3: FAX: +81-3-5546-xxxx

A07-4: E-Mail: webmaster@acme.ne.jp

A07-5: URL: http://www.acme.ne.jp

A08: Scenario Author

ACME CORPORATION

A09: Expected Application Domain

Registered customers for ACME service

A10: Related Regulation

The Japanese law for specific commercial transactions

(Tokutei Syoutorihiki ni kannsuru Houritu)

A11: Intellectual Property Right

Japanese patent: P2000-xxxxxxA

A12: Restriction

A customer should be a corporation.

A13: Relationship with Other Scenarios

None.

A14: Description Language/Technique

Japanese and UML

A15: Repository Location

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

A16: Remarks

None.

C1.2 Scenario Classification Attributes

B01: Market Type

_ Open

x Close

B02: Successiveness Type

x Successive

_ Spot.

B03: Protection Type

_ Insurance

_ Deposit

x None

_ Other( )

B04: Participation Type

_ Bilateral

x Multi-lateral

B05: Role Type of Third Party

_ Buyer’s Agent

_ Seller’s Agent

_ Mediator

x Guarantor

_ Escrow

_ Notary

_ None

_ Other( )

B06: Qualification Type of Parties

x Mandatory

_ Preferred

_ Mediator

_ None

B07: Sales Channel Type

x Direct

_ Consignment

B08: Pricing Type

_ Buyer's Quote

x Seller's Quote

_ Individual Quote

_ Closed Bid

_ Open Bid

_ Auction.

_ Reverse Auction

_ Price Matching

_ Other( )

B09: Non-pricing Negotiation Terms

_ Delivery Term

_ Delivery Lot

_ Packaging

x None

B10: Catalogue Provision

x Provided

_ None

B11: Order Type

x Purchase

_ Proposal

_ Consign

_ Contract

B12: Product Type

_ Digital Product

x Physical Product

_ Service Provision

_ Financial Product

_ Real Estate

_ Intellectual Property

_ Other( )

B13: Manufacturing Type

x Readymade

_ Order made

B14: Delivery Type

x FOB

_ CIF

B15: Payment Term Type

x One Lump

_ Installment

B16: Payment Method

x Credit

_ Debit

_ E-cash

_ Cash on Hand

_ Remittance

_ Other( )

B17: Settlement Type

_ Advanced Payment

x Deferred Payment

_ Payment on Delivery

_ Incremental Payment

_ Other( )

B18: Warranty Type

x Warranty

_ No Warranty

_ Refundable

_ None

C1.3 Scenario Contents Attributes

C01: Purpose

Electronic procurement for general office supply

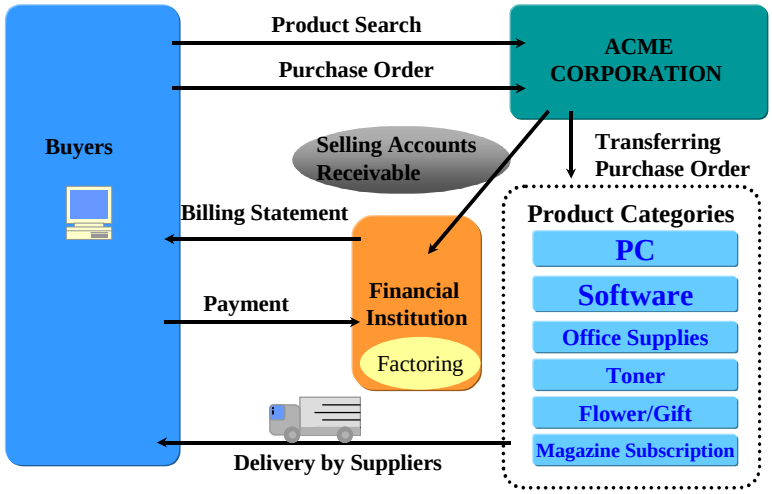
C02: Functional Specification

(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

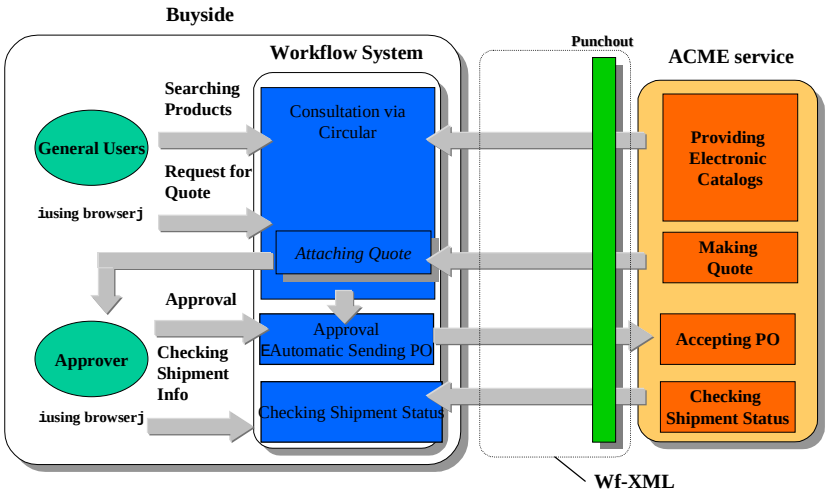
Buyer systems send login information of general users as company id, user id and password.

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).

C03: Processing Mode

x Real-time

_ Batch

C04: Technical Requirement

Internet access, SSL, Wf-XML

C04: General Remarks

None

ANNEX-C2 (informative): Example of Electronic Parts Business

C2.1 Scenario Administration Attributes

A01: Identification/Version Number

A02: Scenario Name

Electronic Parts Business

A03: Registration Date

A04: Application Number

A05: Application Date

2001-07-01

A06: Application Name

Taro Nippon, Japan Information Processing Development Center

A07: Contact Information

A07-1:ADDR

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

A07-2:TEL

+81 3-3432-XXXX

A07-3:FAX

+81 3-3432-XXXX

A07-4:E-mail

XXXXXXXXXXXX

A07-5: URL

XXXXXXXXXXX

A08: Scenario Author

Electronics Industry of Japan (EIAJ)

A09: Expected Application Domain

Electronics Industry

A10: Related Regulation

Japan Commercial Law, Shitaukeho Law for Small & Medium Enterprise

A11: Intellectual Property Right

A11-1: Patent Number

--

A11-2: Disclosure Scope

Full Open (with no charge)

A12: Restriction

--

A13: Relationship with Other Scenarios

Payment Order/settlement Scenarios by CII/EIAJ Joint Project

A14: Description Language/Technique

Natural Language Description in Japanese and English

A15: Repository Location

XXXXXXXXXXXX

A16: 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)

C2.2 Scenario Classification Attributes

B01: Market Type

_ Open

x Close

B02: Successiveness Type

x Successive

_ Spot

B03: Protection Type

_ Insurance

_ Deposit

_ None

x

Other( )

B04: Participation Type

x Bilateral

_ Multi-Lateral

B05: Role Type of Third Party

_ Buyer's Agent

_ Seller's Agent

_ Mediator

_ Guarantor

_ Escrow

_ Notary

x None

_

Other( ),

B06: Qualification Type of Parties

x Mandatory

_ Preferred

_ Mediator

_ None

B07: Sales Channel Type

x Direct

_ Consignment

B08: Pricing Type

_ Buyer's Quote

_ Seller's Quote

x Individual Quote

_ Closed Bid

_ Open Bid

_ Auction

_ Reverse Auction

_ Price Matching

_
Other( )

B09: Non-pricing Negotiation Terms

x Delivery Term

_ Delivery Lot

_ Packaging

_ None

B10: Catalogue Provision

x Provided

_ None

B11: Order Type

x Purchase

_ Proposal

_ Consign

_ Contract

B12: Product Type

_ Digital Product

x Physical Product

_ Service Provision

_ Financial Product

_ Real Estate

_ Intellectual Property

_
Other( )

B13: Manufacturing Type

x Ready made

_ Order Made

B14: Delivery Type

_ FOB

x CIF

B15: Payment Term Type

x One Lump

_ Installment

B16: Payment Method

_ Credit

_ Debit

_ E-cash

_ Cash on Hand

x Remittance

_ Other( )

B17: Settlement Type

_ Advanced Payment

_ Deferred Payment

_ Payment on Delivery

x Incremental Payment

_ Other( )

B18: Warranty Type

x Warranty

_ No Warranty

_ Refundable

_ None

C2.3 Scenario Contents Attributes

C01: Purpose

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

C02: Functional Specification

TBD

C03: Processing Mode

_ Real-time

x Batch

C04: Technical Requirement

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

C05: General Remarks

None