



Deployment Profile Template v1.1

For OASIS ebXML Business Process Specification Schema v2.0.X

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Abstract:

(Refer to Section 1.1, Purpose.)

Status:

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1 Introduction

1.1 Purpose

The ebXML ebBP 2.0 [ebBP2] contains several configurable features and options. Any use of ebBP requires a certain amount of standardization within a trading community. In order to foster interoperability on multiple levels between participants, these communities will want to (1) document additional conventions on ebBP process definitions and business content, and (2) define ebBP templates that may be partially filled-in, from which the user community can (or should) derive complete definitions. This profile template includes an initial set of modules to provide the capability to support these goals. More experience is being sought by relevant user communities and domains to continue to expand this profile template.

1.2 Terminology

The keywords *must*, *must not*, *required*, *shall*, *shall not*, *should*, *should not*, *recommended*, *may*, and *optional* in this document are to be interpreted as described in [RFC2119].

Source Specification: The specification or standard that is being profiled. Note, section references may exist in this document that are not for a source specification (such as to another section in this document). These are clearly differentiated.

Deployment Profile Template: Document that lists the options in the source specification that may be selected by a user community, that identifies content elements (e.g. message headers, XML values) the format and/or value of which may be further standardized by a community, and that also identifies typical operating conditions under which the source specification may be used, and selected by a user community.

User Community: A group of users, e.g. within a supply-chain industry, the members of which decide to make a similar usage of the source specification in order to be able to interoperate.

Deployment Profile (or Deployment Guide): Document that is an instance of the Deployment Profile Template. It defines which options should / should not be used by this community, which format or value some content elements should conform to, and under which operating conditions the standard must be used by this community.

1.3 How to Use the Deployment Profile Template

There are three parts in the Deployment Profile Template that need to be instantiated in order to generate a Deployment Profile:

The section on the source specification modules (see section 2 below)

The section on the profiling requirement details (see section 3 below)

The section on operating conditions associated with the profile (see section 4 below)

Every feature from the source specification that is candidate for profiling is listed in a profiling table. Each profiling table corresponds to a functional subset of a CPA. In case a CPA element requires a detailed profiling recommendation, this will be specified in another table called a “profile requirement item” table, which is of the form:

Specification Feature	<Description of the source specification item to be profiled. This is pre-filled in the Deployment Profile Template.>
Specification Reference	<Identifies the item in the source specification. This is pre-filled in the Deployment Profile Template >
Profiling	<how the item is profiled: option narrowing/selection, content formatting, narrowing structure of XML complex element, content integrity constraint,... This is left for a Deployment Profile to fill in. >
Alignment	<dependency / alignment with other data, e.g. binding, either with other item in this same specification, items from other ebXML specifications, or items specified in an external source, e.g. a domain-specific or industry-specific standard. This is left for a Deployment Profile to fill in. >
Test References	<references to related test requirements or test cases, that would verify this profiling. This is left for a Deployment Profile to fill in. >
Notes	<Profile-specific comments. This is left for a Deployment Profile to fill in.>

When no recommendation is made for a profile requirement item of the template, one of the following values MUST be used in the “profiling” and “alignment” fields of the table:

Not Applicable: for items that are not relevant to the community.

No Recommendation: will indicate that there is no recommendation or requirement for this feature item.

Pending: for items that are still under study for a recommendation, and for which some recommendation is likely to be specified in future versions of the Deployment Profile (yet, the user community did not want to wait for these to be specified before publishing a current version of the Profile or Guide.)

For items that specify text values, it should also be noted whether or not the values are case-sensitive.

Two classes of users would be expected to collaborate in the instantiation of this Template to produce a Deployment Guide (or Profile):

Business Process Designers would detail the business-process specific requirements of the Message Service.

Technical Architects in user communities or vertical industries would make the technical decisions necessary to implement the business processes most effectively.

Consumers of a Deployment Guide include:

Business process implementers (IT departments), to deploy a Message Service solution according to the requirements of specific trading communities.

Software solution vendors, to identify all areas in which business process specification bodies require software flexibility, and what specific configurations are necessary to support such standards.

2 Profiling the Modules of ebBP 2.0.x

In this section, users will only specify which modules of the source specification are used in this profile (i.e. modules that business partners need to use or support in order to conform to the profile and communicate with others who do conform). For each used module, users also specify whether the module has been profiled or not. If yes, some profiling details should be given for this module in section 3 or 4. It is important and relevant to the development of all of these modules to reference and use the Business Transaction pattern matrices and well-formedness rules that exist in the technical specification. The pattern matrices provide guidance on the operational semantics surrounding the patterns. The well-formedness rules also further ensure consistency in the development of ebBP process definitions.

2.1 Modules

Module Name and Reference	Business Transactions
Profiling Status	Usage: <required / optional / never used in this profile> Profiled: <yes / no>
Notes	

Module Name and Reference	Business Documents
Profiling Status	Usage: <required / optional / never used in this profile> Profiled: <yes / no>
Notes	

Module Name and Reference	Business Collaborations
Profiling Status	Usage: <required / optional / never used in this profile> Profiled: <yes / no>
Notes	

Module Name and Reference	Business Signals
Profiling Status	Usage: <required / optional / never used in this profile> Profiled: <yes / no>
Notes	

Module Name and Reference	Attachments
Profiling Status	Usage: <required / optional / never used in this profile> Profiled: <yes / no>
Notes	

3 Profile Requirements Details

3.1 Introduction

This profile section provides detailed information about the key functional capabilities expressed in the ebBP and that may be used by a domain or user community to refine their use of this technical specification. Each table provides information on:

1. The key function or capability, or specialization of that function
2. The applicable information for that function or capability and possible usage
3. Mapping that function to the element, attribute or group of attributes in the core or business signal schemas relevant to that function or capability
4. References back to the technical specification (where applicable) and/or to other sections in this document relevant to that function or capability.

3.2 Defining a Business Transaction Profile

(NOTE: there should be one such section for each Business Transaction profile)

3.2.1 Process Diagram of the Business Transaction

Define the general flow of documents between partners, e.g. using UML or related modeling or visualization notation. If business document that are exchanged are to be profiled too, or constrained in any way, these document profiles must be described in a later section (see Document Profiles) and are only referenced from this diagram.

3.2.2 Properties and Parameters of the Business Transaction Pattern

The table or form that follows is used to identify the properties that are constrained for this business transaction profile. Several such tables may be used, depending on the Business Transactions that are profiled based on the Business Transaction pattern and used in a corresponding Business Transaction Activity. The profile will clearly state which elements are parameterized, which ones are fixed by the pattern, and where dependencies exist. Some range of values may also be defined for parameters. These properties are specified for each use of the Business Transaction Activity. It is important to note that the properties used in a Business Transaction Activity are in addition to those than the BT and BT pattern that is referenced. A separate profile may be created for BTA, as they also can be generically used in a modular process definition.

Form: Business Transaction properties		
General properties	Name	[Provide the name attribute value for the business Transaction.] [name] attribute group
	Name ID	[Used for referencing such as identification of an element.] [name] attribute group
	Timing constraints	[constraints on timing, e.g. TimeToPerform, time to acknowledge receipts] [TimeToPerform] element
	Non repudiation requirements	[List non-repudiation requirements: non-repudiation of receipt, of identity/origin, and of content]. Note that these are related to business signals and the logical business document. [isNonRepudiationRequired] attribute [isNonRepudiationReceiptRequired] attribute
	Type of business transaction	[Which external category of business transaction is this profile associated with? E.g. which UMM transaction type? What kind of modification/customization does this profile represents w/r to the original transaction pattern? Are they within the selectable parameters of the patterns themselves? If not, what are the reasons for this customization (legal or other)?] [BusinessTransactionType] [BusinessTransactionHead] See: Set of concrete BT patterns, operational matrices and extensibility pattern (Data Exchange) derived from these.
	User-defined customization	See upcoming section on customization of Business Transaction patterns. [DataExchange] element

	"BeginsWhen" Triggers	<p>[Event external to this activity that causes the activity to commence. Note, this external event must be publicly visible to the involved parties.]</p> <p>For example, when a product is delivered and a Receipt Advice to signal delivery or an Advanced Ship Notice is generated to signal that dispatch, an invoice is generated.</p> <p>[BeginsWhen] element</p>
	"EndsWhen" Triggers	<p>[Event external to the activity that causes the activity to end. Note, this external event must be publicly visible to the involved parties.]</p> <p>For example, a registrant can have three times to pass a certification exam. If they fail three times and the certification process ends.</p> <p>[EndsWhen] element</p>
	Pre-conditions	<p>[What other BT or message exchange is required to occur before this Business Transaction may take place.]</p> <p>Note: A description of a state external to this activity that is required before the activity can commence. Note, this external state must be publicly visible to the involved parties. Typically a PreCondition + other variables = BeginsWhen.</p> <p>For example, a purchase order must exist before an invoice can be generated.</p> <p>[PreCondition] element</p>
	Post-conditions	<p>[What other BT or message exchange is expected to take place after this Business Transaction occurs.]</p> <p>Note: PostCondition is a description of a state external to this activity that is required after the activity concludes (i.e. the state doesn't exist before the execution of this activity but does exist afterwards). Note, this external state must be publicly visible to the involved parties. Typically a PostCondition + other variables = EndsWhen.</p> <p>For example, a registrant fails to pass a certification exam three times, and a Business Failure occurs.</p> <p>[PostCondition] element</p>
Roles and Parties	Requesting role	<p>[any prescribed value or content rule for: Role name, ID]</p> <p>[RequestingRole] element</p>
	Responding role	<p>[any prescribed value or content rule for: Role name, ID]</p> <p>[RespondingRole] element</p>
Requesting activity	Document Envelope name and ID	<p>[any prescribed value or content rule for: name, ID, business document. How are these business documents referenced?]</p> <p>[DocumentEnvelope] element</p> <p>[name] attribute group</p>
	(other Doc envelopes?)	See above (can be 0...n).

	Business Signal Envelope Types Allowed and Used	<p>[any prescribed value or content rule for: name, ID, bus. doc. reference]</p> <p>Define what business signals will be used with this Business Transaction Activity consistent with the BT patterns and BT used. If outside of this specification, see Section 3.2.3.</p> <p>For example, Receipt Acknowledgement and/or Acceptance Acknowledgement.</p> <p>[SignalEnvelopeType] complexType</p>
	Business Signal Type	<p>Are the standard format of Business Signals used or a partner specific Signal?</p> <p>[SignalType] complexType</p>
	Communication medium	<p>[What communication medium may/must be used for this message exchange? For the associated business signals?]</p>
Responding activity	Document Envelope name and ID	<p>[any prescribed value or content rule for: name, ID, bus. doc. Reference. How are these business documents referenced?]</p> <p>Note: Specify for each occurrence of the Document Envelope. The concept of a logical Business Document applies to the Document Envelope. That Business Document may be composed or assembled from many sources. There may be multiple Document Envelopes. There exists only one primary logical Business Document. See Section 3.4.</p> <p>[DocumentEnvelope] element</p> <p>[name] attribute group</p>
	Business Signal Envelope Type Allowed and Used	<p>[any prescribed value or content rule for: name, ID, bus. doc. reference]</p> <p>Define what business signals will be used with this Business Transaction Activity consistent with the BT patterns and BT used. If outside of this specification, see the succeeding section on Customization.</p> <p>For example, Receipt Acknowledgement and/or Acceptance Acknowledgement.</p> <p>[SignalEnvelopeType] complexType</p>
	Business Signal Type	<p>[Are the standard format of Business Signals used or a partner specific Signal?]</p> <p>[SignalType] complexType</p>
	Communication medium	<p>[What communication medium may/must be used for this message exchange? For the associated business signals?]</p>
Complex Transactions	Nested Transactions	<p>[Does this Business Transaction Activity depend on visibility to another Business Transaction specified in another process definition?]</p> <p>Note: This mechanism is for visibility only of a particular</p>

		<p>party. For example, a Supplier may only respond to a Purchase Order Request, after he has an indicator from a Distributor that a product component is available. The Supplier-Distributor relationship is specified elsewhere, such as in another Business Transaction outside of this definition. A ComplexBTA allows for nested BTAs to happen in a recursive sequential way and does not affect Business Transaction atomicity. The ComplexBTA provides a mechanism to implement / communicate dependencies between an actual business process (semantic process) and systems implementation of business processes (service choreography). A ComplexBTA is not a multi-party collaboration.</p> <p>[ComplexBusinessTransactionActivity] element</p>
Composition	Usage	<p>[How is this Business Transaction Activity to be composed?]</p> <ul style="list-style-type: none"> • In its own Business Collaboration • In a Business Collaboration with other BTA • By a user community or domain • Is a ComplexBusinessTransactionActivity (Note: This is specific to element above not to XInclude or design composability) • Other (specify) <p>Note: When composition occurs in a domain or community, the transitions and condition expressions may differ. Therefore, they may be added later. This flexibility adds to the declarative power of ebBP. If the same Business Transaction Activity is defined for modular use and also within a Business Collaboration with other BTA, two profile items may be required to distinguish given the compositional characteristics may differ.</p> <p>As needed, add other criteria in the Operational profile. Map into the Business Collaboration profile item in upcoming section.</p>
Test References	<p>Spec (Spec package, ebBP v2.0.x)</p> <p>Note: Valid for all reference unless specified.</p>	

3.2.3 Customization of the Business Transaction Pattern

This table or form that follows is used to identify the customized elements that the deployment profile allows or requires for the above business transaction pattern. The Business Transaction Pattern used for a Business Transaction and realized in a Business Transaction Activity allows certain specification by the involved parties. Customization may occur, within the scope of the specification, through an extensible pattern whereby the involved parties define the semantics and syntactic conditions. For example, [What kind of derivation can be done by the user, for defining business transactions that conform to this profile? If the derivation is outside of the scope of the available parameters of the template realized in this profile, is this a root pattern for future user-defined BTs? Is this pattern itself derived from a root BT?]

Customization Feature	Description
Extensions	[If the customization extends outside of the standardized patterns, their selectable options, and defined semantics, what are the structure and semantics of such extensions?] [DataExchange] element
Signal Variability	[Are additional signals specified outside of the specification that should be included and aren't available in the standard patterns of Business Transaction?] [SignalType] complexType (for specification) [SignalEnvelopeType] (for specification of the type of signal envelope such as ReceiptAcknowledgement)
Others	What other business semantics are to be used that exist outside of those specified (in addition to selections available via the technical specification and as held in the BT pattern matrices defined)?
Test References	Section 3.4.9.1, Spec
Notes	See upcoming section on customization of Business Transaction patterns. [DataExchange] element

3.2.4 Common Characteristics for a Business Transaction Pattern Across All or Specific Usages

This profile item applies for Business Transactions within or outside of the standard allowed set, if common characteristics apply. Specify in common profile table for a particular Business Transaction pattern type (i.e. for all Commercial Transactions).

Specification Feature	[Commonality between different BTA based on a specific Business Transaction and BT pattern.] [BusinessTransactionHead] [BusinessTransactionType] See: Set of concrete BT patterns, operational matrices and extensibility pattern (Data Exchange) derived from these.
Specification Reference	Section 3.4.9, Spec
Profiling	Where applicable, this profile item involves common characteristics across all or some of the usages of a particular BT pattern.
Alignment	See Operational profile where applicable in Section 4.
Common characteristics	Which operational semantics apply as defined in the BT patterns or user defined matrices? Specify in detail such as document security, quality, non-repudiation, etc.
Test References	Section 3.4.9.1, Spec
Notes	

3.2.5 Composing Complex Business Collaboration Activities

When Business Transaction Activities are defined based on the concrete Business Transaction or user-defined patterns, it is important to identify whether the overall picture whereby they could exist. For example a modular process definition may hold one Business Transaction Activity in a Business Collaboration. The expected outcome may be that several Business Transaction Activities can be combined in that Business Collaboration by a user community or domain, or a Business Collaboration with that one Business Transaction Activity is included in another process definition. In some of these cases, the condition expressions and use of transition are added to create a more complex Business Collaboration, CollaborationActivity or composed in different ways. A profile module for this capability is included in Section 3.5.3 and should be used in conjunction with this table.

Specification Feature	[Composing Complex Business Collaboration Activities (for Business Transaction Activity)] [xi:include] [Specification]
Specification Reference	Section 3.4.6 (addresses use of automated functions), Spec
Profiling	Are manual composition and/or use of XInclude to be used? If so, please specify.
Alignment	Partner agreements, references or other intentions may be defined outside of this technical specification. They serve as a guide to the composition of business process definitions using ebBP. What guides serve to assist in composition by the community involved?
Test References	See Section 3.5.
Compositional characteristics	Will the BTA and BC be combined in design or using the XInclude functionality? See Section 3.5.
Notes	The profile item should be consistent with and used alongside what is specified in Section 3.5 (and 3.5.3 specifically). These profile items are designed to be used in a complementary fashion. This profile item may map to operational details in Section 4 and also impacts Business Collaboration development in Section 3.5. This should be consistent with the profile items defined for Business Transaction Activities previously identified and as expressed in operational constraints in Section 4, where they apply.

3.3 Defining a Standard or User-Defined Business Signal

(NOTE: there should be one such section for each Business Signal profiled)

3.3.1 Business Signal General Profile

This form that follows is used to define parts of a Business Signal, or constraints associated with these parts, that define a business signal profile. Note, that business signals are an integral part of the Business Transaction Activity, the BT and the pattern of which they are based. Such a profile will constrain the business signals that a user community may define and use, e.g. as use of the standard business signals or for those that are user-defined.

Form: Business Signal profile		
General	Profile identifier	[identifier for this profile item]
	Signal name	[full name of the signal, e.g. <ReceiptAcknowledgement>]
	Signal ID	[name ID of the signal, to be used in Signal element of ProcessSpecification]
	Schema location	[to be used in xsi:schemaLocation attribute]
	Signal Envelope Type	[Also is consistent with and defines the value of isPositiveSignal attribute – positive or exception]
Party and Role Info	Originating Party	[value to be used in FromPartyInfo, in case this profile is associated with this originating party. Specify also the type of this value.]
	Originating Role	[value to be used in FromRole, in case this profile is associated with a well-defined originating role. Specify also the type of this value.]
	Destination Party	[value to be used in ToPartyInfo, in case this profile is associated with this destination party. Specify also the type of this value.]
	Destination Role	[value to be used in ToRole, in case this profile is associated with a well-defined destination role. Specify also the type of this value.]

Security properties	[List the message parts and associated security requirements – non-repudiation parameters.]	
	Message Part 1	[non-repudiation settings]
	Message Part 2	[non-repudiation settings]
	(others?)	
	Process operational semantics	Is non-repudiation of receipt required?
Certificates elements	[List the certificates info and ID.]	
	Certificate 1	
	Certificate 2	
	(others?)	
Communication medium	[What transport may/must be used for this signal?]	
		<p>If this maps to a web service abstract operation (name), what are the:</p> <ul style="list-style-type: none"> • Interface name • Operation name • Operation step <p>[SignalMap] element [map] attribute group</p>
Business Transaction	Business Transaction Activity	<p>[Specify what Business Transaction Activity of which these signals are integrated.]</p> <p>What role is associated with this signal?</p> <p>[businessTransactionActivityRef] attribute [roleRef] attribute</p>
Exception Signal	Exception Signal Details	<p>If an exception signal is used, are there allowed reasons associated with such signals relative to the expectations of the involved parties?</p> <p>Note: Are these used for auditing or tracking purposes? For example, a Negative Acceptance Acknowledgement is related to Business or Performance reasons.</p>
Catastrophic Condition (Exception Signal)	Exception Signals Details	<p>[Are general exceptions related to catastrophic conditions to be used?]</p> <p>Note: These are outside of the choreography and Business Transactions themselves.</p> <p>[GeneralExceptionType] element</p>

Test References	Sections 3.2 and 3.4.9.3, Spec Note: Requires cross-reference of SignalSchema and/or Schema, when the former standard signals are used.
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3.3.2 Common Characteristics for a Business Signals

Across All or Specific Usages of a Particular Type

This profile item applies for Business Signals within or outside of the standard allowed set, if common characteristics apply. Specify in common profile table for a particular Business Transaction pattern type such as for all Commercial Transactions for a Receipt Acknowledgement or more generally for all Receipt Acknowledgements.

Specification Feature	Commonality between different Business Signals <ul style="list-style-type: none">• For all usages?• For a particular Business Transaction pattern and BT?• For all signals? See: Set of concrete BT patterns, operational matrices and extensibility pattern (Data Exchange) derived from these.
Specification Reference	Section 3.4.9, Spec
Profiling	Where applicable, this profile item involves common characteristics across all or some of the usages of a Business Signal of a particular type (Receipt Acknowledgement, General Exception etc).
Alignment	See Operational profile where applicable in Section 4.
Common characteristics	Which operational semantics apply as defined in the BT patterns or user defined matrices? Specify in detail such as quality, non-repudiation, etc.
Test References	Section 3.4.9.1, Spec

3.4 Defining the Business Document Profiles

(NOTE: there should be one such section for each Business Document profile)

In this section, the profiling of Business Documents is outlined. Where applicable, Attachments may also be profiled with the subsection provided.

3.4.1 Profiling Table for Business Documents

This form is used to define profiles for logical Business Documents that are to be used in Document Envelopes associated with Business Transactions.

Form: Business Document profile		
Document name and ID	[name] [nameID] [name] attribute group	
	[Document Envelope(s) that instances of this Business Document profile can be bound to] [DocumentEnvelope] element	
External References	External Document Reference Name	[reference to an external specification that this document must conform to. Any external elements (e.g. a UBL subset) that must be used for composing this document?] Note: This information may provide other third-party details to control the use of that Business Document. This could be a name, URN or other reference that cites an external specification or reference that defines the document. For example, a government procurement organization may choose variably to enable other requirements on structure to a Business Document. [externalDocumentDefRef]
	Source Location	[one or more locations for the reference business document.] [Specification] element
Security requirements and parameters		[For example, tamper detection, confidentiality, authentication, etc.] Note: Relates to non-repudiation requirements associated with the BT pattern and BT used in the BTA. [documentSecurity] attribute group
Test References	Section 3.4.9.5 on Business Document Flows, Spec	
Notes	See the subsequent section on Attachments where applicable.	

3.4.2 Profiling Table for Attachments.

This form is used to define profiles for Attachments that may be used in Document Envelopes associated with Business Transactions and a logical Business Document.

Form: Attachments profile		
Attachments	Attachments Detail	<p>[These are typically unstructured documents that may be included with the logical Business Document such as an architectural drawing, image, etc.]</p> <p>[Attachment] element</p> <p>Is this attachment(s) always present?</p> <p>[minOccurs] attribute</p> <p>[maxOccurs] attribute</p> <p>What is its type?</p> <p>[mimeType] attribute</p>
	[Name] [Name ID]	[name] attribute group
	[Document Envelope(s) that instances of Attachment profile can be bound to]	[businessDocumentRef]
	Source Location	[one or more locations for the reference attachment.] [Specification] element
External References	External Document Reference Name	<p>[reference to an external specification that this Attachment must conform to.]</p> <p>Note: This information may provide other third-party details to control the use of that Attachment.</p> <p>[externalDocumentDefRef]</p>
Security requirements and parameters	Security	<p>[What security is required for the attachment?]</p> <p>[documentSecurity] attribute group</p>
Test References	Section 3.4.9.5 on Business Document Flows, Spec	
Notes	<p>See preceding section on logical Business Documents.</p> <p>Attachments are generally non-substantive in nature.</p>	

3.4.3 Common Characteristics for Business Documents

Across All or Specific Usages of a Particular Type

Any profiling info that is common to all Business Documents parts or Attachments may be moved up to the general Business Document / Attachments profile table. This profile item applies for Business Documents and/or Attachments, if common characteristics apply. Specify in common profile table for a class or type of business document such as all purchase orders.

Specification Feature	Commonality between different Business Documents <ul style="list-style-type: none">• For all usages?• For a particular Business Transaction pattern and BT?• Under specific conditions (condition expressions)? See: Set of concrete BT patterns, operational matrices and extensibility pattern (Data Exchange) derived from these.
Specification Reference	Section 3.4.9, Spec
Profiling	[Where applicable, this profile item involves common characteristics across all or some of the usages of a logical Business Document of a particular type (all purchase orders for example), e.g. any reference to a particular vocabulary, external XML schemas, core components – UBL or UBL subset, OAG, etc.]
Alignment	Besides conformance to a document structure, any semantic constraint on content, format of fields, rules of composition. If some external methodology is used, what are the usage rules? See Operational profile where applicable in Section 4.
Common characteristics	Which operational semantics apply as defined in the BT patterns or user defined matrices? Specify in detail such as quality, non-repudiation of use and content, etc. [isNonRepudiationRequired] [documentSecurity] attribute group
Test References	any reference to content validation artifact – semantic rules, Schematron file, etc.

3.5 Defining a Business Collaboration Profile

(NOTE: there should be one such section for each Business Collaboration profile)

3.5.1 Process Diagram of the Business Collaboration

The general flow of documents between partners is described here e.g. using UML or other visualization process notation. This general flow should reference Business Transactions or profiles of these.

3.5.2 Properties and Parameters of the Business Collaboration

This table or form is used to identify the properties that are constrained by this business collaboration profile.

Form: Business Collaboration properties		
General properties	Name Name ID	[Provide the name attribute value for the Business Collaboration.] [name] attribute group [BusinessCollaboration] element
	Timing constraints	[constraints on timing, e.g. TimeToPerform for the Business Collaboration] [TimeToPerform] element
	Roles and Parties	[What are the externally exposed roles? External roles map to the actual roles in a Business Collaboration.] [ExternalRoles] element
	Roles and Parties (continued)	[What are the top-level or abstract partner roles?] [Role] element
Referenced Business Transaction, BT Pattern, and BTA	[Used only when the concrete patterns are not used. Specify a URI for the definition of the pattern used.] [pattern] attribute	

Conditions on Business Collaboration	“BeginsWhen” Triggers	[Event external to this Business Collaboration that causes the activity to commence. Note, this external event must be publicly visible to the involved parties.] [BeginsWhen] element
	“EndsWhen” Triggers	[Event external to the activity that causes the activity to end. Note, this external event must be publicly visible to the involved parties.] [EndsWhen] element
	Pre-conditions	[What other events, activities or message exchange is/are required to occur before this Business Collaboration may take place. Note, this external state must be publicly visible to the involved parties.] Note: A description of a state external to this Business Collaboration that is required before the Business Collaboration can commence. Typically a PreCondition + other variables = BeginsWhen. [PreCondition] element
	Post-conditions	[What other events, activities or message exchange is/are expected to take place after this Business Collaboration occurs. Note, this external state must be publicly visible to the involved parties.] Note: PostCondition is a description of a state external to this Business Collaboration that is required after the Business Collaboration concludes (i.e. the state doesn't exist before the execution of this Business Collaboration but does exist afterwards). Typically a PostCondition + other variables = EndsWhen. [PostCondition] element
Complex Business Collaborations	Nested Business Collaborations	[Does a Business Collaboration exist only in the context of another Business Collaboration (i.e. is dependent and an inner collaboration)?] [collaborationGroup] group
	Constraints	Are there constraints on composition? Also see Section 4 for operational profile.
Test References	Sections 3.4, 3.4.1, 3.4.10, Spec	

3.5.3 Composing Complex Business Collaboration Activities

It is important to identify whether the overall picture of how Business Collaborations are anticipated for usage when Business Transaction Activities are developed. Business Collaborations may be modular or complex, include only one BTA or many, and have specific usages planned by a user community or domain. In conjunction with Section 3.2.5 (see section on Composing Complex Business Collaboration Activities), user communities may specify their compositional needs and/or preferences.

Specification Feature	[Composing Complex Business Collaboration Activities] [xi:include] [Specification]
Specification Reference	Section 3.4.6 (addresses use of automated functions), Spec
Profiling	Are manual composition and/or use of XInclude to be used? If so, please specify.
Alignment	Partner agreements, references or other intentions may be defined outside of this technical specification. They serve as a guide to the composition of business process definitions using ebBP. What guides serve to assist in composition by the community involved?
Test References	Section 3.4.6.3, Spec For the use of XInclude, this is limited to packages. Therefore, one or more package elements may be included using this function. This element must be inserted before validation occurs. The identification of these packages must be unique in the ebBP process definition (i.e. the nameID must be unique to avoid collisions). Also see Section 3.5.3.
Compositional characteristics	Will the BC and BTA (one or multiple are possible) be combined in design or using the XInclude functionality? What is name and nameID of the package to be included? The current ebBP technical specification allows use of the XInclude functionality. This can allow automated inclusion of packages, such as for compositional purposes. This may differ from or complement composing BTA and BC as the constructs are defined in design by a user community.
Notes	The profile item should be consistent with and used alongside what is specified in Section 3.2. This profile item may map to operational details in Section 4 and may also impact Business Transaction (Activity) development in Section 3.2. This should be consistent with the profile items defined for Business Transaction Activities previously identified and as expressed in operational constraints in Section 4, where they apply.

3.5.4 Common Characteristics for Business Collaboration

This profile item applies to Business Collaboration if common characteristics apply. Specify in common profile table for a set of or all specified Business Collaborations. For example, a community may use the Business Collaboration in a modular fashion where each includes only one BT activity to allow flexibility of composition. Another domain may choose to defer statement of timing to configuration, such as for the Collaboration Protocol Profile (CPP) or Agreement (CPA) which is supported in this version of the specification.

Specification Feature	Commonality between different Business Collaborations [BusinessCollaboration] [BinaryCollaboration] [MultiPartyCollaboration]
Specification Reference	Section 3.4.10, Spec Also supported by Sections 3.4.1 and 3.4.5, Spec
Profiling	Where applicable, this profile item involves common characteristics across all or some of the usages of Business Collaborations.
Alignment	See Operational profile where applicable in Section 4.
Common characteristics	What common characteristics may apply, for example: <ul style="list-style-type: none"> • How many BT activities may this Business Collaboration allow? • May Business Collaborations be nested in other Business Collaborations? Are there dependencies? • Where is TimeToPerform to be specified? Is this variable? • Is use of condition expressions allowed (such as BeginsWhen, EndsWhen, etc)? In this case, a modular definition model may defer composition and the use of such expressions to another time.
Test References	Section 3.4.10.1, Spec
Notes	This profile module should be consistent with the Operational specifics in Section 4 and may be influenced by the documented assumptions for the Properties and Parameters for Business Collaborations specified earlier in this section.

4 Operational Profile

This section defines the operational aspect of the profile: type of deployment that the above profile is supposed to be operated with, expected or required conditions of operations, usage context, etc.

4.1 Management Authority

For Business Transaction and/or Collaborations Profiles and Definitions

Management Authorities	Profile requirements
Who is (are) the authority(ies) in charge of managing the BT / BC final definitions? Who has the authority and responsibility for: <ul style="list-style-type: none">• Creation• Storage• Update• Distribution/Notification	e.g. each party could store and manage Business Transactions (BT), or they could be stored and managed in a third-party repository, e.g. in a registry/repository with a standardized user authenticated interface to query and retrieve them.
Who is the authority in charge of managing BT / BC templates from which final definitions can be instantiated? Who has the authority and responsibility for: <ul style="list-style-type: none">• Creation• Storage• Update• Distribution/Notification	
Others	

4.2 Deployment and Processing Requirements for Business Documents

Business Document definitions Management Process	Profile requirements
Is a specific registry or repository for storing Business Document required? What is its accessibility? If so, provide access details.	
Is there a set of predefined Business Document profiles or templates that users should conform to?	
What is the validation process for Business Document instances?	
Others	

4.3 Deployment and Processing Requirements for Business Transactions and/or Collaborations

BT Management Process	Profile requirements
<p>Storage: Is a specific registry or repository for storing BTs or BT artifacts required? What is its accessibility? If so, provide access details.</p>	
<p>BT creation: Is there a set of predefined BT profiles that should be used to create final definitions? How were they created? Any particular process to follow to create a definition?</p>	
<p>Security: How will certificates be managed and distributed? (procedure)</p>	
<p>Validation: What is the validation process for BTs that must conform to this profile?</p> <ul style="list-style-type: none"> • validation expected at import / configuration time? • validation expected at run-time? 	<p>How should a BT / BC final definition be tested for conformance to this profile?</p>
<p>Monitoring: What are the monitoring and auditing requirements for this business transaction?</p>	
<p>Others</p>	

4.4 Additional Aspects beyond Business Transaction Specification

Additional Agreement	Profile requirements
Are there additional profiling aspects (e.g. business-related) out of specification scope that this BT / BC profile is part of, and that should be associated with it?	

4.5 Additional Deployment or Operational Requirements

Operational or Deployment Conditions	Profile requirements
Operational or deployment aspects that are the object to further requirements or recommendations.	Recommended or required practices.

5 References

5.1 Normative

- [ebCPPA] OASIS, *ebXML Collaboration-Protocol Profile and Agreement Specification Version 2.0*, <http://www.oasis-open.org/committees/download.php/204/ebcpp-2.0.pdf>, September 23, 2002.
- [ebMS] OASIS, *ebXML Message Service Specification Version 2.0*, http://www.oasis-open.org/committees/ebxml-msg/documents/ebMS_v2_0.pdf, April 1, 2002.
- [ebBP] OASIS, *ebXML Business Process Schema Specification Committee Specification Version 2.0.4*, <http://docs.oasis-open.org/ebxml-bp/2.0.4/ebxmlbp-v2.0.4-Specs-en.pdf>, October 13, 2006.
- [RFC2119] S. Bradner, *Key words for use in RFCs to Indicate Requirement Levels*, <http://www.ietf.org/rfc/rfc2119.txt>, IETF RFC 2119, March 1997.

5.2 Non-Normative

- [ebDPT] OASIS, *Metadata for Deployment Profile Templates*, http://www.oasis-open.org/committees/download.php/19253/ebxml-iic-Deployment_Profile_Template-CD.doc.

Appendix A. Acknowledgments

In addition to editors or direct contributors, any individuals were members of the committee during the development of this specification or of a previous version of it, or commented to its development: The ebXML Business Process TC.

Appendix B. Revision History

Rev	Date	By Whom	What
0.1	March, 2005	P. Wenzel J. Durand	Initial Draft.
0.6	September 26, 2005	Jacques Durand	Add some editorial corrections, and content corrections based on feedback.
0.8	May 30, 2006	M. Martin	Add inclusion for package for Specification, add schema references, general improvements
1.0	November 20, 2006	M. Martin	Typographical and formatting cleanup only