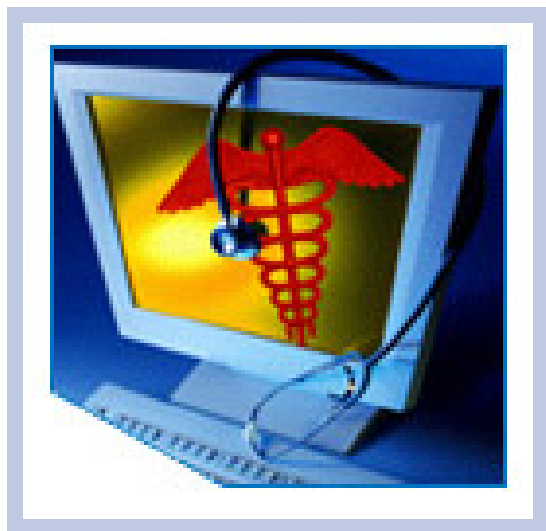


# HITSP Document Reliable Interchange Transaction

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HITSP/T31



*Submitted to:*

**Healthcare Information Technology Standards Panel**

*Submitted by:*

**Security, Privacy and Infrastructure Domain Technical Committee  
(Formerly Security and Privacy Technical Committee)**



## DOCUMENT CHANGE HISTORY

| Version Number | Description of Change       | Name of Author  | Date Published   |
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## 1.0 INTRODUCTION

As an introduction to the HITSP Document Reliable Interchange Transaction, this section provides a high level overview of the information sharing scenario enabled by following this specification, provides a document map of the construct relationships for this specification, acknowledges the copyright protections that pertain and provides a list of key reference documents and background material. If you are already familiar with this information, proceed to Section 2.0 Transaction Definition.

### 1.1 OVERVIEW

This section describes the contents of this specification and provides a high level definition of this Transaction and background information about the underlying Components that the Transaction is based on.

A healthcare delivery organization or clinician may need to communicate a clinical document to a recipient through direct communication. This may involve direct interchange between EHRs, PHRs, Quality Measurement Organizations, Public Health Authorities and other healthcare IT systems in the absence of a document sharing infrastructure such as that enabled by the Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework. The content of the communication might be clinical documents, quality documents or public health documents. This construct provides a standards-based mechanism for conveying a set of medical documents in a point-to-point network-based communication.

This Transaction uses the IHE *Cross-Enterprise Document Reliable Interchange (XDR)* Integration Profile, a companion to the IHE *Cross-Enterprise Document Sharing (XDS)* Integration Profile. *Cross-Enterprise Document Reliable Interchange (XDR)* uses the XDS defined metadata formats in a simpler environment in which the communicating parties have agreed to a point-to-point interchange rather than communicating via document sharing.

This specification includes, by reference, the Transactions and Components that comprise the on-line and off-line modes for the Provide and Register Transaction. It describes the processes supported by these structures and the work that is accomplished by implementing this Transaction. Source material is from the IHE IT Infrastructure Technical Framework (ITI-TF) 2006-2007 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR).

### 1.2 TRANSACTION DOCUMENT MAP

Each HITSP specification describes how to integrate and constrain existing standards and specifications that will satisfy the requirements for the HITSP construct. There are four types of HITSP constructs called Interoperability Specifications (IS), Transaction Packages (TP), Transactions (T), and Components (C). Interoperability Specifications define the context(s) in which any other HITSP construct may be used. The current Document Reliable Interchange Transaction specification does not depend on any other HITSP



constructs; however, it is used with other constructs to meet the requirements of one or more ISs. Review Section 1.2 Interoperability Specification Document Map from the relevant IS to better understand the context, dependencies, and relationships between the constructs used to meet the IS requirements.

### 1.3 COPYRIGHT PERMISSIONS

#### COPYRIGHT NOTICE

© 2008 ANSI. This material may be copied without permission from ANSI only if and to the extent that the text is not altered in any fashion and ANSI's copyright is clearly noted.

IHE materials used in this document have been extracted from relevant copyrighted materials with permission of Integrating the Healthcare Enterprise (IHE) International. Copies of this standard may be retrieved from the IHE Web Site at [www.ihe.net](http://www.ihe.net).

OASIS materials used in this document have been extracted from relevant copyrighted materials with permission of the Organization for the Advancement of Structured Information Standards (OASIS). Copies of this standard are available from OASIS at [www.oasis-open.org](http://www.oasis-open.org).

### 1.4 REFERENCE DOCUMENTS

This section provides a list of key reference documents and background material. If you are already familiar with this information, proceed to Section 2.

A list of key reference documents and background material is provided in the table below. These documents can be retrieved from the [www.hitsp.org](http://www.hitsp.org) Web Site.

**Table 1.4-1 Reference Documents**

| Reference Document                            | Document Description  |
|---|---|
| HITSP Interoperability Specification Overview | Provides background information about the HITSP and its role in the overall U.S. efforts to realize large scale interoperability of health information. The document also provides a description of the HITSP process for healthcare standards harmonization and explains how to use the Interoperability Specifications and other related documents to inform your health IT product development or product refinement |
| HITSP Conventions List                        | Describes the conventions that are used to convey the full descriptions and usage of standards in the HITSP specifications  |
| HITSP Acronyms List                           | Lists and defines the acronyms used in this document  |
| HITSP Glossary                                | Provides definitions for relevant terms used by HITSP documents   |
| HITSP Harmonization Framework                 | Describes the current framework within which the Interoperability Specifications are built  |



| Reference Document                          | Document Description   |
|---|--|
| TN900 - Security and Privacy Technical Note | <p>Developed as a reference document to provide the overall context for use of the HITSP Security and Privacy constructs. It includes the following:</p> <ul style="list-style-type: none"> <li>• The scope, reference policy background, and Security and Privacy principles used in the development of the constructs</li> <li>• A detailed description and schematics of the conceptual relationship between the Security and Privacy constructs</li> <li>• A mapping of existing standards and constructs to be used in meeting the stated requirements of the AHIC Use Cases</li> <li>• A list of identified gaps and the recommended approaches to resolving those gaps</li> <li>• A roadmap for how the Security and Privacy constructs will evolve and eventually align with other HITSP Interoperability Specifications</li> <li>• A conceptual framework for Security and Privacy management, including reference information on privacy policies, risk assessment, and risk management</li> <li>• A glossary of terms used in all the Security and Privacy construct documents</li> <li>• A description of the application of the Security and Privacy constructs to the HITSP Interoperability Specifications for the three initial AHIC Use Cases – Biosurveillance, Electronic Health Records - Laboratory Results Reporting, and Consumer Empowerment</li> </ul> <p>HITSP will periodically update this Technical Note as required by the introduction of new contexts for use.</p> |



## 2.0 TRANSACTION DEFINITION

Transactions are logical groups of actions, including the necessary content and context that must all succeed or fail as a group.

### 2.1 CONTEXT OVERVIEW

This section provides a general description of the Transaction. It includes a detailed definition of the Transaction and the reason for its use. It also provides all the necessary background information that further describes the context in which the Transaction is needed, and the Components or composite standards that the Transaction is based on.

This Transaction describes a standards-based mechanism to enable the interchange of documents using a reliable messaging system. This allows for a point-to-point communication option for the interchange of documents in the absence of an XDS document sharing infrastructure or for communications of documents to one or more specific receivers.

Building on existing standards to define this Transaction, HITSP has chosen the IHE *Cross-Enterprise Document Reliable Interchange (XDR)* Integration Profile published by Integrating the Healthcare Enterprise (IHE). Source material is from the XDR Supplement to the IHE IT Infrastructure (ITI) Technical Framework (TF), Volume 1 and Volume 2 (ITI TF-1 and ITI TF-2).

The IHE XDR Integration Profile, which is reproduced in part in this specification with written permission from IHE, explains how technical actors should comply with the proposed standards for interoperability. Key concepts from the IHE XDR Integration Profile are introduced in this document to help the reader understand the context of the Profile. The entire IHE XDR Integration Profile is also available at [www.ihe.net/Technical\\_Framework](http://www.ihe.net/Technical_Framework).

#### **Overview of XDR**

This section provides an overview of the IHE XDR Integration Profile. Its intent is to provide the reader with an introductory context to the XDR Profile. XDR defines the reliable interchange of IHE *Cross-Enterprise Document Sharing (XDS)* Integration Profile documents submission sets as a direct communication using a reliable messaging system. This permits direct document interchange between EHRs and other healthcare IT systems such as Quality Measurement Organizations, Public Health Authorities in the absence of a document sharing infrastructure such as XDS.

The text for the IHE XDR Integration Profile begins here.

XDR describes the exchange of a set of a patient's documents between healthcare providers, such as: physicians, hospitals, special care networks or other healthcare professionals.





Where XDS Registry/Repositories are not yet implemented or available for the exchange of information, XDR is the viable approach.

In a situation where the information is going to an automated application or robust system capable of automated storage or processing of documents relative to one patient, XDR is the appropriate profile.

The XDR Integration Profile is intended only for exchange of patient related medical documents and not intended to address all cross-enterprise EHR communication needs.

This profile is only defining the digital transport mechanism used for such Use Cases. Content transported will be detailed by Content Profiles such as the ones defined by the IHE PCC (Patient Care Coordination) domain.

The text for the IHE XDR Integration Profile ends here.

#### 2.1.1 TRANSACTION CONSTRAINTS

This section describes the constraints that limit the context in which the Transaction construct may be used. A constraint describes a rule that limits the use of the actors, actions or data within the given context, or to which the interactions must conform to be used within the described context. It is a description of the limits and scope of the interactions and can describe actions or events that are not part of the initial definition for the context.

**Table 2.1.1-1 Transaction Constraints**

| Constraint                | Constraint Section |
|---------------------------|--------------------|
| No applicable constraints |                    |

#### 2.1.2 TECHNICAL ACTORS

This section describes the technical actors that must be integrated in order to meet the interoperability requirements for this Transaction. A technical actor represents an entity internal to a software application, which is engaged in one or more specific Transactions to support a specific aspect of a real world information interchange (e.g., set of message exchanges). The table below lists the technical actors involved in the Transaction, a definition of their roles, an indication of their optionality, the specific Transactions and content with which they are involved and the optionality of the associated Transactions and/or content.

There are two technical actors involved in this Transaction supporting either an SMTP secure message ("off-line mode") or a Web Services-based HTTP message ("on-line mode"). Both of these modes support the option of sending either a single document or multiple documents. In both modes, communications are initiated by the Document Sender and are received and processed by the Document Recipient.



**Table 2.1.2-1 Technical Actors**

| Technical Actor    | Description  | Used in Component/ Standard             | Transaction/Content                              | Optionality* |
|--------------------|--|---|--|--------------|
| Document Source    | The Document Source Actor is the producer and publisher of documents. It is responsible for sending documents to a Document Repository Actor. It also supplies metadata to the Document Repository Actor for subsequent registration of the documents with the Document Registry Actor | IHE Document Reliable Interchange (XDR) | Provide & Register Document Set.b (on-line mode) | [C202]       |
|                    |  |   | Provide & Register Document Set (off-line mode)  | [C202]       |
| Document Recipient | This actor receives a set of documents sent by another actor. Typically this document set will be made available to the intended recipient who will choose to either view it or integrate it into a Health Record  | IHE Document Reliable Interchange (XDR) | Provide & Register Document Set.b (on-line mode) | [C202]       |
|                    |  |   | Provide & Register Document Set (off-line mode)  | [C202]       |

**\*NOTE:** Optionality = “R” for Required, “R2” for Required if known, “O” for Optional, or “C” for Conditional. If applicable, conditional footnotes are further described below.

#### **Transaction/Content (T/C) Optionality Conditions**

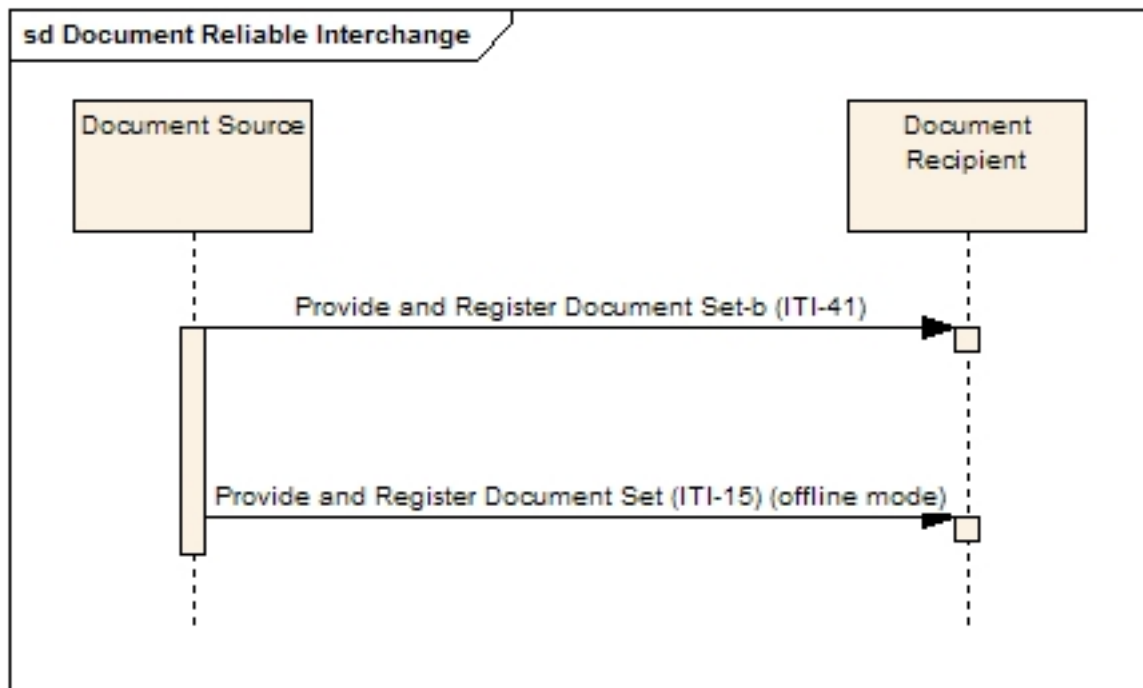
[C202] - The Actor shall support at least one of these transactions.

#### **2.1.3 ACTOR INTERACTIONS**

The following sections document the content of the Transaction and the basic process flows that are supported by the Transaction. It describes the underlying events that fulfill the Transaction, the sequence and timing of the events and the specific actors involved. Process flow diagrams are provided to illustrate the process relationships.



Figure 2.1.3-1 Document Reliable Interchange Actor Interactions



There are two transaction options: *on-line mode* and *off-line mode*:

In the off-line mode, the Document Source sends a document or set of documents to a recipient, using an SMTP reliable e-mail based off-line transmission mode for receipt and processing by the Document Recipient. This leverages the IHE ITI-15 Provide and Register Document Set Transaction. It also leverages the ebXML Message Service over SMTP as specified by the ebXML Registry Service (ebRS), with asynchronous messages and responses as specified by ebXML Messaging Services (ebMS). The current IHE XDR specification for the off-line XDR is cited to allow for compatibility with existing systems. The profile is expected to be updated once the standards are completed in the area of Web Services-based off-line solutions.

In the on-line mode, the Document Source sends the document or set of documents to a single recipient, using an HTTP Web Service based on-line transmission mode for receipt and processing by the Document. This leverages the IHE ITI-41 Provide and Register Document Set-b Transaction.

#### 2.1.4 PRE-CONDITIONS

This section describes the necessary conditions that must be in place prior to the start of the workings of the Transaction. The pre-conditions are used to convey any conditions that must be true at the outset of a Transaction. They describe the context that must be established before the Transaction is executed. They are not, however, the triggers that initiate the Transaction. Where one or more pre-conditions are not met, the behavior of the Transaction should be considered uncertain.



**Table 2.1.4-1 Pre-conditions**

| Pre-condition  |
|--|
| The source of the information has data and documents stored in electronic format   |
| It is expected that the security framework under which this Transaction operates is in accordance with the Interoperability Specification that references this construct. Therefore any applicable HITSP Security and Privacy constructs are implemented as required |

#### 2.1.4.1 Process Triggers

This section describes the triggers, including actors and/or processes, which are necessary to start the Transaction. They can invoke an automatic or manual process or result that, in turn, starts off the Transaction. A trigger is not the same as a pre-condition that describes a context that needs to be in place at the start of the event.

**Table 2.1.4.1-1 Process Triggers**

| Process Trigger                |
|--------------------------------|
| No applicable process triggers |

#### 2.1.5 POST-CONDITIONS

This section provides an overview of the conditions or results that must occur at the end of the Transaction in order for the Transaction to be deemed successfully completed. This includes any required outputs from the Transaction or specific actor states.

**Table 2.1.5-1 Post-conditions**

| Post-condition  |
|---|
| For off-line mode, the chosen document(s) are received by the Document receiver actor using email       |
| For on-line mode, the chosen document(s) are received by the Document receiver actor using Web Services |

#### 2.1.5.1 Required Outputs

This section identifies the required outputs that must be produced at the end of the Transaction in order for the Transaction to be deemed successfully completed. This includes the format and usage of the required output.

**Table 2.1.5.1-1 Required Outputs**

| Required Output       | Format/Usage |
|-----------------------|--------------|
| No applicable outputs |              |

#### 2.1.6 DATA FLOWS

This section describes the basic data flows that are supported by this Transaction. It also describes the format of the data, the data sources and the relevant actors involved in the successful flow of data for the



Transaction. Any prevailing pre-conditions and post-conditions are identified, as well as the purpose of each data post-condition associated with each Transaction. Any data that need to be made available to particular actors are highlighted, as well as the conditions and processes that will use the data to achieve the stated post-conditions.

HITSP is adhering to the XDR specifications without further constraint.

Technical specifications for the on-line and off-line transmission mode including message header and metadata constraints may be found in the IHE XDR Supplement.

## 2.2 LIST OF HITSP CONSTRUCTS

The following list of constructs and their definitions are used by the Transaction specification.

**Table 2.2-1 List of HITSP Constructs**

| Construct Name                 | Technical Actors | Description | Event/Action Code | Content |
|--------------------------------|------------------|-------------|-------------------|---------|
| No applicable HITSP constructs |                  |             |                   |         |

### 2.2.1 CONSTRUCT DEPENDENCIES

The following table shows a list of Components with their existing dependencies. Dependencies usually exist when there are some additional prerequisites for a specific construct:

**Table 2.2.1-1 Construct Dependencies**

| Construct                  | Depends On<br>(Name of Component that it depends on) | Dependency Type<br>(Pre-condition, post-condition, general) | Purpose<br>(Reason for this dependency) |
|----------------------------|--|---|---|
| No applicable dependencies |  |   |   |

### 2.2.2 ADDITIONAL CONSTRAINTS ON REQUIRED CONSTRUCTS

This section describes the constraints that further limit the constructs that are used by this Transaction.

**Table 2.2.2-1 Additional Constraints on Required Constructs**

| Data Element              | Construct | Constraint | Constraint Type<br>(Pre-condition, post-condition, general) | Purpose<br>(Reason for this constraint) |
|---------------------------|-----------|------------|---|---|
| No applicable constraints |           |            |   |   |

## 2.3 STANDARDS

It is important to understand that the standards selected here are within the context of the specific Use Case requirements and do not necessarily reflect selection in other contexts. The standards used by this Transaction specification fall into the following categories:



- Regulatory guidance is a legal or other authoritative declaration that HITSP must abide by in standards selection (see Section 2.3.1)
- Selected standards are necessary for interoperability. These are standards that are used to meet information exchange requirements of associated constructs. For example, they are used to realize direct information exchange, to provide the transport mechanism, to specify the content, or to address security (see Section 2.3.2)
- Informative reference standards provide additional background information or guidance, and are not required for interoperability. These standards are not required to implement the Transaction specification (see Section 2.3.3)

### 2.3.1 REGULATORY GUIDANCE

The following table provides a list of legal or other authoritative guidelines that HITSP must abide by, or has agreed to use as guidance in the selection of standards. Note that only the referenced sections of the regulations are relevant to this Transaction specification.

**Table 2.3.1-1 Regulatory Guidance**

| Standard                          | Description |
|-----------------------------------|-------------|
| No applicable regulatory guidance |             |

### 2.3.2 SELECTED STANDARDS

The following table provides a list of standards that are used to meet information exchange requirements of this Transaction specification, and a detailed description of each standard.

**Table 2.3.2-1 Selected Standards**

| Standard  | Description  |
|---|--|
| Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2006-2007 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) | <p>This Supplement to the IHE IT Infrastructure Technical Framework provides a generic, standards based mechanism for conveying a set of medical documents in a point-to-point networked based communication. The current version of the XDR is specified in the XDR Trial Implementation Supplement to the ITI-TF, rev. 4.0, which is consistent with IHE XDS.b Supplement in term of document entry metadata. For more information visit <a href="http://www.ihe.net/technical_framework">www.ihe.net/technical_framework</a></p> <p>NOTE: off-line mode transaction expected to be updated once standards are available for Web Services Off-line</p> |

### 2.3.3 INFORMATIVE REFERENCE STANDARDS

The following table lists standards that provide additional background information or guidance; however, they are not required for the implementation of the Transaction specification.



**Table 2.3.3-1 Informative Reference Standards**

| Standard Name  | Description/Usage   |
|--|---|
| Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0                                | The IHE IT Infrastructure Technical Framework defines specific implementations of established standards to achieve integration goals that promote appropriate sharing of health information to support optimal patient care. IHE Integration Profiles offer a common language that healthcare professionals and vendors may use in communicating requirements for the integration of products. The current version of the ITI-TF, rev. 4.0 for Final Text, specifies the IHE transactions defined and implemented as of August 22, 2007. The latest version of the IHE Technical Framework is available at <a href="http://www.ihe.net">www.ihe.net</a> |
| Internet Engineering Task Force (IETF), HTTP HyperText Transfer Protocol HTTP/1.1 (RFC 2616)   | The Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. It is a generic, stateless, protocol, which can be used for many tasks beyond its use for hypertext, such as name servers and distributed object management systems, through extension of its request methods, error codes and headers [47]. A feature of HTTP is the typing and negotiation of data representation, allowing systems to be built independently of the data being transferred. For more information visit <a href="http://www.ietf.org">www.ietf.org</a>  |
| Internet Engineering Task Force (IETF), MIME Multipurpose Internet Message Extensions (RFC 2045 to RFC 2049)                           | The first and second documents in this set define MIME header fields and the initial set of MIME media types. The third document describes extensions to RFC 822 formats to allow for character sets other than US-ASCII. The fourth document describes what portions of MIME must be supported by a conformant MIME implementation. It also describes various pitfalls of contemporary messaging systems as well as the canonical encoding model MIME is based on. For more information visit <a href="http://www.ietf.org">www.ietf.org</a>   |
| Internet Engineering Task Force (IETF), SMTP Simple Mail Transfer Protocol (RFC 2821)  | The objective of the Simple Mail Transfer Protocol (SMTP) is to transfer mail reliably and efficiently. SMTP is independent of the particular transmission subsystem and requires only a reliable ordered data stream channel. While this document specifically discusses transport over TCP, other transports are possible. For more information visit <a href="http://www.ietf.org">www.ietf.org</a>  |
| Internet Engineering Task Force (IETF), The MIME Multipart/Related Content-type (RFC 2387)   | The Multipart/Related content-type provides a common mechanism for representing objects that are aggregates of related MIME body parts. This document defines the Multipart/Related content-type and provides examples of its use. For more information visit <a href="http://www.ietf.org">www.ietf.org</a>  |
| Organization for the Advancement of Structured Information Standards (OASIS) - ebRIM OASIS – ebXML Registry Information Model v2.1     | The Registry Information Model provides a blueprint or high-level schema for the ebXML Registry. Its primary value is for implementers of ebXML Registries. It provides these implementers with information on the type of metadata that is stored in the Registry as well as the relationships among metadata Classes. The Registry information model: a) Defines what types of objects are stored in the Registry; b) Defines how stored objects are organized in the Registry. For more information visit <a href="http://www.oasis-open.org">www.oasis-open.org</a>   |
| Organization for the Advancement of Structured Information Standards (OASIS) - ebMS OASIS/ebXML Messaging Services Specifications v2.1 | Defines a Message Service protocol for reliable Business-to-Business data interchange. ebMS v2.1 adds quality of service features on top of transfer protocols such as HTTP and SMTP. Key qualities of service features include guaranteed delivery and nonrepudiation of receipt. ebMS v2.1 can reliably transfer any data type including XML, X12, EDIFACT, or binary data between two parties over the Internet. For more information visit <a href="http://www.oasis-open.org">www.oasis-open.org</a>   |



| Standard Name  | Description/Usage   |
|--|---|
| Organization for the Advancement of Structured Information Standards (OASIS) -ebRS OASIS – ebXML Registry Services Specifications v2.1 | The ebXML Registry provides a set of services that enable sharing of information between interested parties for the purpose of enabling business process integration between such parties based on the ebXML specifications. The shared information is maintained as objects in a repository and managed by the ebXML Registry Services defined in this document. For more information visit <a href="http://www.oasis-open.org">www.oasis-open.org</a> |

RELEASED FOR IMPLEMENTATION





## 3.0 TECHNICAL IMPLEMENTATION

### 3.1 CONFORMANCE

This section describes the conformance criteria, which are objective statements of requirements that can be used to determine if a specific behavior, function, interface or code set has been implemented correctly.

#### 3.1.1 CONFORMANCE CRITERIA

In order to claim conformance to this construct specification, an implementation must satisfy all the requirements and mandatory statements listed in this specification, the associated HITSP Interoperability Specification, its associated construct specifications, as well as conformance criteria from the selected base and composite standards. A conformant system must also be constrained as specified in Table 2.1.1-1 and implement all of the required actors from Table 2.1.2-1, within the scope, subset or implementation option that is selected from the associated Interoperability Specification.

Claims of conformance may only be made for the overall HITSP Interoperability Specification with which this construct is associated.

#### 3.1.2 CONFORMANCE SCOPING, SUBSETTING AND OPTIONS

A HITSP Interoperability Specification must be implemented in its entirety for an implementation to claim conformance to the specification. HITSP may define the permissibility for actor scoping, subsetting or implementation options by which the specification may be implemented in a limited manner. Such scoping, subsetting and options may extend to associated constructs, such as this construct. This construct must implement all requirements within the selected scope, subset or options as defined in the associated Interoperability Specification to claim conformance.

This construct defines the following options that may be selected by the referencing HITSP Interoperability Specification.

Within XDR, a number of options may be selected depending on the Technical Actor implemented as defined by Table 3.1.2-1.

**Table 3.1.2-1 XDR - Options by Actors**

| Actor              | Options                      | Vol & Section   |
|--------------------|------------------------------|-----------------|
| Document Source    | Multiple Document Submission | ITI TF-1:15.2.1 |
|                    | On-Line Mode                 | ITI TF-1:15.2.2 |
|                    | Off-Line Mode                | ITI TF-1:15.2.3 |
| Document Recipient | On-Line Mode                 | ITI TF-1:15.2.2 |
|                    | Off-Line Mode                | ITI TF-1:15.2.3 |



## 4.0 APPENDIX

The following sections include relevant materials referenced throughout this document.

No additional information at this time.

RELEASED FOR IMPLEMENTATION



## 5.0 CHANGE HISTORY

The following sections provide the history of changes made to this document.

### 5.1 DECEMBER 7, 2007

No changes. This is the first published version of the document.

### 5.2 MARCH 19, 2008

There were no comments against this document. Minor editorial changes were made to make this document comply with the current templates.

### 5.3 MARCH 27, 2008

Upon approval by the HITSP Panel on March 27, 2008, this document is now Released for Implementation.

### 5.4 AUGUST 20, 2008

This document has been modified to reflect the updated HITSP approach to categorizing standards as Regulatory Guidance, Selected Standards, and Informative References.

The following standards were designated as Informative References:

- Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0
- Internet Engineering Task Force (IETF), HTTP HyperText Transfer Protocol HTTP/1.1 (RFC 2616)
- Internet Engineering Task Force (IETF), MIME Multipurpose Internet Message Extensions (RFC 2045 to RFC 2049)
- Internet Engineering Task Force (IETF), SMTP Simple Mail Transfer Protocol (RFC 2821)
- Internet Engineering Task Force (IETF), The MIME Multipart/Related Content-type (RFC 2387)
- Organization for the Advancement of Structured Information Standards (OASIS) - ebRIM OASIS – ebXML Registry Information Model v2.1
- Organization for the Advancement of Structured Information Standards (OASIS) - ebMS OASIS/ebXML Messaging Services Specifications v2.1
- Organization for the Advancement of Structured Information Standards (OASIS) - ebRS OASIS – ebXML Registry Services Specifications v2.1

### 5.5 AUGUST 27, 2008

Upon approval by the HITSP Panel on August 27, 2008, this document is now Released for Implementation.

