

HITSP HL7 Messaging Service Collaboration

HITSP/SC115



Healthcare Information Technology Standards Panel

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Submitted by:

Security, Privacy and Infrastructure Tiger Team



DOCUMENT CHANGE HISTORY

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0.0.1	Review Copy	Security, Privacy and Infrastructure Tiger Team	June 30, 2009
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1.0 INTRODUCTION

1.1 SERVICE COLLABORATION OVERVIEW AND SCOPE

The HL7 Messaging Service Collaboration provides the capability to send and receive HL7 messages. The Service Collaboration applies the necessary Security and Privacy constructs. The Service Collaboration supports all the HL7 messaging needs of the HITSP constructs including:

- HITSP/T14 Send Laboratory Result Message
- HITSP/T17 Secured Communication Channel
- HITSP/C34 Patient Level Quality Data Message
- HITSP/C36 Lab Result Message
- HITSP/C39 Encounter Message
- HITSP/C41 Radiology Result Message
- HITSP/TP43 Medication Orders
- HITSP/T67 Clinical Referral Request Transport
- HITSP/C70 Immunization Query and Response
- HITSP/C72 Immunization Message

For more information about the underlying capabilities, pre-conditions, post-conditions, data flows and other detailed information, please refer to the constructs that are composed by this Service Collaboration.

The Service Collaboration document illustrates one internal view diagram and sequence table for each service interface. The diagrams are descriptive and the sequences are not mandatory. They may be affected by policy, chosen architecture, and implementation details. Conformance is measured against the underlying constructs.

1.2 SERVICE COLLABORATION INVOCATION

Table 1-1 Service Collaboration Transactions and Data

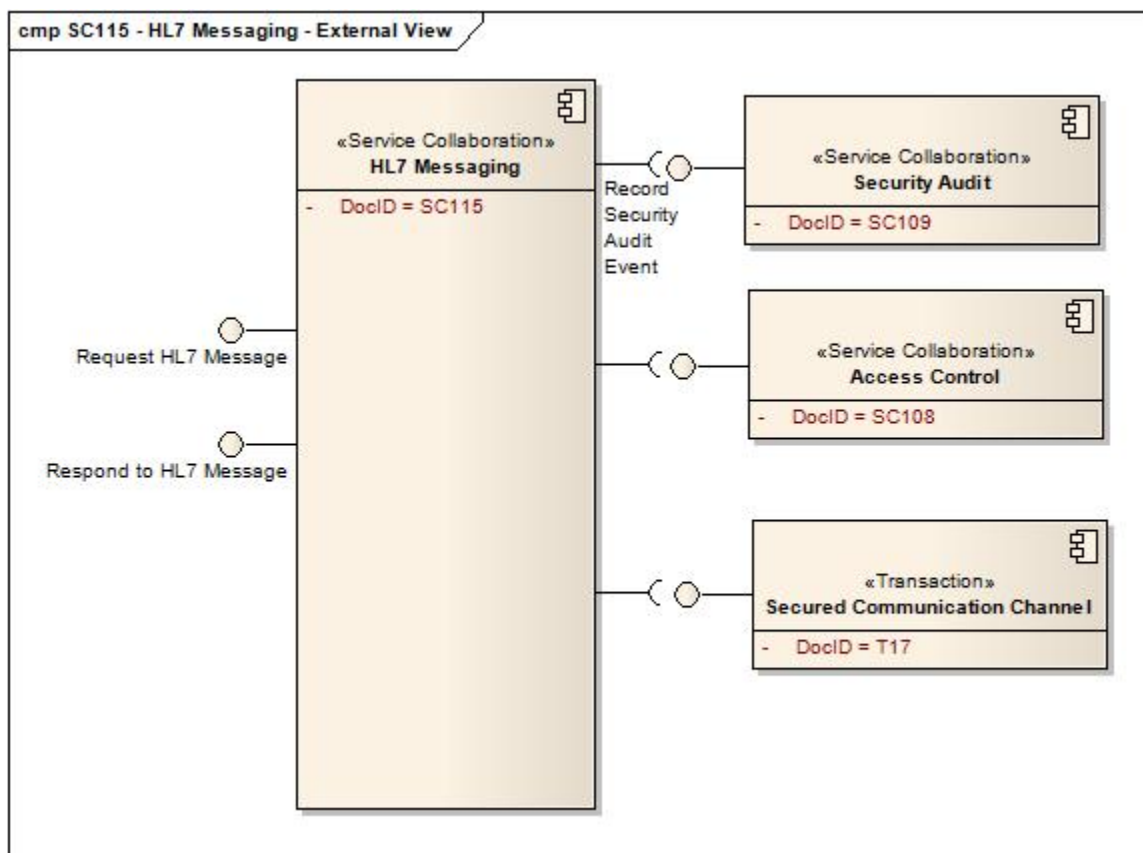
Service Collaboration	Service Collaboration description	Transaction or Data	Transaction or Data Optionality ¹
HITSP/SC115	Provides the collaboration details on the requests side of an HL7 messaging interaction	Request HL7 Message	R
HITSP/SC115	Provides the collaboration details on response side of an HL7 messaging interaction	Respond to HL7 Message	R

¹ Optionality = "R" for Required, "R2" for Required if Known or "O" for Optional, or "C" for Conditional



1.3 EXTERNAL VIEW (i.e., “black box” diagram)

Figure 1-1 HL7 Messaging External View



1.3.1 SERVICE COLLABORATION SOURCE CONSTRUCTS

Table 1-2 List of Source Constructs

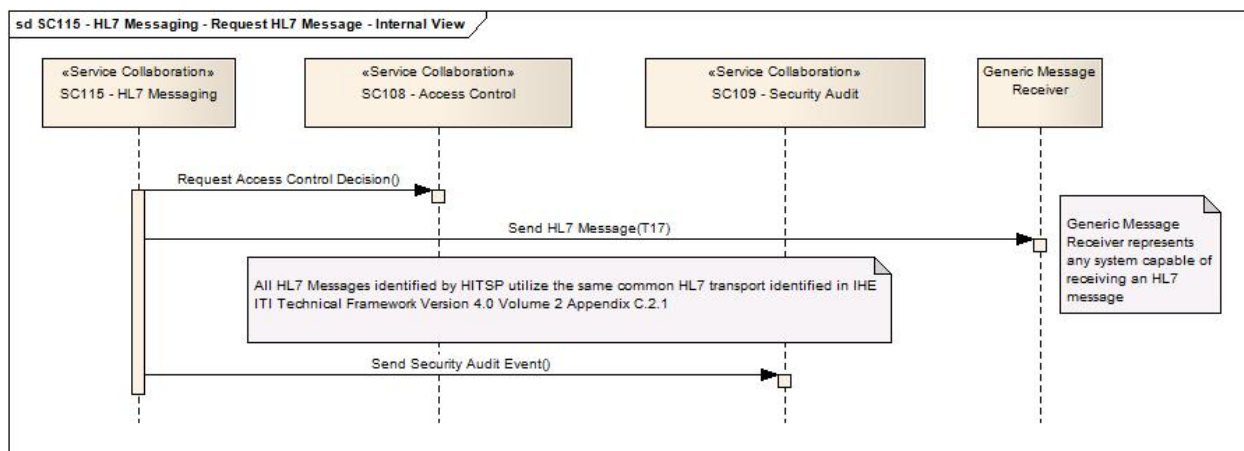
Construct
HITSP/SC108 - Access Control
HITSP/SC109 - Security Audit
HITSP/T17 - Secured Communication Channel
HL7 Messaging as identified in multiple HITSP constructs



1.4 INTERNAL VIEW DIAGRAM WITH SEQUENCING (i.e., “white box” diagram)

1.4.1 INTERFACE: REQUEST HL7 MESSAGE

Figure 1-2 Request HL7 Message Internal View



1.4.1.1 SEQUENCE DETAILS

Table 1-3 Request HL7 Message – Pre-Conditions

Pre-condition	Uses SC, T, TP or C	Interface	Purpose
None			

Table 1-4 Request HL7 Message – Sequence of Constructs

Step Number	Uses SC, T, TP or C	Interface	Purpose
1	HITSP/SC108 - Access Control Service	Request Access Control Decision	To ensure that the user of this Service Collaboration has the authorization to send the identified HL7 Message to the identified endpoint
2	HITSP/T17 - Secure Communications Channel	Secure Node	To open a secure communications channel to the identified endpoint to transmit clinical data
3	HL7 Message ²		To deliver the message and receive back any response
4	HITSP/SC109 - Security Audit	Send Security Audit Event	To record the success or failure of the interface

Table 1-5 Request HL7 Message – Post-conditions

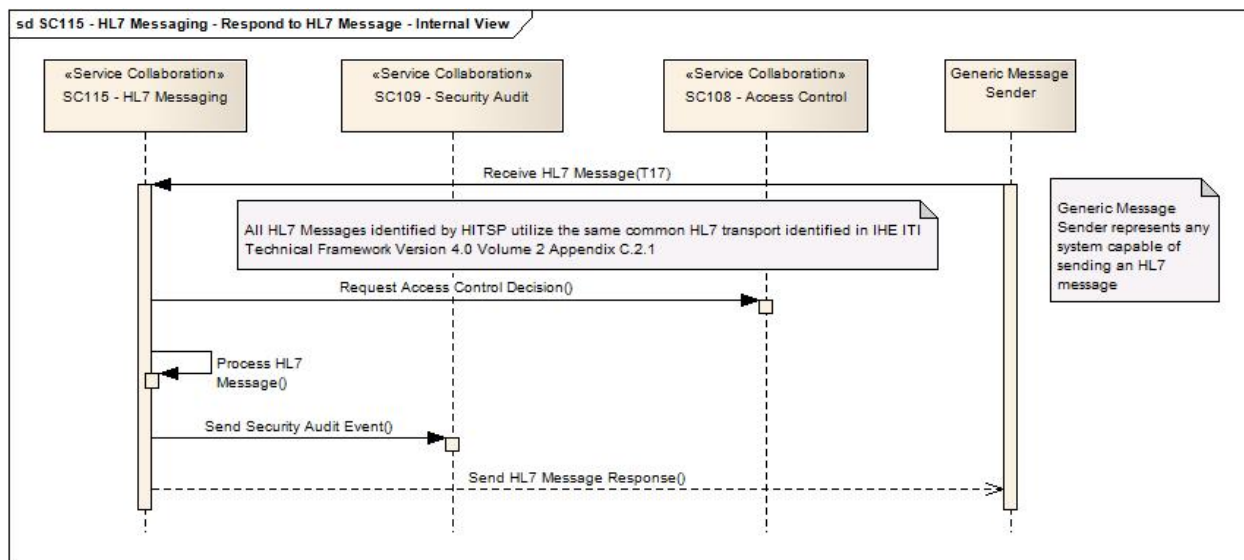
Post-condition	Uses SC, T, TP or C	Interface	Purpose
None			

² All HL7 Messages identified by HITSP utilize the same common HL7 transport identified in IHE ITI Technical Framework Version 4.0 or later”



1.4.2 INTERFACE: RESPOND TO HL7 MESSAGE CAPABILITY

Figure 1-3 Respond HL7 Message Internal View



1.4.2.1 SEQUENCE DETAILS

Table 1-6 Respond HL7 Message – Pre-conditions

Pre-condition	Uses SC, T, TP or C	Interface	Purpose
None			

Table 1-7 Respond HL7 Message – Sequence of Constructs

Step Number	Uses SC, T, TP or C	Interface	Purpose
1	HITSP/T17 - Secured Communications Channel	Secure Node	To receive a secure communications channel for the HL7 message
2	HL7 Messaging ³	Depends on payload.	Receive the HL7 Message
3	HITSP/SC108 - Access Control Service	Request Access Control Decision	To ensure that the system that has connected has the authorization for the purpose of the message
4	n/a (loopback)	Internal Processing	If authorized process the message as defined by the message type
5	HITSP/SC109 - Security Audit	Send Security Audit Event	To record the success or failure of the HL7 message
6	HL7 Messaging ⁴	Depends on payload	Return the appropriate response according to authorization and the HL7 message request

³ All HL7 Messages identified by HITSP utilize the same common HL7 transport identified in IHE ITI Technical Framework Version 4.0 or later

⁴ All HL7 Messages identified by HITSP utilize the same common HL7 transport identified in IHE ITI Technical Framework Version 4.0 or later”



Table 1-8 Respond HL7 Message – Post-Conditions

Post-condition	Uses SC, T, TP or C	Interface	Purpose
None			



2.0 DOCUMENT UPDATES

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

2.1 JUNE 30, 2009

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

2.2 JULY 8, 2009

Upon approval by the HITSP Panel on July 8, 2009, this document is now Released for Implementation.

