ITU-T

H.830.8

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU (07/2016)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

E-health multimedia services and applications – Interoperability compliance testing of personal health systems (HRN, PAN, LAN, TAN and WAN)

Conformance of ITU-T H.810 personal health devices: WAN interface Part 8: Consent Management: Receiver

Recommendation ITU-T H.830.8



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## **Recommendation ITU-T H.830.8**

# Conformance of ITU-T H.810 personal health devices: WAN interface Part 8: Consent Management: Receiver

# **Summary**

Recommendation ITU-T H.830.8 is a transposition of Continua Health Alliance Test Tool DG2013, Test Suite Structure & Test Purposes, WAN Interface; Part 8: Consent Management. Receiver (Version 1.0, 2014-01-24), that was developed by the Continua Health Alliance. A number of versions of this specification existed before transposition.

This Recommendation includes an electronic attachment with the protocol implementation conformance statements (PICS) and the protocol implementation extra information for testing (PIXIT) required for the implementation of Annex A.

This Recommendation was initially approved as ITU-T H.838 (01/2015) and later renumbered, without further modifications, as ITU-T H.830.8 (01/2015) for consistency with the numbering of new WAN interface conformance testing specifications.

## **History**

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T H.838	2015-01-13	16	11.1002/1000/12256
1.0	ITU-T H.830.8	2015-01-13	16	11.1002/1000/12594
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# **Keywords**

Conformance testing, continua design guidelines, e-health, H.810, WAN interface, personal connected health devices, wide area network.

<sup>\*</sup> To access the Recommendation, type the URL http://handle.itu.int/ in the address field of your web browser, followed by the Recommendation's unique ID. For example, <a href="http://handle.itu.int/11.1002/1000/11830-en">http://handle.itu.int/11.1002/1000/11830-en</a>.

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**Electronic attachment**: This Recommendation includes an electronic attachment with the protocol implementation conformance statements (PICS) and the protocol implementation extra information for testing (PIXIT) required for the implementation of Annex A.

# Introduction

This Recommendation is a transposition of Continua Health Alliance Test Tool DG2013, Test Suite Structure & Test Purposes, WAN Interface; Part 8: Consent Management. Receiver (Version 1.0, 2014-01-24), that was developed by the Continua Health Alliance. A number of versions of this specification existed before transposition and these can be found in the table below.

Version	Date	Revision history	
1.0	2012-10-05	Initial release for Test Tool DG2011	
1.1	2013-05-24	Initial release for Test Tool DG2012. This uses "TSS&TP_DG2012_WAN_PART_8 (REC CM) v1.0.doc" as a baseline as new features included in [b-CDG 2012] do not affect the test procedures specified in this document.	
1.2	2014-01-24	Initial release for Test Tool DG2013. This uses "TSS&TP_DG2012_WAN_PART_8 (REC CM) v1.0.doc" as a baseline as new features included in [b-ITU-T H.810 (2013)] do not affect the test procedures specified in this document.	

## Recommendation ITU-T H.830.8

# Conformance of ITU-T H.810 personal health devices: WAN interface Part 8: Consent Management: Receiver

# 1 Scope

The scope of this Recommendation<sup>1</sup> is to provide a test suite structure and the test purposes (TSS & TP) for the WAN interface based on the requirements defined in the Continua Design Guidelines (CDG) [ITU-T H.810 (2015)]. The objective of this test specification is to provide a high probability of air interface interoperability between different devices.

TSS & TP for the WAN interface have been divided into the eight parts specified below. This Recommendation covers Part 8.

- Part 1: Web services interoperability Sender
- Part 2: Web services interoperability Receiver
- Part 3: SOAP/ATNA. Sender
- Part 4: SOAP/ATNA. Receiver
- Part 5: PCD-01 HL7 messages. Sender
- Part 6: PCD-01 HL7 messages. Receiver
- Part 7: Consent management. Sender
- Part 8: Consent management. Receiver

#### 2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- [ITU-T H.810 (2015)] Recommendation ITU-T H.810 (2015), *Interoperability design guidelines* for personal health systems.
- [ITU-T H.810 (2016)] Recommendation ITU-T H.810 (2016), *Interoperability design guidelines* for personal health systems.
- [IEEE 11073-20601A] IEEE 11073-20601A-2010, IEEE Health informatics Personal health device communication Part 20601: Application profile Optimized Exchange Protocol Amendment 1.

<a href="http://standards.ieee.org/findstds/standard/11073-20601a-2010.html">http://standards.ieee.org/findstds/standard/11073-20601a-2010.html</a>

<sup>&</sup>lt;sup>1</sup> This Recommendation includes an electronic attachment with the protocol implementation conformance statements (PICS) and the protocol implementation extra information for testing (PIXIT) required for the implementation of Annex A.

[IHE ITI TF-2] IHE ITI TF 2 (2009), Integrating the Healthcare Enterprise, IHE IT

Infrastructure Technical Framework, Volume 2 (ITI TF-2), Revision 6.0. It comprises three sub-volumes: 2a (Transactions Part A), 2b (Transactions Pa

Part B) and 2x (Appendices).

<a href="http://www.ihe.net/Technical\_Framework/upload/IHE\_ITI\_TF\_6-0\_Vol2a\_FT\_2009-08-10.pdf">http://www.ihe.net/Technical\_Framework/upload/IHE\_ITI\_TF\_6-0\_Vol2a\_FT\_2009-08-10.pdf</a>

<a href="http://www.ihe.net/Technical\_Framework/upload/IHE\_ITI\_TF\_6-0\_Vol2b\_FT\_2009-08-10.pdf">http://www.ihe.net/Technical\_Framework/upload/IHE\_ITI\_TF\_6-0\_Vol2b\_FT\_2009-08-10.pdf</a>

<a href="http://www.ihe.net/Technical\_Framework/upload/IHE\_ITI\_TF\_6-0\_Vol2x\_FT\_2009-08-10.pdf">http://www.ihe.net/Technical\_Framework/upload/IHE\_ITI\_TF\_6-0\_Vol2x\_FT\_2009-08-10.pdf</a>

#### 3 Definitions

#### 3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

- **3.1.1** agent [IEEE 11073-20601A]: A node that collects and transmits personal health data to an associated manager.
- **3.1.2** manager [IEEE 11073-20601A]: A node receiving data from one or more agent systems. Some examples of managers include a cellular phone, health appliance, set top box, or a computer system.

#### 3.2 Terms defined in this Recommendation

None.

## 4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

ATNA Audit Trail and Node Authentication

ATS Abstract Test Suite

CDA Clinical Document Architecture

CDG Continua Design Guidelines

DUT Device Under Test

ebXML electronic business using extensible Markup Language

EHR Electronic Health Record

INR International Normalized Ratio

IUT Implementation Under Test

MDS Medical Device System

MTOM Message Transmission Optimization Mechanism

NFC Near Field Communication

PCD Patient Care Device

PCO Point of Control and Observation

PCT Protocol Conformance Testing

PHD Personal Healthcare Device

PHDC Personal Healthcare Device Class

PHM Personal Healthcare Monitoring (report)

PICS Protocol Implementation Conformance Statement

PIXIT Protocol Implementation extra Information for Testing

S/MIME Secure/Multipurpose Internet Mail Extensions

SDP Service Discovery Protocol

SOAP Simple Object Access Protocol

SABTE Sleep Apnoea Breathing Therapy Equipment

TCRL Test Case Reference List

TCWG Test and Certification Working Group

TP Test Purpose

TSS Test Suite Structure

URI Uniform Resource Identifier

USB Universal Serial Bus

WAN Wide Area Network

WDM Windows Driver Model

WS Web Service

WSDL Web Service Description Language

XDR cross-enterprise Document Reliable interchange

XDS.b cross-enterprise Document Sharing-b

XML extensible Markup Language

## **5** Conventions

The key words "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "MAY", "MAY NOT" in this Recommendation are to be interpreted as in [b-ETSI SR 001 262].

- SHALL is equivalent to 'must' or 'it is required to'.
- SHALL NOT is equivalent to 'must not' or 'it is not allowed'.
- SHOULD is equivalent to 'it is recommended to'.
- SHOULD NOT is equivalent to 'it is not recommended to'.
- MAY is equivalent to 'is permitted'.
- MAY NOT is equivalent to 'it is not required that'.

NOTE-The above-mentioned key words are capitalized for illustrative purposes only and they do not appear capitalized within this Recommendation.

Reference is made in the ITU-T H.800-series of Recommendations to different versions of the Continua Design Guidelines (CDG) by a specific designation. The list of terms that may be used in this Recommendation is provided in Table 1.

Table 1 – List of designations associated with the various versions of the CDG

CDG release	Transposed as	Version	Description	Designation
2016 plus errata	[ITU-T H.810 (2016)]	6.1	Release 2016 plus errata noting all ratified bugs [ITU-T H.810 (2016)].	-
2016	_	6.0	Release 2016 of the CDG including maintenance updates of the CDG 2015 and additional guidelines that cover new functionalities.	Iris
2015 plus errata	[ITU-T H.810 (2015)]	5.1	Release 2015 plus errata noting all ratified bugs [ITU-T H.810 (2015)].	_
2015	-	5.0	Release 2015 of the CDG including maintenance updates of the CDG 2013 and additional guidelines that cover new functionalities.	Genome
2013 plus errata	[ITU-T H.810 (2013)]	4.1	Release 2013 plus errata noting all ratified bugs [b-ITU-T H.810 (2013)].	_
2013	-	4.0	Release 2013 of the CDG including maintenance updates of the CDG 2012 and additional guidelines that cover new functionalities.	Endorphin
2012 plus errata	_	3.1	Release 2012 plus errata noting all ratified bugs [b-CDG 2012].	_
2012	-	3.0	Release 2012 of the CDG including maintenance updates of the CDG 2011 and additional guidelines that cover new functionalities.	Catalyst
2011 plus errata	_	2.1	CDG 2011 integrated with identified errata.	_
2011	-	2.0	Release 2011 of the CDG including maintenance updates of the CDG 2010 and additional guidelines that cover new functionalities [b-CDG 2011].	Adrenaline
2010 plus errata	ı	1.6	CDG 2010 integrated with identified errata	-
2010	-	1.5	Release 2010 of the CDG with maintenance updates of the CDG Version 1 and additional guidelines that cover new functionalities [b-CDG 2010].	1.5
1.0	-	1.0	First released version of the CDG [b-CDG 1.0].	_

# **6** Test suite structure (TSS)

The test purposes (TPs) for the WAN interface have been divided into the main subgroups specified below. Annex A describes the TPs for subgroups 2.5.1 and 2.5.2 (shown in bold).

- Group 1: Sender (SEN)
  - Group 1.1: Web services interoperability (WSI)
    - Subgroup 1.1.1: Basic profile (BP)
    - Subgroup 1.1.2: Basic security profile (BSP)
    - Subgroup 1.1.3: Reliable messaging (RM)

- Group 1.2: SOAP (SOAP)
  - Subgroup 1.2.1: SOAP headers (HEAD)
- Group 1.3: Audit (ATNA)
  - Subgroup 1.3.1: General (GEN)
  - Subgroup 1.3.2: PCD-01 (PCD-01)
  - Subgroup 1.3.3: Consent management (CM)
- Group 1.4: PCD-01 HL7 messages (PCD-01-DATA)
  - Subgroup 1.4.1: General (GEN)
  - Subgroup 1.4.2: Design guidelines (DG)
  - Subgroup 1.4.3: Pulse oximeter (PO)
  - Subgroup 1.4.4: Blood pressure monitor (BPM)
  - Subgroup 1.4.5: Thermometer (TH)
  - Subgroup 1.4.6: Weighing scales (WEG)
  - Subgroup 1.4.7: Glucose meter (GL)
  - Subgroup 1.4.8: Cardiovascular fitness and activity monitor (CV)
  - Subgroup 1.4.9: Strength fitness equipment (ST)
  - Subgroup 1.4.10: Independent living activity hub (HUB)
  - O Subgroup 1.4.11: Adherence monitor (AM)
  - Subgroup 1.4.12: Peak expiratory flow monitor (PF)
  - Subgroup 1.4.13: Body composition analyser (BCA)
  - Subgroup 1.4.14: Basic electrocardiograph (ECG)
  - Subgroup 1.4.15: International normalized ratio (INR)
  - Subgroup 1.4.16: Sleep apnoea breathing therapy equipment (SABTE)
- Group 1.5: Consent management (CM)
  - Subgroup 1.5.1: WAN XDR transaction (TRANS)
  - Subgroup 1.5.2: WAN metadata validation (META)
  - Subgroup 1.5.3: WAN consent directive validation (CDV)
- Group 1.6: hData observation upload (HDATA)
  - Subgroup 1.6.1: General (GEN)
- Group 1.7: Questionnaires (QUE)
  - Subgroup 1.7.1: General (GEN)
  - Subgroup 1.7.2: CDA validation (CDA)
- Group 2: Receiver (REC)
  - Group 2.1: Web service interoperability (WSI)
    - Subgroup 2.1.1: Basic profile (BP)
    - Subgroup 2.1.2: Basic security profile (BSP)
    - Subgroup 2.1.3: Reliable messaging (RM)
  - Group 2.2: SOAP (SOAP)
    - Subgroup 2.2.1: SOAP headers (HEAD)
  - Group 2.3: Audit (ATNA)
    - Subgroup 2.3.1: General (GEN)

- Subgroup 2.3.2: PCD-01 (PCD-01)
- Subgroup 2.3.3: Consent management (CM)
- Group 2.4: PCD-01 HL7 messages (PCD-01-DATA)
  - Subgroup 2.4.1: General (GEN)
  - Subgroup 2.4.2: Design guidelines (DG)
  - Subgroup 2.4.3: Pulse oximeter (PO)
  - Subgroup 2.4.4: Blood pressure monitor (BPM)
  - Subgroup 2.4.5: Thermometer (TH)
  - Subgroup 2.4.6: Weighing scales (WEG)
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  - Subgroup 2.4.12: Peak expiratory flow monitor (PF)
  - Subgroup 2.4.13: Body composition analyser (BCA)
  - Subgroup 2.4.14: Basic electrocardiograph (ECG)
  - Subgroup 2.4.15: International normalized ratio (INR)
  - Subgroup 2.4.16: Sleep apnoea breathing therapy equipment (SABTE)
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- Group 2.6: hData observation upload (HDATA)
  - Subgroup 2.6.1: General (GEN)
  - Subgroup 2.6.2: hData record format (HRF)
- Group 2.7: Questionnaires (QUE)
  - Subgroup 2.7.1: General (GEN)
  - Subgroup 2.7.2: CDA validation (CDA)
  - Subgroup 2.7.3: hData record format (HRF)

#### 7 Electronic attachment

The protocol implementation conformance statements (PICS) and the protocol implementation extra information for testing (PIXIT) required for the implementation of Annex A can be downloaded from <a href="http://handle.itu.int/11.1002/2000/12067">http://handle.itu.int/11.1002/2000/12067</a>.

In the electronic attachment, letters "C" and "I" in the column labelled "Mandatory" are used to distinguish between "PICS" and "PIXIT" respectively during testing. If the cell is empty, the corresponding PICS is "independent". If the field contains a "C2, the corresponding PICS is dependent on other PICS, and the logical expression is detailed in the "SCR\_Expression" field. The static conformance review (SCR) is used in the test tool to assert whether the PICS selection is consistent.

#### Annex A

# **Test purposes**

(This annex forms an integral part of this Recommendation.)

#### A.1 TP definition conventions

The test purposes (TPs) are defined according to the following rules:

- **TP Id**: This is a unique identifier (TP/<TT>/<DUT>/<GR>/<SGR>/<XX> <NNN>). It is specified according to the naming convention defined below:
  - Each test purpose identifier is introduced by the prefix "TP".
  - <TT>: This is the test tool that will be used in the test case.
    - WAN: Wide area network
  - O COUTS: This is the device under test.
    - SEN: WAN observation sender
    - REC: WAN observation receiver
  - <GR>: This identifies a group of test cases.
  - <SGR>: This identifies a subgroup of test cases.
  - <XX>: This identifies the type of testing.
    - BV: Valid behaviour test
    - BI: Invalid behaviour test
  - <NNN>: This is a sequential number that identifies the test purpose (TP).
- **TP label**: This is the title of the TP.
- **Coverage**: This contains the specification reference and clause to be checked by the TP.
  - Spec: This indicates the earliest version of the specification from which the testable items to be checked by the TP are included.
  - Testable Item: This contains testable items to be checked by the TP.
- **Test purpose**: This is a description of the requirements to be tested.
- **Applicability**: This contains the PICS items that define if the test case is applicable or not for a specific device. When a TP contains an "ALL" in this field it means that it applies to the device under test within that scope of the test (specialization, transport used, etc.).
- Other PICS: This contains additional PICS items (apart from the PICS specified in the Applicability row) which are used within the test case implementation and can modify the final verdict. When this row is empty, it means that only the PICS specified in the Applicability row are used within the test case implementation.
- **Initial condition**: This indicates the state to which the DUT needs to be moved at the beginning of TC execution.
- **Test procedure**: This describes the steps to be followed in order to execute the test case.
- **Pass/Fail criteria**: This provides criteria to decide whether the DUT passes or fails the test case.

# A.2 Subgroup 2.5.1: WAN XDR Transaction (TRANS)

TP Id		TP/WAN/REC/CM/TRANS/BV-000			
TP label		Provide and Register Document Set-b Transaction Response			
Coverage	Spec	[b-CDG 2012], WAN interface requirements for consent management			
	Testable items	ConsentReceiver1; M			
	Spec	[IHE ITI TF-2], Volume 2b			
	Testable items	ProvideResponse1; M	ProvideResponse2; M	ProvideProtocol2; M	
		ProvideProtocol10; M	ProvideProtocol11; M		
Test purpose	e	Check that:			
		Consent Enabled WAN Obse Directives consent document	rvation Receiver shall be able to (s)	receive, HL7 CDA R2 Consent	
		[AND]			
		The Document Repository shall send a Provide and Register Document Set-b Response when the processing of a Provide and Register Document Set-b Request is complete			
		[AND]			
		The Provide and Register Document Set-b Response message shall carry the status of the requested operation and an error message if the requested operation failed.			
		[AND]			
		The Provide and Register Document Set-b transaction shall use SOAP12 and MTOM with XOP encoding.			
		[AND]			
		The Document Repository sharman saction in MTOM/XOP for		e and Register Document Set-b	
		[AND]			
		The response message shall use MTOM/XOP format			
Applicability		C_REC_000 AND C_REC_GEN_002 AND C_REC_GEN_003			
Other PICS					
Initial condition		The receiver under test has published the document recipient service and is ready to receive a "Provide and Register Document Set-b Request" sent by the simulated sender.			
Test procedure		The simulated sender sends a "Provide and Register Document Set-b Request" with a clinical document architecture (CDA) using MTOM/XOP.			
		The receiver under test responds with a "Provide and Register Document Set-b Response" with status = "urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success" using SOAP12 [b-SOAP 1.2].			
Pass/Fail criteria		All steps are as specified with	in the test procedure above.		
Notes					

# A.3 Subgroup 2.5.2: WAN Service Validation (SER)

TP ld		TP/WAN/REC/CM/SER/BV-000			
TP label		Service WSDL			
Coverage	ge Spec [IHE ITI TF-2], Volume 2b				
	Testable items	ProvideProtocol3; M	ProvideProtocol4; M	ProvideProtocol5; M	
	items	ProvideProtocol6; M	ProvideProtocol7; M	ProvideProtocol8; M	
Test purpos	se	Check that:			
		The following types shall be im WSDL:	ported (xsd:import) in the /de	finitions/types section of the	
		- namespace="urn:oasis:name	es:tc:ebxml-regrep:xsd:rs:3.0	", schema="rs.xsd"	
		- namespace="urn:ihe:iti:xds-b	:2007", schemaLocation="IH	IEXDS.xsd"	
		[AND]			
		The /definitions/message/part/b Request message of the WS "ihe:ProvideAndRegisterDocum	DL shall be defined as	ovide and Register Document Set-	
		[AND]			
		The /definitions/message/part/b Response message of the W		ovide and Register Document Set- :RegistryResponse"	
		[AND]			
The /definitions/portType/operation/input/@wsaw:Action attribute for Document Set-b Request message of the WSDL shall be defined a "urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-b"					
		[AND]			
		The /definitions/portType/operation/output/@wsaw:Action attribute for the Provide and Register Document Set-b Response message of the WSDL shall be defined as "urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-bResponse"			
		[AND]			
		The /definitions/portType/opera shall be defined as "urn:ihe:iti:2			
Applicabilit	у	C_REC_000 AND C_REC_GE	N_002 AND C_REC_GEN_0	003	
Other PICS					
Initial condi	tion	The receiver under test has published its WSDL description for a consent management service			
Test proced	lure	Look up the WSDL description using the corresponding URL given by the receiver under test (I_REC_CM_001). Check that:			
		There are two xsd:import elements in the definitions/types section for which the namespaces are:			
		namespace="urn:oasis:names:	tc:ebxml-regrep:xsd:rs:3.0"		
		namespace="urn:ihe:iti:xds-b:2	2007"		
		/definitions/message/part/@element = "ihe:ProvideAndRegisterDocumentSetRequest" for the "Provide and Register Document Set-b Request"			
		/definitions/message/part/@ele Document Set-b Response"	ement = " ihe:RegistryRespor	nse " for the "Provide and Register	
		/definitions/portType/operation/	/input/@wsaw:Action =		

	"urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-b" for the "Provide and Register Document Set-b Request"
	/definitions/portType/operation/input/@wsaw:Action = "urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-bResponse" for the "Provide and Register Document Set-b Response"
	/definitions/portType/operation/soap12:operation/@soapAction = "urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-b"
Pass/Fail criteria	All steps are as specified within the test procedure above.
Notes	

TP Id		TP/WAN/REC/CM/SER/BV-001				
TP label		Service Metadata Validation				
Coverage	Spec	[IHE ITI TF-2], Volume 2b				
	Testable items	ProvideRecipient3; M	ProvideRecipient5; O	ProvideRecipient7; C		
Test purpos	е	Check that:				
		A Document Repository shall v Provide and Register transaction	alidate the following metadata e on:	lements received as part of a		
		- XDSDocumentEntry.uniqueId	1			
		- XDSSubmissionSet.sourceId				
		[AND]				
			Id element is received, a Docum certain sources and use this field			
		[AND]				
		If the attributes "hash" and "size 41] transaction, they shall be ig	e" are received in a Provide and nored.	Register Document Set-b [ITI-		
Applicability	1	C_REC_000 AND C_REC_GEN_002 AND C_REC_GEN_003				
Other PICS						
Initial condi	tion	The receiver under test has published the document recipient service and is ready to receive a "Provide and Register Document Set-b Request" sent by the simulated sender.				
Test proced	ure	The Simulated Sender sends a "Provide and Register Document Set-b Request" message including XDSSubmissionSet.sourceld, XDSDocumentEntry.uniqueld, XDSDocumentEntry.hash and XDSDocumentEntry.size elements with correct values.				
		The Receiver under test responds with a "Provide and Register Document Set-b Response" with status Success				
		The simulated sender sends a "Provide and Register Document Set-b Request" message including an XDSDocumentEntry.hash element with a wrong value				
		The receiver under test responds with a "Provide and Register Document Set-b Response" with status Success				
		The simulated sender sends a "Provide and Register Document Set-b Request" message including an XDSDocumentEntry.size element with a wrong value				
		The receiver under test responds with a "Provide and Register Document Set-b Response" with status Success				
		The simulated sender sends a "Provide and Register Document Set-b Request" message including a different XDSSubmissionSet.sourceId element				
		The receiver under test may accept or may not accept the message.				

Pass/Fail criteria	All steps are as specified within the test procedure above.
Notes	

TP Id		TP/WAN/REC/CM/SER/BV-002			
TP label		Multiple Documents and Errors			
Coverage Spec		[IHE ITI TF-2], Volume 2b			
	Testable items	ProvideReqActions3; M	ProvideRecipient1; M		
Test purpos	е	Check that:			
		A detected failure it shall result in an error message being returned to the Document Source thus terminating this transaction.			
		[AND]			
		A Document Repository shall documents.	be capable of accepting submiss	ions containing multiple	
Applicability	7	C_REC_000 AND C_REC_GEN_002 AND C_REC_GEN_003			
Other PICS					
Initial condit	ion	The receiver under test has published the document recipient service and is ready to receive a "Provide and Register Document Set-b Request" sent by the simulated sender.			
Test proced	ure	The simulated sender sends a "Provide and Register Document Set-b Request" with two documents using MTOM/XOP			
		The receiver under test responds with a "Provide and Register Document Set-b Response" with status = "urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success"			
		The simulated sender sends a "Provide and Register Document Set-b Request" without attaching a document using MTOM/XOP			
		The receiver under test responds with a "Provide and Register Document Set-b Response" with status = "urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Failure".			
Pass/Fail criteria		All steps are as specified within the test procedure above.			
Notes					

# **Bibliography**

[b-ITU-T H.810 (2013)] Recommendation ITU-T H.810 (2013), Interoperability design

guidelines for personal health systems.

[b-CDG 1.0] Continua Health Alliance, Continua Design Guidelines v1.0 (2008),

Continua Design Guidelines.

[b-CDG 2010] Continua Health Alliance, Continua Design Guidelines v1.5 (2010),

Continua Design Guidelines.

[b-CDG 2011] Continua Health Alliance, Continua Design Guidelines (2011),

"Adrenaline" Continua Design Guidelines.

[b-CDG 2012] Continua Health Alliance, Continua Design Guidelines (2012),

"Catalyst", Continua Design Guidelines.

[b-ETSI SR 001 262] ETSI SR 001 262 v1.8.1 (2003): ETSI drafting rules.

https://docbox.etsi.org/MTS/MTS/10-PromotionalMaterial/MBS-20111118/Referenced%20Documents/Drafting%20Rules.pdf

[b-HL7 CDA IG] Health Level Seven (2011), Health Level Seven, HL7 Implementation

Guide for Clinical

Document Architecture, Release 2: Consent Directives, Release 1,

HL7 Draft Standard for Trial Use.

<a href="http://www.hl7.org/documentcenter/public/standards/dstu/CDAR2\_IG%20\_CONSENTDIR\_DS">http://www.hl7.org/documentcenter/public/standards/dstu/CDAR2\_IG%20\_CONSENTDIR\_DS</a>

TU\_2011JAN.pdf>

[b-Receiver PICS & PIXIT] WAN Receiver DG2013 PICS and PIXIT excel sheet v1.2.

http://handle.itu.int/11.1002/2000/12067

[b-Sender PICS & PIXIT] WAN Sender DG2013 PICS and PIXIT excel sheet v1.3.

http://handle.itu.int/11.1002/2000/12067

[b-SOAP 1.2] W3C SOAP 1.2 (2007), SOAP Version 1.2 (Second Edition).

<http://www.w3.org/TR/soap/>

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