

Federal Office for Information Security

Technical Guideline TR-03122-2

Conformance Test Specification for BSI TR-03121 Biometrics for Public Sector Applications

Part 2: Test Cases for High Level Biometric Services (HLBS)

Version 6.0

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Table of Content

1	Testcases for Servers (SRV)	1
1.1	Testcases for All Services (ALL)	1
1.2	Testcases for a Specific Set of Service Definitions (APP)	29
1.3	Testcases for Service Definition Facial Image Acquisition System (FIAS)	33
1.4	Testcases for Service Definition Basic Facial Image Acquisition System (BFIAS)	. 41
2	Testcases for Clients (CLI)	46

1 Testcases for Servers (SRV)

This chapter contains testcases for implementations of a HLBS server.

1.1 Testcases for All Services (ALL)

This section contains testcases that are applicable to HLBS servers implementing any service (ALL).

1.1.1 Testcases for Operation acquireService

Test Case ID: TC-H	LBS-SRV-ALL-acquireService-001
Scope	Testing acquireService operation for a HLBS Server with a valid service, device, sessionHandle combination.
Applicability	The testcase is applicable for the following services:
	Facial Image Acquisition System
	Basic Facial Image Acquisition System
	Fingerprint Acquisition
	Rolled Fingerprint Acquisition
	Automated Acquisition Slap Fingerprints SSS
	Automated Acquisition Facial Images SSS
	Facial Image Delivery System
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).
	• A hardware-device that is compatible with the service to be tested is connected and available, i.e. not currently in use.
CTS Mode	• automatic
	no provision of pre-defined input data
	• HTTP method: POST
	• CTS acts as: Client
Description	Step Description / Expected Result
	1 Description:
	A HLBS response-message for the operation 'acquireService' is sent. The fol-

 A HLBS response-message for the operation 'acquireService' is sent. The following parameters are provided:

Кеу	Value/Property
serviceID	The serviceID is valid w.r.t. the service that should be tested
deviceID	The deviceID corresponds to the device ac- cording to the precondition (i.e. valid and available)
sessionHandle	my_SessionHandle

Table 1.2 Parameters for the operation 'acquireService'.

Expected Result:

- A HLBS response-message for the operation 'acquireService' is received.
- The received hlbs message contains the value my_SessionHandle at key sessionHandle.

Table 1.1 Test Case ID: TC-HLBS-SRV-ALL-acquireService-001

Test Case ID: <u>TC-HI</u>	LBS-SRV-ALL-acquireService-002			
Scope	Testing the acquireService operation for a HLBS Server with a valid service, device combination where no sessionHandle is given.			
Applicability	The testcase is applicable for the following services:			
	Facial Image Acquisition System			
	Basic Facial Image Acquisition System			
	Fingerprint Acquisition			
	Rolled Fingerprint Acquisition			
	Automated Acquisition Slap Fingerprints SSS			
	Automated Acquisition Facial Images SSS			
	Facial Image Delivery System			
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).			
	• A hardware-device that is compatible with the service to be tested is connected and available, i.e. not currently in use.			
CTS Mode	• automatic			
	no provision of pre-defined input data			
	• HTTP method: POST			
	• CTS acts as: Client			
Description	Step Description / Expected Result			
	1 Description:			
	 A HLBS response-message for the operation 'acquireService' is sent. The fol- lowing parameters are provided: 			

Key	Value/Property
serviceID	The serviceID is valid w.r.t. the service that should be tested
deviceID	The deviceID is corresponding to the device according to the precondition (i.e. valid and available)

Table 1.4 Parameters for the operation 'acquireService'.

Expected Result:

- A HLBS response-message for the operation 'acquireService' is received.
- The received hlbs message contains a value at key sessionHandle that has the following property:

sessionHandle is non-empty

Table 1.3 Test Case ID: TC-HLBS-SRV-ALL-acquireService-002

Test Case ID: TC-HLBS-SRV-ALL-acquireService-003

Scope

Testing the acquireService operation for a HLBS Server with a device that is not available.

Test Case ID: TC-H	LBS-SRV-ALL-acqu	ireService-003			
Applicability	The testcase is	applicable for the following set	rvices:		
	Facial Imag	ge Acquisition System			
	• Basic Facia	l Image Acquisition System			
	Fingerprin	t Acquisition			
	Rolled Fing	gerprint Acquisition			
	Automated	Acquisition Slap Fingerprints S	SSS		
	Automated	Acquisition Facial Images SSS			
	Facial Imag	ge Delivery System			
Preconditions	• The IUT (i.e tool).	e. HLBS-Server) is running and o	configured to communicate with the CTS (HLBS test-		
		e-device that is compatible with e, i.e. the service-device combina	the service to be tested is connected but is currently ation was already acquired.		
CTS Mode	• automatic				
	no provision of pre-defined input data				
	• HTTP method: POST				
	CTS acts as	:Client			
Description	Step	Description / Expected F	Result		
	1	Description:			
		 A HLBS response-mes lowing parameters are 	sage for the operation 'acquireService' is sent. The fol- provided:		
		Key	Value/Property		
		serviceID	The serviceID is valid w.r.t. the service that should be tested		
		deviceID	The deviceID corresponds to the device ac- cording to the precondition (i.e. valid but unavailable)		
		Table 1.6 Parameters for	the operation 'acquireService'.		
		Expected Result:			
		• A HLBS fault-message received.	'AlreadyInUse' for the operation 'acquireService' is		

• The received hlbs message contains a value at key serviceID that has the following property:

The serviceID matches the serviceID that was requested

• The received hlbs message contains a value at key deviceID that has the following property:

The deviceID matches the deviceID that was requested

Table 1.5 Test Case ID: TC-HLBS-SRV-ALL-acquireService-003

Test Case ID: TC-HLBS	S-SRV-A	LL-acq	uireService-004				
-				 	 	-	

Scope

Testing the acquireService operation for a HLBS Server with a service that is unknown to the server.

Test Case ID: TC-H	LBS-SRV-ALL-acquireService-004
Applicability	The testcase is applicable for the following services:
	Facial Image Acquisition System
	Basic Facial Image Acquisition System
	Fingerprint Acquisition
	Rolled Fingerprint Acquisition
	Automated Acquisition Slap Fingerprints SSS
	Automated Acquisition Facial Images SSS
	Facial Image Delivery System
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).
	• A hardware-device that is compatible with the service to be tested is connected and available, i.e. not currently in use.
	• A serviceID is given that is unknown to the server, i.e. does not correspond to a service the server offers.
CTS Mode	• automatic
	no provision of pre-defined input data
	• HTTP method: POST
	• CTS acts as: Client
Description	Step Description / Expected Result
	1 Description:
	A HLBS response-message for the operation 'acquireService' is sent. The fol-

lowing parameters are provided:

Кеу	Value/Property
serviceID	The serviceID is unknown to the server ac- cording to the precondition
deviceID	The deviceID corresponds to the device ac- cording to the precondition (i.e. valid and available)

Table 1.8 Parameters for the operation 'acquireService'.

Expected Result:

- A HLBS fault-message 'InvalidServiceId' for the operation 'acquireService' is received.
- The received hlbs message contains a value at key id that has the following property:

The value of "id" is equal to the value of serviceID that was requested.

Table 1.7 Test Case ID: TC-HLBS-SRV-ALL-acquireService-004

Test Case ID: TC-HLBS-SRV-ALL-acquireService-005

Scope

Testing the acquireService operation for a HLBS Server with a deviceID that is unknown to the server.

Applicability	The testcase	is applicable for the following se	rvices:		
ipplicability		age Acquisition System			
		al Image Acquisition System			
		nt Acquisition			
		ngerprint Acquisition			
		ed Acquisition Slap Fingerprints	SSS		
		ed Acquisition Facial Images SSS			
		age Delivery System			
Preconditions			configured to communicate with the CTS (HLBS test-		
		D is given that is unknown to the the server.	e server, i.e. does not correspond to a device that is		
CTS Mode	• automatio	C			
	no provision of pre-defined input data				
	• HTTP method: POST				
	CTS acts a	as: Client			
Description	Step	Description / Expected	Result		
	1	Description:			
		 A HLBS response-me lowing parameters ar 	ssage for the operation 'acquireService' is sent. The fol e provided:		
		Key	Value/Property		
		serviceID	The serviceID is valid w.r.t. the service that should be tested		
		deviceID	The deviceID is unknown to the server ac- cording to the precondition		
		Table 1.10 Parameters for	or the operation 'acquireService'.		
		Expected Result:			
		 A HLBS fault-message received. 	e 'InvalidDeviceId' for the operation 'acquireService' is		
		received.	e 'InvalidDeviceId' for the operation 'acquireService' is assage contains a value at key id that has the following		

The value of id is equal to the value of deviceID that was requested.

Table 1.9 Test Case ID: TC-HLBS-SRV-ALL-acquireService-005

Test Case ID: TC-HLBS-SRV-ALL-acquireService-006

Scope

Testing the acquireService operation for a HLBS Server with a deviceID that is invalid in combination with the respective service.

Applicability	The testesse is a	applicable for the following as	wines:		
Applicability		oplicable for the following set	rvices:		
	-	Acquisition System			
		mage Acquisition System			
	Fingerprint A	-			
	-	print Acquisition			
		cquisition Slap Fingerprints S	SSS		
		cquisition Facial Images SSS			
	Facial Image	Delivery System			
Preconditions	• The IUT (i.e. I tool).	HLBS-Server) is running and	configured to communicate with the CTS (HLBS test-		
			rver but invalid in combination with the service to be combination with "Facial Image Acquisition System".		
CTS Mode	• automatic				
	no provision	of pre-defined input data			
	• HTTP method	I: POST			
	• CTS acts as: C	lient			
Description	Step	Description / Expected I	Result		
	1	Description:			
		A HLBS response-mes lowing parameters are	sage for the operation 'acquireService' is sent. The fol- provided:		
		Key	Value/Property		
		serviceID	The serviceID is valid w.r.t. the service that should be tested.		
		deviceID	The deviceID is known to the server but in- valid in combination with the service (cf. to precondition).		

Expected Result:

- A HLBS fault-message 'InvalidDeviceId' for the operation 'acquireService' is received.
- The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of deviceID that was requested.

Table 1.11 Test Case ID: TC-HLBS-SRV-ALL-acquireService-006

1.1.2 Testcases for Operation beginServiceExecution

Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-001

Scope

Testing the beginServiceExecution operation on HLBS Server for a service that was acquired beforehand.

Test Case ID: TC-H	LBS-SRV-ALL-beginServic	ceExecution-001	
Applicability	The testcase is application	able for the following servic	res:
	Facial Image Acquisition System		
	Basic Facial Image	Acquisition System	
	Fingerprint Acqui	sition	
	Rolled Fingerprint	t Acquisition	
	Automated Acquis	sition Slap Fingerprints SSS	
	Automated Acquis	sition Facial Images SSS	
	Facial Image Deliv	very System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
			een acquired, i.e. aquireService was called with a A corresponding sessionHandle exists.
CTS Mode	• automatic		
	• no provision of pr	e-defined input data	
	• HTTP method: PC	DST	
	• CTS acts as: Clien	t	
Description	Step I	Description / Expected Res	ult
	1 <i>I</i>	Description:	
		A HLBS response-messag The following parameter	e for the operation 'beginServiceExecution' is sent. is provided:
		Key	Value/Property
		sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
		Table 1.14 Parameters for the	e operation 'beginServiceExecution'.
	E	Expected Result:	
		A HLBS response-messag ceived.	e for the operation 'beginServiceExecution' is re-

• The received hlbs message contains a value at key feedback that has the following property:

The value at key feedback is of type hlbs:Feedback.

Table 1.13 Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-001

Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-002		
Scope	Testing the beginServiceExecution operation on HLBS Server, focussed on the case that the provi- ded sessionHandle is unknown.	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	
	Basic Facial Image Acquisition System	
	Fingerprint Acquisition	
	Rolled Fingerprint Acquisition	
	Automated Acquisition Slap Fingerprints SSS	
	Automated Acquisition Facial Images SSS	
	Facial Image Delivery System	

Test Case ID: TC-H	LBS-SRV-ALL-begin	nServiceExecution-002	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
			been acquired, i.e. aquireService was called with a D. A corresponding sessionHandle exists.
CTS Mode	• automatic		
	 no provisio 	on of pre-defined input data	
	• HTTP meth	nod: POST	
	• CTS acts as: Client		
Description	Step	Description / Expected Re	esult
	1	Description:	
		A HLBS response-messa The following parameter	age for the operation 'beginServiceExecution' is sent. er is provided:
		Key	Value/Property
		sessionHandle	The sessionHandle does not match the ses- sionHandle that was acquired according to the precondition.
		Table 1.16 Parameters for	the operation 'beginServiceExecution'.
		Expected Result:	
		 A HLBS fault-message ' viceExecution' is receiv 	InvalidSessionHandle' for the operation 'beginSer- ed.
		 The received hlbs messa property: 	age contains a value at key id that has the following
		The value of id is equal	to the value of sessionHandle that was requested.
		· · · · · · · · · · · · · · · · · · ·	

Table 1.15 Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-002

Test Case ID: TC-H	LBS-SRV-ALL-beginServiceExecution-003
Scope	Testing the beginServiceExecution operation on HLBS Server, focussed on the case that the service is already running (i.e. beginServiceExecution was called before).
Applicability	The testcase is applicable for the following services:
	Facial Image Acquisition System
	Basic Facial Image Acquisition System
	Fingerprint Acquisition
	Rolled Fingerprint Acquisition
	Automated Acquisition Slap Fingerprints SSS
	Automated Acquisition Facial Images SSS
	Facial Image Delivery System
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).
	• A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.

Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-003

Step

CTS Mode

- automatic
 - no provision of pre-defined input data
 - HTTP method: POST
 - CTS acts as: Client

Description

Description:

Description / Expected Result

A HLBS response-message for the operation 'beginServiceExecution' is sent. The following parameter is provided:

Кеу	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.

Table 1.18 Parameters for the operation 'beginServiceExecution'.

Expected Result:

• A HLBS fault-message 'AlreadyRunning' for the operation 'beginServiceExecution' is received.

Table 1.17 Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-003

Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-004 Scope Testing the beginServiceExecution operation requiring MTOM for a HLBS Server that does not support MTOM. Applicability The testcase is applicable for the following services: Facial Image Acquisition System Basic Facial Image Acquisition System **Fingerprint Acquisition Rolled Fingerprint Acquisition** • Automated Acquisition Slap Fingerprints SSS Automated Acquisition Facial Images SSS • Facial Image Delivery System The HLBS Server does not support MTOM. Preconditions The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS testtool). A suitable service - device combination has been acquired, i.e. aquireService was called with a • valid combination of serviceID and deviceID. A corresponding sessionHandle exists. CTS Mode automatic no provision of pre-defined input data • HTTP method: POST • CTS acts as: Client Description **Description / Expected Result** Step

Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-004

1

Description:

• A HLBS response-message for the operation 'beginServiceExecution' is sent. The following parameters are provided:

Key	Value/Property
sessionHandle	The sessionHandle was acquired according to the precondition.
useMTOM	true

Table 1.20 Parameters for the operation 'beginServiceExecution'.

Expected Result:

• A HLBS fault-message 'MTOMNotSupported' for the operation 'beginServiceExecution' is received.

Table 1.19 Test Case ID: TC-HLBS-SRV-ALL-beginServiceExecution-004

1.1.3 Testcases for Operation configureService

Test Case ID: TC-H	LBS-SRV-ALL-con	nfigureService-001	
Scope		configureService operation for HLBS Ser be used for the Parameter with ID "Purp	rvers, focussed on whether the value "enrol- ose".
Applicability	The testcase is applicable for the following services:		
	Facial Ima	age Acquisition System	
	• Basic Faci	al Image Acquisition System	
	Fingerprin	nt Acquisition	
	Rolled Fire	ngerprint Acquisition	
	Automate	ed Acquisition Slap Fingerprints SSS	
	Automate	ed Acquisition Facial Images SSS	
	 Facial Ima 	age Delivery System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
		e service - device combination has been bination of serviceID and deviceID. A co	acquired, i.e. aquireService was called with a orresponding sessionHandle exists.
CTS Mode	• automatic		
	 no provisi 	ion of pre-defined input data	
	• HTTP met	hod: POST	
	CTS acts a	as:Client	
Description	Step	Description / Expected Result	
	1	Description:	
		 A HLBS response-message fo following parameters are pro 	or the operation 'configureService' is sent. The ovided:
		Key	Value/Property
		sessionHandle	The sessionHandle was acquired according to the precondition.
		parameters[1]/key	Purpose
		parameters[1]/string- Value	enrolment

Table 1.22 Parameters for the operation 'configureService'.

Expected Result:

Test Case ID: TC-HLBS-SRV-ALL-configureService-001

• A HLBS response-message for the operation 'configureService' is received.

Table 1.21 Test Case ID: TC-HLBS-SRV-ALL-configureService-001

	LBS-SRV-ALL-conf		
Scope		onfigureService operation for HLBS Se may be configured for the Parameter	ervers, focussed on whether the possible value with ID "Purpose".
Applicability	The testcase is applicable for the following services:		
	 Facial Imag 	ge Acquisition System	
	Basic Facia	l Image Acquisition System	
	• Fingerprin	t Acquisition	
	Rolled Fing	gerprint Acquisition	
	Automated	d Acquisition Slap Fingerprints SSS	
	Automated	d Acquisition Facial Images SSS	
	• Facial Imag	ge Delivery System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
		service - device combination has been pination of serviceID and deviceID. A c	acquired, i.e. aquireService was called with a corresponding sessionHandle exists.
CTS Mode	• automatic		
	no provisio	on of pre-defined input data	
	• HTTP meth	nod: POST	
	CTS acts as	:Client	
Description	Step	Description / Expected Result	
	1	Description:	
		 A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided: 	
		Key	Value/Property
		sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
		parameters[1]/key	Purpose
		parameters[1]/string- Value	verification
		Table 1.24 Parameters for the op	peration 'configureService'.
		Expected Result:	
		• A HLBS response-message f	or the operation 'configureService' is received.

Table 1.23 Test Case ID: TC-HLBS-SRV-ALL-configureService-002

Test Case ID: TC-HLBS-SRV-ALL-configureService-003

Scope

Testing the configureService operation for HLBS Servers, focussed on the case that the provided sessionHandle is unknown. A more generic version where the specific configuration is left to the evaluator.

Test Case ID: TC-H	LBS-SRV-ALL-con	figureService-003		
Applicability	The testcase is applicable for the following services:			
	Facial Image Acquisition System			
	Basic Facia	al Image Acquisition System		
	• Fingerprir	nt Acquisition		
	Rolled Fin	gerprint Acquisition		
	• Automate	d Acquisition Slap Fingerprints SSS		
	• Automate	d Acquisition Facial Images SSS		
	• Facial Ima	ge Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).			
			een acquired, i.e. aquireService was called with a A corresponding sessionHandle exists.	
CTS Mode	• automatic			
	 no provisi 	on of pre-defined input data		
	• HTTP met	hod: POST		
	• CTS acts a	s:Client		
Description	Step	Description / Expected Res	ult	
	1	Description:		
		 A HLBS response-messag following parameters are 	e for the operation 'configureService' is sent. The provided:	
		Key	Value/Property	
		sessionHandle	The sessionHandle does not match the ses- sionHandle that was acquired according to the precondition.	
		parameters[1]/key	The requested key matches a "Parameter	

Table 1.26 Parameters for the operation 'configureService'.

Expected Result:

parameters[1]/*

- A HLBS fault-message 'InvalidSessionHandle' for the operation 'configureService' is received.
- The received hlbs message contains a value at key id that has the following property:

spective service.

The value of id is equal to the value of sessionHandle that was requested.

 Table 1.25 Test Case ID: TC-HLBS-SRV-ALL-configureService-003

Test Case ID: TC-HLBS-SRV-ALL-configureService-004		
Scope	Testing the configureService operation for HLBS Servers, focussed on the case that the requested	
	"Parameter ID" is unknown.	

ID" that is a configuration option for the re-

The requested value matches a "Possible Value" that is a configuration option for "Parameter ID" of the respective service.

Test Case ID: TC-H	(LBS-SRV-ALL-configureService-004	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	
	Basic Facial Image Acquisition System	
	Fingerprint Acquisition	
	Rolled Fingerprint Acquisition	
	Automated Acquisition Slap Fingerprints SSS	
	Automated Acquisition Facial Images SSS	
	Facial Image Delivery System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).	
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 	
	 A list of the configuration options (i.e. "Parameter ID" mapped to "Possible Values") that the IUT supports shall be given. 	
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method: POST	
	• CTS acts as: Client	
Description	Step Description / Expected Result	
	1 Description:	
	A HLBS response-message for the operation 'configureService' is sent. The	

following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
parameters[1]/key	The requested key does not match the "Pa- rameter ID" of any configuration option for the IUT.
parameters[1]/strin Value	ng- ANYVALUE

Table 1.28 Parameters for the operation 'configureService'.

Expected Result:

- A HLBS fault-message 'InvalidParameterKey' for the operation 'configureService' is received.
- The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of parameters[1]/key that was requested.

Table 1.27 Test Case ID: TC-HLBS-SRV-ALL-configureService-004

Test Case ID: TC-HLBS-SRV-ALL-configureService-005

Scope

Testing the configureService operation for HLBS Servers, focussed on the case that the requested "Value" is no "Possible Value".

Test Case ID: TC-H	LBS-SRV-ALL-configureService-005
Applicability	The testcase is applicable for the following services:
	Facial Image Acquisition System
	Basic Facial Image Acquisition System
	Fingerprint Acquisition
	Rolled Fingerprint Acquisition
	Automated Acquisition Slap Fingerprints SSS
	Automated Acquisition Facial Images SSS
	Facial Image Delivery System
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.
	• A list of the configuration options (i.e. "Parameter ID" mapped to "Possible Values") that the IUT supports shall be given.
CTS Mode	• automatic
	no provision of pre-defined input data
	• HTTP method: POST
	• CTS acts as: Client
Description	Step Description / Expected Result
	1 Description:
	A HLBS response-message for the operation 'configureService' is sent. The

following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
parameters[1]/key	Purpose
parameters[1]/string- Value	According to the precondition the value is not a configuration option in combination for "Purpose" (i.e. "parameters[1]/key") for the IUT.

Table 1.30 Parameters for the operation 'configureService'.

Expected Result:

- A HLBS fault-message 'InvalidParameterValue' for the operation 'configureService' is received.
- The received hlbs message contains the value Purpose at key parameter-Key.

Table 1.29 Test Case ID: TC-HLBS-SRV-ALL-configureService-005

1.1.4 Testcases for Operation endServiceExecution

Test Case ID: TC-HLBS-SRV-ALL-endServiceExecution-001

Scope

Testing the endServiceExecution operation on HLBS Server focussed on the case that a valid sessionHandle is provided.

Test Case ID: TC-HI	LBS-SRV-ALL-endServiceExecution-001			
Applicability	The testcase is applicable for the following services:			
	Facial Image Acquisition System			
	Basic Facial Image Acquisition System			
	Fingerprint Acquisition			
	Rolled Fingerprint Acquisition			
	Automated Acquisition Slap Fingerprints SSS			
	Automated Acquisition Facial Images SSS			
	Facial Image Delivery System			
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).			
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 			
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.			
CTS Mode	• automatic			
	no provision of pre-defined input data			
	• HTTP method: POST			
	• CTS acts as: Client			
Description	Step Description / Expected Result			
	1 Description:			
	• A HLBS response-message for the operation 'endServiceExecution' is sent. The following parameter is provided:			

Кеу	Value/Property
sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.

 Table 1.32 Parameters for the operation 'endServiceExecution'.

Expected Result:

• A HLBS response-message for the operation 'endServiceExecution' is received.

Table 1.31 Test Case ID: TC-HLBS-SRV-ALL-endServiceExecution-001

Test Case ID: TC-HLBS-SRV-ALL-endServiceExecution-002		
Testing the endServiceExecution operation on HLBS Server focussed on the case that an invalid sessionHandle is provided.		
The testcase is applicable for the following services:		
Facial Image Acquisition System		
Basic Facial Image Acquisition System		
Fingerprint Acquisition		
Rolled Fingerprint Acquisition		
Automated Acquisition Slap Fingerprints SSS		
Automated Acquisition Facial Images SSS		
Facial Image Delivery System		

Test Case ID: TC-H	LBS-SRV-ALL-end	ServiceExecution-002		
Preconditions	 The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLB tool). 			
			een acquired, i.e. aquireService was called with a . A corresponding sessionHandle exists.	
	• The servic called.	e that shall be tested is currently e	xecuted, i.e. beginServiceExecution has already been	
CTS Mode	• automatic			
	 no provisi 	on of pre-defined input data		
	• HTTP met	hod: POST		
	CTS acts as	s:Client		
Description	Step	Description / Expected Result		
	1	Description:		
		 A HLBS response-message for the operation 'endServiceExecution' is sent. The following parameter is provided: 		
		Key	Value/Property	
		sessionHandle	The sessionHandle does not match the ses- sionHandle that was acquired according to the precondition.	
		Table 1.34 Parameters for the	ne operation 'endServiceExecution'.	
	Expected Result:			

- A HLBS fault-message 'InvalidSessionHandle' for the operation 'endService-Execution' is received.
- The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of sessionHandle that was requested.

Table 1.33 Test Case ID: TC-HLBS-SRV-ALL-endServiceExecution-002

1.1.5 Testcases for Operation getResults

Test Case ID: TC-HLBS-SRV-ALL-getResults-001			
Scope	Testing the getResulsts operation on HLBS Server focussed on the case that a valid sessionHandle is provided after ServiceExecution is finished.		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Fingerprint Acquisition		
	Rolled Fingerprint Acquisition		
	Automated Acquisition Slap Fingerprints SSS		
	Automated Acquisition Facial Images SSS		
	Facial Image Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
	• A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.		
	• The execution of the service that shall be tested is finished, i.e. beginServiceExecution and en- dServiceExecution have already been called.		

Test Case ID: TC-	HLBS-SRV-ALL-get	tResults-001		
CTS Mode	• automatic			
	 no provis 	sion of pre-defined input data		
	• HTTP me	thod: POST		
	CTS acts	as: Client		
Description	Step	Description / Expected Res	ult	
	1	Description:		
		 A HLBS response-message for the operation 'getResults' is sent. The fol wing parameter is provided: 		
		Key	Value/Property	
		sessionHandle	The sessionHandle matches the sessi- onHandle that was acquired according to the precondition.	
		Table 1.36 Parameters for th	ne operation 'getResults'.	
		Expected Result:		
		A HLBS response-message	ge for the operation 'getResults' is received.	
		 The received hlbs messag lowing property: 	ge contains a value at key results that has the fol	
		results is of type hlbs Res	aulte	

results is of type hlbs:Results.

 Table 1.35 Test Case ID: TC-HLBS-SRV-ALL-getResults-001

Test Case ID: TC-HLBS-SRV-ALL-getResults-002				
Scope	Testing the getResulsts operation on HLBS Server focussed on the case that an invalid sessi- onHandle is provided after ServiceExecution is finished.			
Applicability	The testcase is applicable for the following services:			
	Facial Image Acquisition System			
	Basic Facial Image Acquisition System			
	Fingerprint Acquisition			
	Rolled Fingerprint Acquisition			
	Automated Acquisition Slap Fingerprints SSS			
	Automated Acquisition Facial Images SSS			
	Facial Image Delivery System			
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).			
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 			
	 The execution of the service that shall be tested is finished, i.e. beginServiceExecution and en- dServiceExecution have already been called. 			
CTS Mode	• automatic			
	no provision of pre-defined input data			
	• HTTP method: POST			
	• CTS acts as: Client			
Description	Step Description / Expected Result			

Test Case ID: TC-HLBS-SRV-ALL-getResults-002 1 Desc

Description:

• A HLBS response-message for the operation 'getResults' is sent. The following parameter is provided:

Кеу	Value/Property
sessionHandle	The sessionHandle does not match the ses- sionHandle that was acquired according to the precondition.

Table 1.38 Parameters for the operation 'getResults'.

Expected Result:

•

- A HLBS fault-message 'InvalidSessionHandle' for the operation 'getResults' is received.
 - The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of sessionHandle that was requested.

Table 1.37 Test Case ID: TC-HLBS-SRV-ALL-getResults-002

Test Case ID· TC-H	LBS-SRV-ALL-getRe	sults-003	
Scope	Testing the getResulsts operation on HLBS Server focussed on the case that an invalid sessi- onHandle is provided but ServiceExecution is not finished yet.		
Applicability The testcase is applicable for the following ser			es:
	Facial Image	Acquisition System	
	Basic Facial	Image Acquisition System	
	Fingerprint	Acquisition	
	Rolled Finge	rprint Acquisition	
	Automated A	Acquisition Slap Fingerprints SSS	
	Automated A	Acquisition Facial Images SSS	
	Facial Image	Delivery System	
Preconditions	• The IUT (i.e. tool).	HLBS-Server) is running and con	figured to communicate with the CTS (HLBS test-
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 		
	• The service t called.	hat shall be tested is currently exe	ecuted, i.e. beginServiceExecution has already been
CTS Mode	• automatic		
	no provisior	of pre-defined input data	
	• HTTP metho	d: POST	
	CTS acts as:	Client	
Description	Step	Description / Expected Resu	ılt
	1	Description:	
		 A HLBS response-message wing parameter is provide 	e for the operation 'getResults' is sent. The follo- ed:
		Key	Value/Property
		sessionHandle	The sessionHandle matches the sessi- onHandle that was acquired according to the precondition.
	Table 1.40 Parameters for the operation 'getResults'.		

Test Case ID: TC-HLBS-SRV-ALL-getResults-003

Expected Result:

• A HLBS fault-message 'NotFinishedYet' for the operation 'getResults' is received.

Table 1.39 Test Case ID: TC-HLBS-SRV-ALL-getResults-003

1.1.6 Testcases for Operation getServiceDescription

Test Case ID: TC-HI	LBS-SRV-ALL-getS	erviceDescription-001		
Scope	Testing the ge device.	Testing the getServiceDescription operation for a HLBS Server identifying a valid service but not device.		
Applicability	The testcase is applicable for the following services:			
	• Facial Imag	ge Acquisition System		
	• Basic Facia	l Image Acquisition System		
	Fingerprin	t Acquisition		
	Rolled Fing	gerprint Acquisition		
	Automated	Acquisition Slap Fingerprints SS	3S	
	Automated	Acquisition Facial Images SSS		
	• Facial Imag	ge Delivery System		
Preconditions	• The IUT (i.e tool).	e. HLBS-Server) is running and co	onfigured to communicate with the CTS (HLBS test-	
		hardware-device is connected that is compatible with the service to be tested is available, i.e. t currently in use.		
CTS Mode	• automatic			
	no provisio	on of pre-defined input data		
	• HTTP meth	od: POST		
	CTS acts as	:Client		
Description	Step	Description / Expected Re	esult	
	1	Description:		
		A HLBS response-mess The following parameter	age for the operation 'getServiceDescription' is sent. er is provided:	
		Key	Value/Property	
		serviceID	The serviceID is valid w.r.t. the service that should be tested	
		Table 1.42 Parameters for	the operation 'getServiceDescription'.	
		Expected Result:		
		A HLBS response-messived.	age for the operation 'getServiceDescription' is recei-	
 The received hlbs message contains a value onXML that has the following property: 			age contains a value at key serviceDescripti- owing property:	
		The value of serviceDes against the schema "hlb	criptionXML is a base64-encoded XML that validates os_service_v1.xsd."	

 Table 1.41 Test Case ID: TC-HLBS-SRV-ALL-getServiceDescription-001

Test Case ID: TC-HLBS-SRV-ALL-getServiceDescription-002

Scope

Testing the getServiceDescription operation for a HLBS Server with a valid service, device combination.

Applicability	The testcase is a	pplicable for the following ser	rvices:
	• Facial Image	Acquisition System	
	Basic Facial I	mage Acquisition System	
	• Fingerprint A	cquisition	
	Rolled Finger	print Acquisition	
	Automated A	cquisition Slap Fingerprints S	SSS
	Automated A	cquisition Facial Images SSS	
	Facial Image	Delivery System	
<i>Preconditions</i> • The IUT (i.e. HLBS-Server) is running and configured to communicate tool).		configured to communicate with the CTS (HLBS test	
	 A hardware-on not currently 		npatible with the service to be tested is available, i.e.
CTS Mode	• automatic		
	no provision of pre-defined input data		
	• HTTP method	1: POST	
	• CTS acts as: C	lient	
Description	Step	Description / Expected R	lesult
	1	Description:	
		• A HLBS response-mes The following parame	sage for the operation 'getServiceDescription' is sent ters are provided:
		Key	Value/Property
		serviceID	The serviceID is valid w.r.t. the service that should be tested
		deviceID	The deviceID is corresponding to the device according to the precondition (i.e. valid and available)

- A HLBS response-message for the operation 'getServiceDescription' is received.
- The received hlbs message contains a value at key serviceDescriptionXML that has the following property:

The value of serviceDescriptionXML is a base64-encoded XML that validates against the schema "hlbs_service_v1.xsd."

Table 1.43 Test Case ID: TC-HLBS-SRV-ALL-getServiceDescription-002

Test Case ID: TC-HLBS-SRV-ALL-getServiceDescription-003

Scope

Testing the getServiceDescription operation for a HLBS Server with an invalid service id.

Test Case ID: TC-H	LBS-SRV-ALL-getServiceDescription-003		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Fingerprint Acquisition		
	Rolled Fingerprint Acquisition		
	Automated Acquisition Slap Fingerprints SSS		
	Automated Acquisition Facial Images SSS		
	Facial Image Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
	• A hardware-device is connected that is compatible with the service to be tested is available, i.e. not currently in use.		
CTS Mode	automatic		
	no provision of pre-defined input data		
	• HTTP method: POST		
	• CTS acts as: Client		
Description	Step Description / Expected Result		
	1 Description:		
	 A HLBS response-message for the operation 'getServiceDescription' is sent. The following parameter is provided: 		
	Key Value/Property		
	serviceIDThe serviceID is invalid, i.e. does not refer to a service known by the IUT.		
	Table 1.46 Parameters for the operation 'getServiceDescription'.		
	Expected Result:		
	 A HLBS fault-message 'InvalidServiceId' for the operation 'getServiceDe- scription' is received. 		

• The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of serviceID that was requested.

 Table 1.45 Test Case ID: TC-HLBS-SRV-ALL-getServiceDescription-003

Test Case ID: TC-HLBS-SRV-ALL-getServiceDescription-004		
Scope	Testing the getServiceDescription operation for a HLBS Server with a valid service-id but in combi- nation with an invalid device.	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	
	Basic Facial Image Acquisition System	
	Fingerprint Acquisition	
	Rolled Fingerprint Acquisition	
	Automated Acquisition Slap Fingerprints SSS	
	Automated Acquisition Facial Images SSS	
	Facial Image Delivery System	

Test Case ID: TC-H	I BS-SDV-AI I -90tS	erviceDescription-004	
Preconditions	The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).		
	• A hardwar	e-device is known that is incomp	patible with the service to be tested or unknown.
CTS Mode	• automatic		
	no provisio	on of pre-defined input data	
	• HTTP meth	nod: POST	
	CTS acts as	s:Client	
Description	Step	Description / Expected R	esult
	1	Description:	
	 A HLBS response-message for the operation 'getServiceDescription' is s The following parameters are provided: 		
		Key	Value/Property
		serviceID	The serviceID is valid w.r.t. the service that should be tested
		deviceID	The deviceID is chosen corresponding to the device according to the precondition (i.e.incompatible or unknown)
		Table 1.48 Parameters for	the operation 'getServiceDescription'.
		Expected Result:	
		• A HLBS fault-message scription' is received.	'InvalidDeviceId' for the operation 'getServiceDe-

• The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of deviceID that was requested.

Table 1.47 Test Case ID: TC-HLBS-SRV-ALL-getServiceDescription-004

1.1.7 Testcases for Operation releaseService

Test Case ID: TC-HLBS-SRV-ALL-releaseService-001		
Scope	Testing the releaseService operation for a HLBS Server focussed on the case that a valid sessi- onHandle is provided.	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	
	Basic Facial Image Acquisition System	
	Fingerprint Acquisition	
	Rolled Fingerprint Acquisition	
	Automated Acquisition Slap Fingerprints SSS	
	Automated Acquisition Facial Images SSS	
	Facial Image Delivery System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).	
	• A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.	

Test Case ID: TC-HLBS-SRV-ALL-releaseService-001 CTS Mode • automatic • no provision of pre-defined input data • HTTP method: POST • CTS acts as: Client Description Step Description / Expected Result 1 Description: • A HLBS response-message for the operation 'releaseService' is sent. The fol

lowing parameter is provided:	
Кеу	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that was acquired according to the precondition.

Table 1.50 Parameters for the operation 'releaseService'.

Expected Result:

• A HLBS response-message for the operation 'releaseService' is received.

 Table 1.49 Test Case ID: TC-HLBS-SRV-ALL-releaseService-001

Test Case ID: TC-HLBS-SRV-ALL-releaseService-002		
Scope	Testing the releaseService operation for a HLBS Server focussed on the case that an invalid sessi- onHandle is provided.	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	
	Basic Facial Image Acquisition System	
	Fingerprint Acquisition	
	Rolled Fingerprint Acquisition	
	Automated Acquisition Slap Fingerprints SSS	
	Automated Acquisition Facial Images SSS	
	Facial Image Delivery System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).	
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 	
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method: POST	
	• CTS acts as: Client	
Description	Step Description / Expected Result	

Test Case ID: TC-HLBS-SRV-ALL-releaseService-002 1

Description:

• A HLBS response-message for the operation 'releaseService' is sent. The following parameter is provided:

Кеу	Value/Property
sessionHandle	The sessionHandle does not match the ses- sionHandle that was acquired according to the precondition.

Table 1.52 Parameters for the operation 'releaseService'.

Expected Result:

- A HLBS fault-message 'InvalidSessionHandle' for the operation 'releaseSer-• vice' is received.
- The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of sessionHandle that was requested.

Table 1.51 Test Case ID: TC-HLBS-SRV-ALL-releaseService-002

1.1.8 Testcases for Operation signalUserCommand

Test Case ID: TC-HLBS-SRV-ALL-signalUserCommand-001		
Scope	Testing the signalUserCommand operation for a HLBS Server, focussed on the case that an allowed usercommand is signaled.	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	
	Basic Facial Image Acquisition System	
	Fingerprint Acquisition	
	Rolled Fingerprint Acquisition	
	Automated Acquisition Slap Fingerprints SSS	
	Automated Acquisition Facial Images SSS	
	Facial Image Delivery System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).	
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 	
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.	
	 A set of momentarily allowed user commands shall be available (e.g. by calling "getServiceDe- scription" first). 	
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method: POST	
	• CTS acts as: Client	
Description	Step Description / Expected Result	

1

Description:

• A HLBS response-message for the operation 'signalUserCommand' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
userCommand/userCom- mandId	The value identifies an allowed user com- mand according to the precondition.

Table 1.54 Parameters for the operation 'signalUserCommand'.

Expected Result:

• A HLBS response-message for the operation 'signalUserCommand' is received.

Table 1.53 Test Case ID: TC-HLBS-SRV-ALL-signalUserCommand-001

Test Case ID: TC-HL	.BS-SRV-ALL-signalUserCommand-002
Scope	Testing the signalUserCommand operation on HLBS Server focussed on the case that the sessi- onhandle is invalid.
Applicability	The testcase is applicable for the following services:
	Facial Image Acquisition System
	Basic Facial Image Acquisition System
	Fingerprint Acquisition
	Rolled Fingerprint Acquisition
	Automated Acquisition Slap Fingerprints SSS
	Automated Acquisition Facial Images SSS
	Facial Image Delivery System
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.
	 A set of momentarily allowed user commands shall be available (e.g. by calling "getServiceDe- scription" first).
CTS Mode	• automatic
	no provision of pre-defined input data
	• HTTP method: POST
	• CTS acts as: Client
Description	Step Description / Expected Result

1

Description:

• A HLBS response-message for the operation 'signalUserCommand' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle does not match the ses- sionHandle that refers to the service that is already being executed according to the precondition.
userCommand/userCom- mandId	The value identifies an allowed user com- mand according to the precondition.

Table 1.56 Parameters for the operation 'signalUserCommand'.

Expected Result:

- A HLBS fault-message 'InvalidSessionHandle' for the operation 'signalUser-Command' is received.
- The received hlbs message contains a value at key id that has the following property:

The value of id is equal to the value of sessionHandle that was requested.

 Table 1.55 Test Case ID: TC-HLBS-SRV-ALL-signalUserCommand-002

Test Case ID: TC-HI	LBS-SRV-ALL-signalUserCommand-003		
Scope	Testing the signalUserCommand operation on HLBS Server for Facial Image Acquisition System focussed on the case that the user command is invalid.		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Fingerprint Acquisition		
	Rolled Fingerprint Acquisition		
	Automated Acquisition Slap Fingerprints SSS		
	Automated Acquisition Facial Images SSS		
	Facial Image Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).		
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 		
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.		
	 A set of momentarily allowed user commands shall be available (e.g. by calling "getServiceDe- scription" first). 		
CTS Mode	• automatic		
	no provision of pre-defined input data		
	• HTTP method: POST		
	• CTS acts as: Client		
Description	Step Description / Expected Result		

1

Description:

• A HLBS response-message for the operation 'signalUserCommand' is sent. The following parameters are provided:

Key	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
userCommand/userCom- mandId	UnknownCommandId

Table 1.58 Parameters for the operation 'signalUserCommand'.

Expected Result:

- A HLBS fault-message 'InvalidUserCommandId' for the operation 'signalU-serCommand' is received.
- The received hlbs message contains the value UnknownCommandId at key id.

Table 1.57 Test Case ID: TC-HLBS-SRV-ALL-signalUserCommand-003

Test Case ID: TC-HL	BS-SRV-ALL-signalUserCommand-004		
Scope	Testing the signalUserCommand operation on HLBS Server for Facial Image Acquisition System focussed on the case that the parameters provided with the usercommand specify invalid keys.		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Fingerprint Acquisition		
	Rolled Fingerprint Acquisition		
	Automated Acquisition Slap Fingerprints SSS		
	Automated Acquisition Facial Images SSS		
	Facial Image Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 		
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.		
	• A set of momentarily allowed user commands shall be available (e.g. by calling "getServiceDe- scription" first). One of which shall require additional parameters to be sent (e.g. "SetVerticalPo- sition" with a specified height).		
CTS Mode	• automatic		
	no provision of pre-defined input data		
	• HTTP method: POST		
	• CTS acts as: Client		
Description	Step Description / Expected Result		

1

Description:

• A HLBS response-message for the operation 'signalUserCommand' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
userCommand/userCom- mandId	The requested userCommandId shall mo- mentarily be allowed and require additional parameters (see precondition).
userCommand/parame- ters[1]/key	The value of key shall not match the re- quested userCommandId
userCommand/parame- ters[1]/TYPE	TYPE shall be an element specifying a suita- ble type according to TR03121-2
	The value shall be valid for the respective user command according to TR03121-2.

Table 1.60 Parameters for the operation 'signalUserCommand'.

Expected Result:

- A HLBS fault-message 'InvalidParameterKey' for the operation 'signalUser-Command' is received.
- The received hlbs message contains a value at key id that has the following property:

The id matches the usercommand that was requested.

Table 1.59 Test Case ID: TC-HLBS-SRV-ALL-signalUserCommand-004

Test Case ID: TC-HLBS-SRV-ALL-signalUserCommand-005			
Scope	Testing the signalUserCommand operation on HLBS Server for Facial Image Acquisition System focussed on the case that the parameters provided with the usercommand specify invalid values.		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Fingerprint Acquisition		
	Rolled Fingerprint Acquisition		
	Automated Acquisition Slap Fingerprints SSS		
	Automated Acquisition Facial Images SSS		
	Facial Image Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
	• A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.		
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.		
	 A set of momentarily allowed user commands shall be available (e.g. by calling "getServiceDe- scription" first). One of which shall require additional parameters to be sent (e.g. "SetVerticalPo- sition" with a specified height). 		

Step

CTS Mode

- automatic
 - no provision of pre-defined input data
 - HTTP method: POST

• CTS acts as: Client

Description

Description:

Description / Expected Result

• A HLBS response-message for the operation 'signalUserCommand' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
userCommand/userCom- mandId	The requested userCommandId shall mo- mentarily be allowed and require additional parameters (see precondition).
userCommand/parame- ters[1]/key	The value of key shall match the requested userCommandId
userCommand/parame- ters[1]/TYPE	TYPE shall be an element specifying a suita- ble type according to TR03121-2
	The value shall be invalid for the respective user command according to TR03121-2.

Table 1.62 Parameters for the operation 'signalUserCommand'.

Expected Result:

- A HLBS fault-message 'InvalidParameterValue' for the operation 'signalUserCommand' is received.
- The received hlbs message contains a value at key parameterKey that has the following property:

The parameterKey matches the key that was requested.

Table 1.61 Test Case ID: TC-HLBS-SRV-ALL-signalUserCommand-005

1.2 Testcases for a Specific Set of Service Definitions (APP)

This section contains testcases that are applicable to HLBS Servers implementing a specific set of service definitions.

1.2.1 Testcases for Operation configureService

Test Case ID: TC-HLBS-SRV-APP-configureService-001			
Scope	Testing the configureService operation for HLBS Servers, focussed on whether the possible value "identification" for the Parameter with ID "Purpose".		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Fingerprint Acquisition		
	Rolled Fingerprint Acquisition		
	Facial Image Delivery System		

T-++ C ID- TC III		· · 001	
Test Case ID: TC-HI		-	
Preconditions	 The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test tool). 		
		ervice - device combination has been ination of serviceID and deviceID. A c	acquired, i.e. aquireService was called with a corresponding sessionHandle exists.
CTS Mode	• automatic		
	no provision of pre-defined input data		
	• HTTP meth	od: POST	
	CTS acts as:	Client	
Description	Step	Description / Expected Result	
	1	Description:	
	 A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided: 		
		Key	Value/Property
		sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
		parameters[1]/key	Purpose
		parameters[1]/string Value	identification
		Table 1.64 Parameters for the op	peration 'configureService'.
Expected Result:			
		• A HLBS response-message for	or the operation 'configureService' is received.
Table 1.63 Test Case ID:	TC-HLBS-SRV-APP-c	configureService-001	

Test Case ID: TC-HI	LBS-SRV-APP-configureService-002		
Scope	Testing the configureService operation for HLBS Servers, focussed on whether the possible value "other" for the Parameter with ID "Purpose".		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Facial Image Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 		
CTS Mode	• automatic		
	no provision of pre-defined input data		
	• HTTP method: POST		
	• CTS acts as: Client		
Description	Step Description / Expected Result		

Test Case ID: TC-HLBS-SRV-APP-configureService-002

1

Description:

• A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided:

Key	Value/Property
sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
parameters[1]/key	Purpose
parameters[1]/string Value	other

Table 1.66 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Table 1.65 Test Case ID: TC-HLBS-SRV-APP-configureService-002

Test Case ID: TC-HLB	S-SRV-APP-configureService-003		
Scope	Testing the configureService operation for HLBS Servers, focussed on the possible values for the Parameter with ID "Application Profile".		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
	Basic Facial Image Acquisition System		
	Fingerprint Acquisition		
	Rolled Fingerprint Acquisition		
	Facial Image Delivery System		
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
	• A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.		
	• A list of the Application Profiles the service supports shall be given.		
CTS Mode	• automatic		
	no provision of pre-defined input data		
	• HTTP method: POST		
	• CTS acts as: Client		
Description	Step Description / Expected Result		
	1 Description:		
	 A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided: 		
	Key Value/Property		
	sessionHandle The sessionHandle was acquired according to the precondition.		
	parameters[1]/key ApplicationProfile		
	parameters[1]/string ValueThe value shall be of type hlbs:Application- Profile corresponding to an entry from the list of supported values (ref. to preconditi- 		

Table 1.68 Parameters for the operation 'configureService'.

Test Case ID: TC-HLBS-SRV-APP-configureService-003

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Table 1.67 Test Case ID: TC-HLBS-SRV-APP-configureService-003

Test Case ID: TC-H	LBS-SRV-APP-configu	ureService-004	
Scope	Testing the configureService operation for HLBS Servers, focussed on the possible values for the Parameter with ID "TimeOut".		
Applicability	The testcase is applicable for the following services:		
	Facial Image A	Acquisition System	
	Basic Facial Ir	nage Acquisition System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (H tool).		
		vice - device combination has been a ation of serviceID and deviceID. A co	acquired, i.e. aquireService was called with a presponding sessionHandle exists.
		pports both automated and manual 1 Service shall be called prior).	mode it shall be configured to automated mode
CTS Mode	• automatic		
	no provision	of pre-defined input data	
	• HTTP method	I: POST	
	• CTS acts as: C	lient	
Description	Step	Description / Expected Result	
	1	Description:	
	 A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided: 		
		Key	Value/Property
		sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
		parameters[1]/key	TimeOut
		parameters[1]/intValue	0
		Table 1.70 Parameters for the op	eration 'configureService'.
		Expected Result:	
		• A HLBS response-message fo	r the operation 'configureService' is received.
	2	Description:	
	 A HLBS response-message for the operation 'configureService' is s following parameters are provided: 		
		Key	Value/Property
		sessionHandle	The sessionHandle that was used in the pre- vious step.
		parameters[1]/key	TimeOut
		parameters[1]/intValue	10000

Table 1.71 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Table 1.69 Test Case ID: TC-HLBS-SRV-APP-configureService-004

1.3 Testcases for Service Definition Facial Image Acquisition System (FIAS)

This section contains testcases that are applicable to HLBS servers implementing the service Facial Image Acquisition System (FIAS).

1.3.1 Testcases for Operation configureService

Test Case ID: TC-HLBS-SRV-FIAS-configureService-001		
Scope		gureService operation for HLBS Servers for FIAS, focussed on the possible values with ID "InitialVerticalPosition".
Applicability	The testcase is ap	plicable for the following services:
	• Facial Image A	cquisition System
Preconditions	• The IUT (i.e. H tool).	LBS-Server) is running and configured to communicate with the CTS (HLBS test-
	• The service 'Fa table deviceID	cial Image Acquisition System' has been acquired in valid combination with a sui-
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method	: POST
	• CTS acts as: C1	ient
Description	Step	Description / Expected Result
	1	Description:
		• A HLBS response-message for the operation 'configureService' is sent. The

following parameters are provided:

Key	Value/Property
sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
parameters[1]/key	InitialVerticalPosition
parameters[1]/float Value	0

Table 1.73 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Description:

2

• A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle that was used in the pre- vious step.
parameters[1]/key	InitialVerticalPosition
parameters[1]/float Value	0.5

 Table 1.74 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Test Case ID: TC-HLBS-SRV-FIAS-configureService-001

3

Description:

• A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided:

Key	Value/Property
sessionHandle	The sessionHandle that was used in the pre- vious step.
parameters[1]/key	InitialVerticalPosition
parameters[1]/float Value	1

Table 1.75 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Table 1.72 Test Case ID: TC-HLBS-SRV-FIAS-configureService-001

Test Case ID: TC-H	LBS-SRV-FIAS-cor	nfigureService-002	
Scope	0	onfigureService operation for HLBS Servers for FIAS, focussed on the possible values neter with ID "InitialIlluminationLevel".	
Applicability	The testcase i	s applicable for the following services:	
	• Facial Ima	ge Acquisition System	
Preconditions	• The IUT (i. tool).	e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-	
	• The servic table devic	e 'Facial Image Acquisition System' has been acquired in valid combination with a sui- ceID.	
CTS Mode	• automatic		
	no provisi	no provision of pre-defined input data	
	• HTTP met	hod: POST	
	CTS acts as	s: Client	
Description	Step	Description / Expected Result	
	1	Description:	
		 A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided: 	

Key	Value/Property
sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
parameters[1]/key	InitialIlluminationLevel
parameters[1]/float Value	0

Table 1.77 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Test Case ID: TC-HLBS-SRV-FIAS-configureService-002

2

Description:

• A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle that was used in the pre- vious step.
parameters[1]/key	InitialIlluminationLevel
parameters[1]/float Value	0.5

Table 1.78 Parameters for the operation 'configureService'.

Expected Result:

- A HLBS response-message for the operation 'configureService' is received.
- 3
- Description:
- A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle that was used in the pre- vious step.
parameters[1]/key	InitialIlluminationLevel
parameters[1]/float Value	1

 Table 1.79 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Table 1.76 Test Case ID: TC-HLBS-SRV-FIAS-configureService-002

Test Case ID: TC-HLBS-SRV-FIAS-configureService-003		
Scope	Testing the configureService operation for HLBS Servers for FIAS, focussed on the possible values for the Parameter with ID "InitialOperationMode".	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).	
	• The service 'Facial Image Acquisition System' has been acquired in valid combination with a sui- table deviceID.	
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method: POST	
	• CTS acts as: Client	
Description	Step Description / Expected Result	

Test Case ID: TC-HLBS-SRV-FIAS-configureService-003

1

Description:

• A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle that was acquired ac- cording to the precondition.
parameters[1]/key	InitialOperationMode
parameters[1]/string Value	automated

Table 1.81 Parameters for the operation 'configureService'.

Expected Result:

- A HLBS response-message for the operation 'configureService' is received.
- 2
- Description:
- A HLBS response-message for the operation 'configureService' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle that was used in the pre- vious step.
parameters[1]/key	InitialOperationMode
parameters[1]/string Value	manual

 Table 1.82 Parameters for the operation 'configureService'.

Expected Result:

• A HLBS response-message for the operation 'configureService' is received.

Table 1.80 Test Case ID: TC-HLBS-SRV-FIAS-configureService-003

1.3.2 Testcases for Operation getAllServices

Test Case ID: TC-HLB	S-SRV-FIAS-getAllS	ervices-001	
Scope	Testing the getAllServices operation on HLBS Server for Facial Image Acquisition System.		
Applicability	The testcase is applicable for the following services:		
	• Facial Image A	cquisition System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).		
CTS Mode	• automatic		
	no provision o	f pre-defined input data	
	• HTTP method: POST		
	• CTS acts as: Client		
Description	Step	Description / Expected Result	
	1	Description:	
		• A HLBS response-message for the operation 'getAllServices' is sent. No para- meters are provided.	
		Expected Result:	
		A HLBS response-message for the operation 'getAllServices' is received.	
		 The received hlbs message contains the value 1411ad9f-58e6-4d3c-816d-7fe9d7b67336 at key service/id. 	

Test Case ID: TC-HLBS-SRV-FIAS-getAllServices-001

• The received hlbs message contains a value at key service/type that has the following property:

Type is set to a vendor-specific value

• The received hlbs message contains a value at key service/vendor that has the following property:

Vendor is set to a vendor-specific value

- The received hlbs message contains the value Facial Image Acquisition System at key service/name.
- The received hlbs message contains a value at key service/version that has the following property:

Version corresponds to the respective TR Version

• The received hlbs message contains a value at key service/devices that has the following property:

Devices is set to vendor-specific value(s)

• There is a single element "service" for which all of the expected results above hold

Table 1.83 Test Case ID: TC-HLBS-SRV-FIAS-getAllServices-001

1.3.3 Testcases for Operation getServiceFeedback

Test Case ID: TC-HLBS	S-SRV-FIAS-getService	eFeedback-001	
Scope	Testing the getServio on System in manua	-	S Server implementing Facial Image Acquisiti-
Applicability	The testcase is applicable for the following services:		
	• Facial Image Acq	uisition System	
Preconditions	• The IUT (i.e. HLB tool).	S-Server) is running and configu	red to communicate with the CTS (HLBS test-
			acquired, i.e. aquireService was called with a prresponding sessionHandle exists.
	• The IUT is config	gured to work in 'manual' mode.	
	• The service that s called.	shall be tested is currently execut	ted, i.e. beginServiceExecution has already been
	• A schema file the	e returned xml shall validate agai	nst is given.
CTS Mode	• automatic		
	• no provision of p	ore-defined input data	
	• HTTP method: F	POST	
	• CTS acts as: Clie	nt	
Description	Step	Description / Expected Result	
	1	Description:	
		• A HLBS response-message fo The following parameters are	r the operation 'getServiceFeedback' is sent. e provided:
		Key	Value/Property
		sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
		timeout-ms	10000.

Table 1.85 Parameters for the operation 'getServiceFeedback'.

Test Case ID: TC-HLBS-SRV-FIAS-getServiceFeedback-001

Expected Result:

- A HLBS response-message for the operation 'getServiceFeedback' is received.
- The received hlbs message contains a value at key feedback that has the following property:

feedback is of type hlbs:Feedback.

• The received hlbs message contains a value at key feedback/status that has the following properties:

status is of type hlbs:FeedbackStatus.

status is either "running", "waiting-for-input" or "finished".

- The received hlbs message contains the value Cancel at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value Capture at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value SwitchMode at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value TriggerAutoFocus at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value SetManualFocusPoint at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value TriggerAutoHeightAdjustment at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value SetVerticalPosition at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value IncrementVerticalPosition at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value DecrementVerticalPosition at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value SetAbsoluteIllumination-Level at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value IncrementIlluminationLevel at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value DecrementIlluminationLevel at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value CropManually at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value RotateManually at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value AcceptImage at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value RejectImage at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value LiveStatus at key feedback/feedbackElements/key.
- The value of LiveStatus is a "Possible Value" according to the service definition in TR03121-2.
- The received hlbs message contains the value LiveImage at key feedback/feedbackElements/key.

Test Case ID: TC-HLBS-SRV-FIAS-getServiceFeedback-001

• The received hlbs message contains a value at key feedback/feedback-Elements/key[.="LiveImage"]/following-sibling::imageValue that has the following property:

imageValue is of type hlbs:Image.

- The received hlbs message contains the value LiveCroppedFacialImage at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="LiveCroppedFacialImage"]/following-sibling::imageValue that has the following property:

imageValue is of type hlbs:Image.

- The received hlbs message contains the value CurrentFocusPoint. at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedbackk/feedback/fe
- The received hlbs message contains the value CurrentVerticalPosition at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="CurrentVerticalPosition"]/following-sibling::floatValue that is greater or equal to 0 and less or equal to 1.
- The received hlbs message contains the value CurrentIlluminationLevel at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="CurrentIlluminationLevel"]/following-sibling::floatValue that is greater or equal to 0 and less or equal to 1.
- The received hlbs message contains the value QAFeedback at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="CurrentVerticalPosition"]/following-sibling::stringValue that has the following property:

The returned string is base64-encoded XML that is valid according to the schema-file (see precondition).

- The received hlbs message contains the value QAEntireFacialImage at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="QAEntireFacialImage"]/following-sibling::imageValue that has the following property:

imageValue is of type hlbs:Image.

- The received hlbs message contains the value QACroppedFacialImage at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="QACroppedFacialImage"]/following-sibling::imageValue that has the following property:

imageValue is of type hlbs:Image.

 The received hlbs message contains a value at key feedback/feedback-Elements/key[.="QACroppedFacialImage"]/following-sibling::imageValue/imageData that has the following property:

The encoded value matches the "regionOfInterest" as defined by "feedback/feedbackElements/key[.="QAEntireFacialImage"]/following-sibling::imageValue/regionOfInterest".

 The received hlbs message contains the value QACroppedFacialImageRotation at key feedback/feedbackElements/key.

Test Case ID: TC-HLBS-SRV-FIAS-getServiceFeedback-001

• The received hlbs message contains a value at key feedback/feedback-Elements/key[.="QACroppedFacialImageRotation"]/following-sibling::floatValue that is greater or equal to 0 and less or equal to 360.

Table 1.84 Test Case ID: TC-HLBS-SRV-FIAS-getServiceFeedback-001

Test Case ID: TC-H	LBS-SRV-FIAS-ge	tServiceFeedback-002	
Scope	Testing the getServiceFeedback operation for a HLBS Server implementing Facial Image Acquisition on System in manual mode using a sessionHandle that is unknown to the server.		
Applicability	The testcase is applicable for the following services:		
	• Facial Ima	age Acquisition System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).		
			een acquired, i.e. aquireService was called with a . A corresponding sessionHandle exists.
	• The IUT is	s configured to work in 'manual' m	ode.
	• The servic called.	ce that shall be tested is currently ex	xecuted, i.e. beginServiceExecution has already been
CTS Mode	• automatic		
	no provis	ion of pre-defined input data	
	• HTTP method: POST		
	CTS acts a	as: Client	
Description	Step	Description / Expected Res	sult
	1	Description:	
A HLBS response-message The following parameters a		ge for the operation 'getServiceFeedback' is sent. rs are provided:	
		Key	Value/Property
		sessionHandle	The sessionHandle does not match the ses- sionHandle that refers to the service that is already being executed according to the precondition.
		timeout-ms	10000
		Table 1.87 Parameters for the	ne operation 'getServiceFeedback'.
		Expected Result:	
		-	nvalidSessionHandle' for the operation 'getService-

Test Case ID: TC-HLBS-SRV-FIAS-getServiceFeedback-003		
Scope	Testing the getServiceFeedback operation for a HLBS Server implementing Facial Image Acquisiti- on System in manual mode waiting for a timeout.	
Applicability	The testcase is applicable for the following services:	
	Facial Image Acquisition System	

Test Case ID: TC-H	(LBS-SRV-FIAS-get	ServiceFeedback-003
Preconditions	<i>itions</i> • The IUT (i.e. HLBS-Server) is running and configured to communicate with th tool).	
		service - device combination has been acquired, i.e. aquireService was called with a bination of serviceID and deviceID. A corresponding sessionHandle exists.
	• The IUT is	configured to work in 'manual' mode.
	• The servic called.	e that shall be tested is currently executed, i.e. beginServiceExecution has already been
CTS Mode	• automatic	
	 no provisi 	on of pre-defined input data
	HTTP method: POSTCTS acts as: Client	
Description	Step	Description / Expected Result
	1	Description:
		 A HLBS response-message for the operation 'getServiceFeedback' is sent. The following parameters are provided:
		Voy Value/Droperty

Кеу	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
timeout-ms	0

Table 1.89 Parameters for the operation 'getServiceFeedback'.

Expected Result:

• A HLBS fault-message 'TimeoutOccured' for the operation 'getServiceFeedback' is received.

 Table 1.88 Test Case ID: TC-HLBS-SRV-FIAS-getServiceFeedback-003

1.4 Testcases for Service Definition Basic Facial Image Acquisition System (BFIAS)

This section contains testcases that are applicable to HLBS servers implementing the service Basic Facial Image Acquisition System (BFIAS).

1.4.1 Testcases for Operation getAllServices

Test Case ID: TC-HLBS-SRV-BFIAS-getAllServices-001		
Scope	Testing the getAllServices operation on HLBS Server for Basic Facial Image Acquisition System.	
Applicability	The testcase is applicable for the following services:	
	Basic Facial Image Acquisition System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).	
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method: POST	
	• CTS acts as: Client	
Description	Step Description / Expected Result	

Test Case ID: TC-HLBS-SRV-BFIAS-getAllServices-001		
1	Description:	
	A HLBS response-message for the operation 'getAllServices' is sent. No para- meters are provided.	
Ε	Expected Result:	
	A HLBS response-message for the operation 'getAllServices' is received.	
	The received hlbs message contains the value ac9317c9-46d5-4925-80c- f-0cb45d73ef3d at key service/id.	
	The received hlbs message contains a value at key service/type that has the following property:	
	Type is set to a vendor-specific value.	
	The received hlbs message contains a value at key service/vendor that has the following property:	
	Vendor is set to a vendor-specific value	
	The received hlbs message contains the value Basic Facial Image Ac- quisition System at key service/name.	
	The received hlbs message contains a value at key service/version that has the following property:	
	Version corresponds to the respective TR Version	
	The received hlbs message contains a value at key service/devices that has the following property:	
	Devices is set to a vendor-specific value(s).	
•	There is a single element "service" for which all of the expected results	

above hold

Table 1.90 Test Case ID: TC-HLBS-SRV-BFIAS-getAllServices-001

1.4.2 Testcases for Operation getServiceFeedback

Test Case ID: TC-HLBS-SRV-BFIAS-getServiceFeedback-001		
Scope	Testing the getServiceFeedback operation on HLBS Server for Basic Facial Image Acquisition Sys- tem in manual mode.	
Applicability	The testcase is applicable for the following services:	
	Basic Facial Image Acquisition System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test-tool).	
	 A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists. 	
	The IUT is configured to work in 'manual' mode.	
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.	
	A schema file the returned xml shall validate against is given.	
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method: POST	
	• CTS acts as: Client	
Description	Step Description / Expected Result	

Test Case ID: TC-HLBS-SRV-BFIAS-getServiceFeedback-001

1

Description:

• A HLBS response-message for the operation 'getServiceFeedback' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
timeout-ms	10000

Table 1.92 Parameters for the operation 'getServiceFeedback'.

Expected Result:

- A HLBS response-message for the operation 'getServiceFeedback' is received.
- The received hlbs message contains a value at key feedback that has the following property:

feedback is of type hlbs:Feedback.

• The received hlbs message contains a value at key feedback/status that has the following properties:

status is of type hlbs:FeedbackStatus.

status is either "running", "waiting-for-input" or "finished".

- The received hlbs message contains the value Cancel at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value Capture at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value CropManually at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value RotateManually at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value AcceptImage at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value RejectImage at key feedback/userCommands/UserCommandInfo/userCommandId.
- The received hlbs message contains the value LiveStatus at key feedback/feedbackElements/key.
- The value of LiveStatus is a "Possible Value" according to the service definition in TR03121-2.
- The received hlbs message contains the value LiveImage at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="LiveImage"]/following-sibling::imageValue that has the following property:

imageValue is of type "hlbsImage".

- The received hlbs message contains the value LiveCroppedFacialImage at key feedback/feedbackElements/key.
- The received hlbs message contains a value at key feedback/feedback-Elements/key[.="LiveCroppedFacialImage"]/following-sibling::imageValue that has the following property:

imageValue is of type "hlbsImage".

Test Case ID: TC-HLBS-SRV-BFIAS-getServiceFeedback-001		
•	The received hlbs message contains the value QAFeedback at key feed- back/feedbackElements/key.	
	The received hlbs message contains a value at key feedback/feedback- Elements/key[.="CurrentVerticalPosition"]/following-siblin- g::stringValue that has the following property:	
	The returned string is base64-encoded XML that is valid according to the schema-file (see precondition).	
	The received hlbs message contains the value QAEntireFacialImage at key feedback/feedbackElements/key.	
	The received hlbs message contains a value at key feedback/feedback- Elements/key[.="QAEntireFacialImage"]/following-sibling::i- mageValue that has the following property:	
	imageValue is of type "hlbsImage".	
	The received hlbs message contains the value QACroppedFacialImage at key feedback/feedbackElements/key.	
	The received hlbs message contains a value at key feedback/feedback- Elements/key[.="QACroppedFacialImage"]/following-sibling::i- mageValue that has the following property:	
	imageValue is of type "hlbsImage".	
	The received hlbs message contains a value at key feedback/feedback- Elements/key[.="QACroppedFacialImage"]/following-sibling::i- mageValue/imageData that has the following property:	
	The encoded value matches the "regionOfInterest" as defined by "feed- back/feedbackElements/key[.="QAEntireFacialImage"]/following-sibling::i- mageValue/regionOfInterest".	
	The received hlbs message contains the value QACroppedFacialImageRo- tation at key feedback/feedbackElements/key.	
	The received hlbs message contains a value at key feedback/feedback-	

 The received hlbs message contains a value at key feedback/feedback-Elements/key[.="QACroppedFacialImageRotation"]/following-sibling::floatValue that is greater or equal to 0 and less or equal to 360.

Table 1.91 Test Case ID: TC-HLBS-SRV-BFIAS-getServiceFeedback-001

Test Case ID: TC-HL	BS-SRV-BFIAS-getServiceFeedback-002	
Scope	Testing the getServiceFeedback operation for a HLBS Server implementing Basic Facial Image Ac- quisition System in manual mode using a sessionHandle that is unknown to the server.	
Applicability	The testcase is applicable for the following services:	
	Basic Facial Image Acquisition System	
Preconditions	• The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test- tool).	
	• A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.	
	The IUT is configured to work in 'manual' mode.	
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already been called.	
CTS Mode	• automatic	
	no provision of pre-defined input data	
	• HTTP method: POST	
	• CTS acts as: Client	
Description	Step Description / Expected Result	

Test Case ID: TC-HLBS-SRV-BFIAS-getServiceFeedback-002

1

Description:

• A HLBS response-message for the operation 'getServiceFeedback' is sent. The following parameters are provided:

Кеу	Value/Property
sessionHandle	The sessionHandle does not match the ses- sionHandle that refers to the service that is already being executed according to the precondition.
timeout-ms	10000

Table 1.94 Parameters for the operation 'getServiceFeedback'.

Expected Result:

• A HLBS fault-message 'InvalidSessionHandle' for the operation 'getService-Feedback' is received.

Table 1.93 Test Case ID: TC-HLBS-SRV-BFIAS-getServiceFeedback-002

Scope	Testing the getServiceFeedback operation for a HLBS Server implementing Basic Facial Image Ac- quisition System in manual mode waiting for a timeout.		
Applicability	The testcase is applicable for the following services:		
	Facial Image Acquisition System		
Preconditions	 The IUT (i.e. HLBS-Server) is running and configured to communicate with the CTS (HLBS test tool). 		
	• A suitable service - device combination has been acquired, i.e. aquireService was called with a valid combination of serviceID and deviceID. A corresponding sessionHandle exists.		
	The IUT is configured to work in 'manual' mode.		
	• The service that shall be tested is currently executed, i.e. beginServiceExecution has already be called.		
CTS Mode	• automatic		
	no provision of pre-defined input data		
	• HTTP method: POST		
	• CTS acts as: Client		
Description	Step	Description / Expected Re	sult
	1	Description:	
		 A HLBS response-message for the operation 'getServiceFeedback' is sent. The following parameters are provided: 	
		Key	Value/Property
		sessionHandle	The sessionHandle matches the sessi- onHandle that refers to the service that is already being executed according to the precondition.
		timeout-ms	0
	Table 1.96 Parameters for the operation 'getServiceFeedback'.		

A HLBS fault-message 'TimeoutOccured' for the operation 'getServiceFeedback' is received.

Table 1.95 Test Case ID: TC-HLBS-SRV-BFIAS-getServiceFeedback-003

2 Testcases for Clients (CLI)

Testcases will be added in a future version of this document.