

Broadband Connectivity Service (BBCS) Fulfillment Interface Specification

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Checklist of changes

int.Version	Date	Changed by	Comments / nature of the change
30	21.02.2011	HP	Version WSG-8.3 / Mar11 - BB Schema update: - ISP_CHANGE_DONOR order with new attributes; - some enumerations eliminated - LoV Doc updated
31	27.04.2011	HP	Version WSG-8.4 / Jun11 - BB Schema update: - Ordertypes with new attributes; - LoV Doc updated
32	20.10.2011	HP	Version WSG-8.6 / Nov11 - (SSH)Filetransfer description removed - BB Schema update: - srvQualifType with new elements - plannedEndPoint new type - serviceOrderType with new elements
33	26.03.2012	Roland Staub	Version WSG-9.0 / Mai12 - BB Schema update: - firstInHouse added for fiberQualifAnswer - added termination, sessionType to customerOrderType - Added dslamName to element endPoint in method getSrvServiceStatus
34	17.09.2012	Roland Staub	Version 9.2 / Oct12 - BB Schema update: - Create/modify/get/cancel changeTicket - getCpeReports - added cpeInfo in qualifAnswer, getServiceStatusResponseType
35	25.09.2012	Roland Staub	Updated password policy in Chapter 7.5
36	24.04.2012	Roland Staub	Version 9.4 / Mai13 -BB Schema update. -added Vectoring info -Added addtribute processWithLowPrio to all operations -reorganized endPoint (added instead of dnOffice, bbDeviceLocation, siteCategory in (qualifHistResponseResData)

37	27.05.2013	Roland Staub	Updated, hasFreecapacity was still present, but was deleted on interfacedefinition
38	15.07.2013	Roland Staub	Version 9.5 Aug13
39	15.07.2013	Roland Staub	Version 9.6 Nov13
40	15.07.2013	Roland Staub	Version 9.7 Feb14
41	25.04.2014	Roland Staub	Version 9.8 Mai14
42	08.08.2014	Roland Staub	Version 9.9 Mai14
43	21.01.2015	Roland Staub	Version 9.11 März15
44	19.05.2015	Roland Staub	Version 9.12 June15
45	14.10.2015	Roland Staub	Version 9.12 November15
46	15.01.2016	Roland Staub	Version 9.15 Februar 15
47	29.04.2016	Roland Staub	Version 9.16 Mai 16
48	28.09.2016	Roland Staub	Version 9.18 Nov 16
49	08.02.2016	Roland Staub	Version 9.19 Mar 17
50	17.05.2017	Roland Staub	Version 17.06 June 17
50	17.05.2017	Roland Staub	Version 17.09 Sept 17
52	18.09.2017	Roland Staub	Version 17.10 Oct 17
53	24.10.2017	Roland Staub	Version 17.11 Nov 17
54	20.12.2017	Roland Staub	Version 18.01 Jan 17

Release

int.Version	Date	Released by	Comments / nature of the change
10	20.07.2007	R. Seltmann	Released for WSG-6.6 (June 2007)
17	06.12.2007	R. Seltmann	Released for BBCS Contract Version 12.21
18	11.12.2007	R. Seltmann	Released for BBCS Contract Version 12.3
19	12.02.2008	R. Seltmann	Released for BBCS Contract Version 12.4
20	21.04.2008	R. Seltmann	Released for BBCS Contract Version 13
21	20.10.2008	R. Seltmann	Released for BBCS Contract Version 13-2
22	26.02.2009	R. Seltmann	Released for BBCS Contract Version 13-3
23	26.10.2009	R. Seltmann	Released for BBCS Contract Version 13-31
24	03.03.2010	R. Seltmann	Released for BBCS Contract Version 13-31
25	17.03.2010	Ch. Wäger	Released for BBCS Contract Version 13-31
28	11.05.2010	R. Seltmann	Released for BBCS Contract Version 13-4
29	12.10.2010	H. Künzi	Released for WSG-8.2 (Nov 2010)

30	21.02.2011	A. Studerus (iarope1)	Released for WSG-8.3 (Mar 2011)
31	03.05.2011	H. Künzi	Released for WSG-8.4 (Jun 2011)
32	25.10.2011	H.Künzi	Released for WSG-8.6 (Nov 2011)
33	27.03.2012	H.Künzi	Released for WSG-9.0 (Mai 2012)
35	25.09.2012	H.Künzi	Released for WSG-9.2 (Oct 2012)
36	14.05.2013	H.Künzi	Released for WSG-9.4 (Mai 2013)
37	28.05.2013	H.Künzi	Document update
38	16.07..2013	H.Künzi	Released for WSG-9.5 (Aug2013)
39	28.10.2013	H.Künzi	Released for WSG-9.6 (Nov2013)
40	10.02.2014	H.Künzi	Released for WSG-9.7 (Nov2014)
41	01.05.2014	H.Künzi	Released for WSG-9.8 (Mai2014)
42	08.08.2014	H.Künzi	Released for WSG-9.9 (Aug 2014)
43	17.02.2015	H.Künzi	Released for WSG-9.11 (Mar 2015)
44	26.05.2015	H.Künzi	Released for WSG-9.12 (June 2015)
45	15.10.2015	H.Künzi	Released for WSG-9.14 (Nov 2015)
46	20.01.2016	H.Künzi	Released for WSG-9.15 (Feb 2016)
47	04.05.2016	H.Künzi	Released for WSG-9.16 (Mai 2016)
48	31.10.2016	H.Künzi	Released for WSG-9.18 (Nov 2016)
49	13.02.2017	H.Künzi	Released for WSG-9.19 (Mar 2017)
50	22.05.2017	H.Künzi	Released for WSGJun17 (Jun 2017)
52	26.09.2017	H.Künzi	Released for WSG1710 (Oct2017)
53	26.10.2017	H.Künzi	Released for WSG-17.11
54	05.12.2017	H.Künzi	Released for WSG-18.01 (Jan18)

1 Introduction

1.1 General

This document describes the business-to-business interface for broadband services of the WSG application: it contains detailed technical specification for the implementation of web service (using the SOAP protocol) processes to execute orders, tickets or information requests.

1.2 References

- [1] WSG Messages
- [2] B2B BB Assurance Interface Specification
- [3] ISP BBCS Fulfillment User Manual
- [4] B2B Speed Profiles
- [5] Actual interface definition **wsgBb_v36.0.1.zip**

LOV document (LOV_ID_Definitions.XLS, included in the “ Actual interface definition ZIP-file”)

The actual documents are downloadable as PDF files from the WSG application.
The format of the file names is: <document-name>_V<nn>.pdf

1.3 Document updates

In case of changes of this interface Swisscom will provide the ISPs with the latest update of this document at least three weeks before the changes becomes effective.

2 Business Processes

Overview

This business processes provided by this interface are described by WSDL and XSD files. These files are packed in the ZIP-File

wsgBb_v36.0.1.zip [5]

This ZIP-File contains:

- Readme.txt general information on this file (contents)
- ChangeLog.txt the details of the changes per released version (change-history).
- schema/* the schema definition as well as the web-service definition
 - wsgBbOutbound.wsdl Web Service Definition for WSG Outbound (B2B Interface)
 - wsgLqsSaq.wsdl Web Service Definition for LQS Outbound (SAQ Interface)
- doc/
 - WsgWebOutbound.html a HTML-based documentation of the B2B Interface
 - ServiceAvailabilityQualification.html a HTML-based documentation of the SAQ Interface

How to use samples can be found in the B2B_Web_Service_Tutorial.doc

- The XML schemas are shared by two Web Service Definitions (WSDL):
 - **wsgBbOutbound.wsdl**: Defines the B2B services. This services provides the The server implementation of this services is deployed on **WSG Outbound** (URL: <https://webservices.swisscom.com/wsg/prod/bb/WsgBbVxxx>)
 - **wsgLqsSaq.wsdl**: Defines the Service Availability Services (SAQ) The SAQ provides a quick Qualification of a possible broadband connections. The SAQ gives a first overview. The server implementation of this services is deployed on **LQS Outbound** (URL: <https://webservices.swisscom.com/wsg/prod/lqs/LqsQualiVxxx>)

The following table provides an overview of the available business processes (operations) for B2B-Fulfillment and there deployment as web services:

Business Process / Operation	B2B Web Service	SAQ Web Service
srvQualifByNumber	X	X
srvQualifByAddress	X	X
srvQualifByLlid	X	X
srvQualifByStartPoint	X	X
srvQualifBySocket	X	X
srvQualifByBindingId	X	X
getQualifHistory	X	
srvQualifByLocationId		X
getSrvStatus	X	
createCustomerOrder	X	
getTransactionOverview	X	
getOrderDetail	X	
getTdmMsgDetail	X	
getOrderGroupNr	X	
cancelPendingOrder	X	
getInstallationTicketDetail	X	
createInstallationTicket	X	
modifyPendingInstallationTicket	X	
cancelPendingInstallationTicket	X	
getBusinessLines	X	
createChangeTicket	X	
modifyPendingChangeTicket	X	
cancelPendingChangeTicket	X	
getChangeTicketOverview	X	
getChangeTicketDetail	X	
readPredecessor	X	
addPredecessorEntity	X	
updatePredecessorEntity	X	
removePredecessorEntity	X	
lookUpPredecessors	X	

Interface Descripton

Below is listed the generated documtentation with the highlighted changes. You can use the HTML documentation which is in the archive [5] in the doc directory for better browsing capabilities.

2.1 Operations

2.1.1 **srvQualifByNumber**

Description: This operation returns service qualification and resource availability statements for a given request by number.

Input message	Output message
srvQualifByNumberRequest	srvQualifByNumberResponse

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2.1.2 **srvQualifByAddress**

Description: This operation returns service qualification and resource availability statements for a given request by addres.

Input message	Output message
srvQualifByAddressRequest	srvQualifByAddressResponse

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2.1.3 **srvQualifByLocationId**

Input message	Output message
srvQualifByLocationIdRequest	srvQualifByLocationIdResponse

[Top](#)

2.1.4 **srvQualifByLlid**

Description: This operation returns service qualification and resource availability statements for a given request by LLID.

Input message	Output message
srvQualifByLlidRequest	srvQualifByLlidResponse

[Top](#)

2.1.5 **srvQualifByStartPoint**

Description: This operation returns service qualification and resource availability statements for a given request by Start Point.

Input message	Output message
srvQualifByStartPointRequest	srvQualifByStartPointResponse

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2.1.6 **srvQualifBySocket**

Description: This operation returns service qualification and resource availability statements for a given request by Socket ID or Cooperation ID.

Input message	Output message
srvQualifBySocketRequest	srvQualifBySocketResponse

[Top](#)

2.1.7 **srvQualifByBindingId**

Description: This operation returns service qualification and resource availability statements for a given request by bindingId.

Input message	Output message
srvQualifByBindingIdRequest	srvQualifByBindingIdResponse

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2.1.8 **getSrvStatus**

Description: Obtain status information on a currently installed product or service.

Input message	Output message
getSrvStatusRequest	getSrvStatusResponse

[Top](#)

2.1.9 **getTransactionOverview**

Description: Create a transaction overview over the various WSG transactions overtime.

Input message	Output message
getTransactionOverviewRequest	getTransactionOverviewResponse

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2.1.10 **getOrderDetail**

Description: Lookup an order in the WSG DB.

Input message	Output message
getOrderDetailRequest	getOrderDetailResponse

[Top](#)

2.1.11 **getInstallationTicketDetail**

Description: Lookup an installation ticket in the WSG DB.

Input message	Output message
getInstallationTicketDetailRequest	getInstallationTicketDetailResponse

[Top](#)

2.1.12 **getTdmMsgDetail**

Description: Lookup a (APV) voice message in the WSG DB.

Input message	Output message
getTdmMsgDetailRequest	getTdmMsgDetailResponse

[Top](#)

2.1.13 getOrderGroupNr

Description: Fetch a new ORDER_GROUP_NR from the WSG DB.

Input message	Output message
getOrderGroupNrRequest	getOrderGroupNrResponse

[Top](#)

2.1.14 getQualifHistory

Description: get the qualificaiton history

Input message	Output message
getQualifHistoryRequest	getQualifHistoryResponse

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2.1.15 createCustomerOrder

Description: Place a new customer order.

Input message	Output message
createCustomerOrderRequest	createCustomerOrderResponse

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2.1.16 cancelPendingOrder

Description: Cancel a pending customer order or order.

Input message	Output message
cancelPendingOrderRequest	cancelPendingOrderResponse

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2.1.17 createInstallationTicket

Description: Create an Installation Ticket

Input message	Output message
createInstallationTicketRequest	createInstallationTicketResponse

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2.1.18 modifyPendingInstallationTicket

Description: Modify a pending Installation Ticket

Input message	Output message
modifyPendingInstallationTicketRequest	modifyPendingInstallationTicketResponse

[Top](#)

2.1.19 cancelPendingInstallationTicket

Description: Cancel a pending Installation Ticket

Input message	Output message
cancelPendingInstallationTicketRequest	cancelPendingInstallationTicketResponse

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2.1.20 getBusinessLines

Description: Get a report for all business lines related to a DDI number

Input message	Output message
getBusinessLinesRequest	getBusinessLinesResponse

[Top](#)

2.1.21 createChangeTicket

Description: create a Change Ticket

Input message	Output message
createChangeTicketRequest	createChangeTicketResponse

[Top](#)

2.1.22 modifyPendingChangeTicket

Description: Modifies a still pending Change Ticket

Input message	Output message
modifyPendingChangeTicketRequest	modifyPendingChangeTicketResponse

[Top](#)

2.1.23 cancelPendingChangeTicket

Description: Cancel a still pending Change Ticket

Input message	Output message
cancelPendingChangeTicketRequest	cancelPendingChangeTicketResponse

[Top](#)

2.1.24 getChangeTicketOverview

Description: gets a list of change Tickets

Input message	Output message
getChangeTicketOverviewRequest	getChangeTicketOverviewResponse

[Top](#)

2.1.25 getChangeTicketDetail

Description: gets all detail of one change ticket

Input message	Output message
getChangeTicketDetailRequest	getChangeTicketDetailResponse

[Top](#)

2.1.26 readPredecessor

Description: Read own predecessor Entity

Input message	Output message
readPredecessorEntityRequest	readPredecessorEntityResponse

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2.1.27 addPredecessorEntity

Input message	Output message
addPredecessorEntityRequest	addPredecessorEntityResponse

[Top](#)

2.1.28 updatePredecessorEntity

Input message	Output message
updatePredecessorEntityRequest	updatePredecessorEntityResponse

[Top](#)

2.1.29 removePredecessorEntity

Input message	Output message
removePredecessorEntityRequest	removePredecessorEntityResponse

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2.1.30 lookUpPredecessors

Description: Search all predecessors for a specific phoneNr or location. You can use the locationId as search attribute in case of you get predecessorAddresses with multiple locationid in the response to have a more precise lookup.

Input message	Output message
lookUpPredecessorsRequest	lookUpPredecessorsResponse

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2.2 Messages

2.2.1 srvQualifByNumberRequest

Element	Type	Occ	Comment
parameters	srvQualifByNumber	1..1	

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2.2.2 srvQualifByNumberResponse

Element	Type	Occ	Comment
parameters	srvQualifByNumberResponse	1..1	

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2.2.3 srvQualifByAddressRequest

Element	Type	Occ	Comment
parameters	srvQualifByAddress	1..1	

[Top](#)

2.2.4 srvQualifByAddressResponse

Element	Type	Occ	Comment
parameters	srvQualifByAddressResponse	1..1	

[Top](#)

2.2.5 srvQualifByLocationIdRequest

Element	Type	Occ	Comment
parameters	srvQualifByLocationId	1..1	

[Top](#)

2.2.6 **srvQualifByLocationIdResponse**

Element	Type	Occ	Comment
parameters	srvQualifByLocationIdResponse	1..1	

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2.2.7 **srvQualifByLlidRequest**

Element	Type	Occ	Comment
parameters	srvQualifByLlid	1..1	

[Top](#)

2.2.8 **srvQualifByLlidResponse**

Element	Type	Occ	Comment
parameters	srvQualifByLlidResponse	1..1	

[Top](#)

2.2.9 **srvQualifByStartPointRequest**

Element	Type	Occ	Comment
parameters	srvQualifByStartPoint	1..1	

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2.2.10 **srvQualifByStartPointResponse**

Element	Type	Occ	Comment
parameters	srvQualifByStartPointResponse	1..1	

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2.2.11 **srvQualifBySocketRequest**

Element	Type	Occ	Comment
parameters	srvQualifBySocket	1..1	

[Top](#)

2.2.12 **srvQualifBySocketResponse**

Element	Type	Occ	Comment
parameters	srvQualifBySocketResponse	1..1	

[Top](#)

2.2.13 **srvQualifByBindingIdRequest**

Element	Type	Occ	Comment
parameters	srvQualifByBindingId	1..1	

[Top](#)

2.2.14 **srvQualifByBindingIdResponse**

Element	Type	Occ	Comment
parameters	srvQualifByBindingIdResponse	1..1	

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2.2.15 **getSrvStatusRequest**

Element	Type	Occ	Comment
parameters	getSrvStatus	1..1	

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2.2.16 getSrvStatusResponse

Element	Type	Occ	Comment
parameters	getSrvStatusResponse	1..1	

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2.2.17 getTransactionOverviewRequest

Element	Type	Occ	Comment
parameters	getTransactionOverview	1..1	

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2.2.18 getTransactionOverviewResponse

Element	Type	Occ	Comment
parameters	getTransactionOverviewResponse	1..1	

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2.2.19 getOrderDetailRequest

Element	Type	Occ	Comment
parameters	getOrderDetail	1..1	

[Top](#)

2.2.20 getOrderDetailResponse

Element	Type	Occ	Comment
parameters	getOrderDetailResponse	1..1	

[Top](#)

2.2.21 getInstallationTicketDetailRequest

Element	Type	Occ	Comment
parameters	getInstallationTicketDetail	1..1	

[Top](#)

2.2.22 getInstallationTicketDetailResponse

Element	Type	Occ	Comment
parameters	getInstallationTicketDetailResponse	1..1	

[Top](#)

2.2.23 getTdmMsgDetailRequest

Element	Type	Occ	Comment
parameters	getTdmMsgDetail	1..1	

[Top](#)

2.2.24 getTdmMsgDetailResponse

Element	Type	Occ	Comment
parameters	getTdmMsgDetailResponse	1..1	

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2.2.25 getOrderGroupNrRequest

Element	Type	Occ	Comment
parameters	getOrderGroupNr	1..1	

[Top](#)

2.2.26 getOrderGroupNrResponse

Element	Type	Occ	Comment
parameters	getOrderGroupNrResponse	1..1	

[Top](#)

2.2.27 getQualifHistoryRequest

Element	Type	Occ	Comment
parameters	getQualifHistory	1..1	

[Top](#)

2.2.28 getQualifHistoryResponse

Element	Type	Occ	Comment
parameters	getQualifHistoryResponse	1..1	

[Top](#)

2.2.29 createCustomerOrderRequest

Element	Type	Occ	Comment
parameters	createCustomerOrder	1..1	

[Top](#)

2.2.30 createCustomerOrderResponse

Element	Type	Occ	Comment
parameters	createCustomerOrderResponse	1..1	

[Top](#)

2.2.31 cancelPendingOrderRequest

Element	Type	Occ	Comment
parameters	cancelPendingOrder	1..1	

[Top](#)

2.2.32 cancelPendingOrderResponse

Element	Type	Occ	Comment
parameters	cancelPendingOrderResponse	1..1	

[Top](#)

2.2.33 createInstallationTicketRequest

Element	Type	Occ	Comment
parameters	createInstallationTicket	1..1	

[Top](#)

2.2.34 createInstallationTicketResponse

Element	Type	Occ	Comment
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parameters	createInstallationTicketResponse	1..1	
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2.2.35 modifyPendingInstallationTicketRequest

Element	Type	Occ	Comment
parameters	modifyPendingInstallationTicket	1..1	

[Top](#)

2.2.36 modifyPendingInstallationTicketResponse

Element	Type	Occ	Comment
parameters	modifyPendingInstallationTicketResponse	1..1	

[Top](#)

2.2.37 cancelPendingInstallationTicketRequest

Element	Type	Occ	Comment
parameters	cancelPendingInstallationTicket	1..1	

[Top](#)

2.2.38 cancelPendingInstallationTicketResponse

Element	Type	Occ	Comment
parameters	cancelPendingInstallationTicketResponse	1..1	

[Top](#)

2.2.39 getBusinessLinesRequest

Element	Type	Occ	Comment
parameters	getBusinessLines	1..1	

[Top](#)

2.2.40 getBusinessLinesResponse

Element	Type	Occ	Comment
parameters	getBusinessLinesResponse	1..1	

[Top](#)

2.2.41 createChangeTicketRequest

Element	Type	Occ	Comment
parameters	createChangeTicket	1..1	

[Top](#)

2.2.42 createChangeTicketResponse

Element	Type	Occ	Comment
parameters	createChangeTicketResponse	1..1	

[Top](#)

2.2.43 modifyPendingChangeTicketRequest

Element	Type	Occ	Comment
parameters	modifyPendingChangeTicket	1..1	

[Top](#)

2.2.44 modifyPendingChangeTicketResponse

Element	Type	Occ	Comment
parameters	modifyPendingChangeTicketResponse	1..1	

[Top](#)

2.2.45 cancelPendingChangeTicketRequest

Element	Type	Occ	Comment
parameters	cancelPendingChangeTicket	1..1	

[Top](#)

2.2.46 cancelPendingChangeTicketResponse

Element	Type	Occ	Comment
parameters	cancelPendingChangeTicketResponse	1..1	

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2.2.47 getChangeTicketOverviewRequest

Element	Type	Occ	Comment
parameters	getChangeTicketOverview	1..1	

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2.2.48 getChangeTicketOverviewResponse

Element	Type	Occ	Comment
parameters	getChangeTicketOverviewResponse	1..1	

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2.2.49 getChangeTicketDetailRequest

Element	Type	Occ	Comment
parameters	getChangeTicketDetailRequestType	1..1	

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2.2.50 getChangeTicketDetailResponse

Element	Type	Occ	Comment
parameters	getChangeTicketDetailResponse	1..1	

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2.2.51 readPredecessorEntityRequest

Element	Type	Occ	Comment
parameters	readPredecessorEntityRequest	1..1	

[Top](#)

2.2.52 readPredecessorEntityResponse

Element	Type	Occ	Comment
parameters	readPredecessorEntityResponse	1..1	

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2.2.53 addPredecessorEntityRequest

Element	Type	Occ	Comment
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parameters	addPredecessorEntityRequest	1..1	
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[Top](#)

2.2.54 addPredecessorEntityResponse

Element	Type	Occ	Comment
parameters	addPredecessorEntityResponse	1..1	

[Top](#)

2.2.55 updatePredecessorEntityRequest

Element	Type	Occ	Comment
parameters	updatePredecessorEntityRequest	1..1	

[Top](#)

2.2.56 updatePredecessorEntityResponse

Element	Type	Occ	Comment
parameters	updatePredecessorEntityResponse	1..1	

[Top](#)

2.2.57 removePredecessorEntityRequest

Element	Type	Occ	Comment
parameters	removePredecessorEntityRequest	1..1	

[Top](#)

2.2.58 removePredecessorEntityResponse

Element	Type	Occ	Comment
parameters	removePredecessorEntityResponse	1..1	

[Top](#)

2.2.59 lookUpPredecessorsRequest

Element	Type	Occ	Comment
parameters	lookUpPredecessorsRequest	1..1	

[Top](#)

2.2.60 lookUpPredecessorsResponse

Element	Type	Occ	Comment
parameters	lookUpPredecessorsResponse	1..1	

[Top](#)

2.3 Root elements

2.3.1 srvQualifByNumber

Description: Get information on possible broadband connections to a given destination by DN/VN/NSN.

ElementType	Occ	Comment
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request	srvQualifByNumberType	1..1	Get information on possible broadband connections to a given destination by DN/VN/NSN.
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2.3.2 srvQualifByNumberResponse

ElementType	OccComment		
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.3.3 srvQualifByAddress

Description: Get information on possible broadband connections to a given destination by address.

ElementType	OccComment		
request	srvQualifByAddressType	1..1	Get information on possible broadband connections to a given destination by location.

2.3.4 srvQualifByAddressResponse

ElementType	OccComment		
response	srvQualifByLocationIdType	1..1	The acknowledge message returned after processing an qualification request.

2.3.5 srvQualifByLocationId

Description: Get information on possible broadband connections to a given destination by Location Id.

ElementType	OccComment		
response	srvQualifByLocationIdType	1..1	The acknowledge message returned after processing an qualification request.

2.3.6 srvQualifByLocationIdResponse

ElementType	OccComment		
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.3.7 srvQualifByLlid

Description: Get information on possible broadband connections to a given destination by LLID.

ElementType	OccComment		
request	srvQualifByLlIdType	1..1	Get information on possible broadband connections to a given destination by LLID.

2.3.8 srvQualifByLlidResponse

ElementType	OccComment		
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.3.9 srvQualifByStartPoint

Description: Get information on possible broadband connections to a given destination by start point.

ElementType		OccComment	
request	srvQualifByStartPointType	1..1	Get information on possible broadband connections to a given destination by start point.

2.3.10 srvQualifByStartPointResponse

ElementType		OccComment	
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.3.11 srvQualifBySocket

Description: Get information on possible broadband connections to a given destination by Socket Id.

ElementType		OccComment	
request	srvQualifBySocketType	1..1	Get information on possible broadband connections to a given destination by socket ID (and opt. by PlugNr).

2.3.12 srvQualifBySocketResponse

ElementType		OccComment	
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.3.13 srvQualifByBindingId

Description: Get information on possible broadband connections to a given destination by bindingId.

ElementType		OccComment	
request	srvQualifByBindingIdType	1..1	Get information on possible broadband connections to a given destination by binding ID (accesssId).

2.3.14 srvQualifByBindingIdResponse

ElementType		OccComment	
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.3.15 getSrvStatus

ElementType		OccComment	
request	getServiceStatusRequestType	1..1	Purpose: Obtain status information on a currently installed product or service. Directory number to get the state of the service for. In case of PABX with DDI, VN has to be used. In case of broadband type SDSL a NSN has to be used.

2.3.16 getSrvStatusResponse

ElementType		OccComment	
response	getServiceStatusAckType	1..1	Acknowledge response for the GET_SERVICE_STATUS

		command. Provides status information on a currently installed product or service. Service status response
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2.3.17 getTransactionOverview

Element	Type	Occ	Comment
request	getTransactionOverviewRequestType	1..1	Purpose: List transactions.

2.3.18 getTransactionOverviewResponse

Element	Type	Occ	Comment
response	getTransactionOverviewAckType	1..1	This class represents a response message returned by the getTransactionOverview operation. A list of selected transaction records sorted descending by time. This class represents a transaction record documenting any action on a WORK_ORDER, a VOICE_MESSAGE, an ACCESS_TICKET, a WORK_TICKET or an ALARM. Timestamp of last modification. (not null) The name of the user that performed the last modification. (not null) if transType1 = WORK_ORDER, then transType2 = 1001 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = ACCESS_TICKET, then transType2 = empty if transType1 = WORK_TICKET, then transType2 = 4002 The transaction ID. (e.g. if transType1:=WORK_ORDER then transId:=ORDER_ID) (not null) The transaction state. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_STATE hence transType2=2 means 'HOLDING') (not null) The ID of the ISP involved in the transaction. (not null) The name of the ISP involved in the transaction. (not null) The ID of a second ISP involved in the transaction. The name of a second ISP involved in the transaction. The DN/VN/NSN associated to that transaction. (not null) A second DN/VN/NSN associated to that transaction. A transaction response message.

2.3.19 getOrderDetail

Element	Type	Occ	Comment
request	getDetailRequestType	1..1	Purpose: Get details of a customer order.

2.3.20 getOrderDetailResponse

Element	Type	Occ	Comment
response	getDetailAckType	1..1	Acknowledge response for the GET_DETAIL command.

2.3.21 **getInstallationTicketDetail**

ElementType		OccComment	
request	getInstallationTicketDetailRequestType	1..1	Purpose: Get details of an installation ticket.

2.3.22 **getInstallationTicketDetailResponse**

ElementType		OccComment	
response	getInstallationTicketDetailAckType	1..1	LIST-response for the GET_INSTALLATION_TICKET_DETAIL command. Lists a bunch of matching installation ticket.

2.3.23 **getTdmMsgDetail**

ElementType		OccComment	
request	getTdmMessageDetailRequestType	1..1	Purpose: Get a TDM message with a specific log ID.

2.3.24 **getTdmMsgDetailResponse**

Element	Type	Occ	Comment
response	getTdmMessageDetailAckType	1..1	

2.3.25 **getOrderGroupNr**

ElementType		OccComment	
request	getOrderGroupNrRequestType	1..1	Purpose: Obtain a unique number for grouping customer orders. Order group numbers can be used by the ISP to identify related customer orders, e.g. in a LIST_ORDERS command. The resulting order group number will be returned in the ack file.

2.3.26 **getOrderGroupNrResponse**

ElementType		OccComment	
response	customerOrderAckType	1..1	The acknowledge message returned after processing an customer order request.

2.3.27 **getQualifHistory**

ElementType		OccComment	
request	getQualifHistoryRequestType	1..1	Get qualification history from initialy or re-qualification

2.3.28 **getQualifHistoryResponse**

ElementType		OccComment	
response	getQualifHistoryAckType	1..1	Get qualification history from initialy or re- qualification

2.3.29 **createCustomerOrder**

ElementType		OccComment	
request	customerOrderRequestType	1..1	Purpose: Place a customer order. Data structure for

			wrapping related detail orders. Restriction: A customer order can contain at most 1 detail order related to a base product (BASIS_CREATE, BASIS_MODIFY, BASIS_DISCONNECT or ISP_CHANGE). The number of service related detail orders is not restricted. Only one basis order may be listed here.
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2.3.30 createCustomerOrderResponse

ElementType		OccComment	
response	customerOrderAckType	1..1	The acknowledge message returned after processing an customer order request.

2.3.31 cancelPendingOrder

Element	Type	Occ	Comment
request	cancelPendingRequestType	1..1	Purpose: Cancel a pending order.

2.3.32 cancelPendingOrderResponse

ElementType		OccComment	
response	cancelPendingAckType	1..1	Acknowledge response for the CANCEL_PENDING_ORDER command.

2.3.33 createInstallationTicket

ElementType		OccComment	
request	createInstallationTicketRequestType	1..1	Purpose: creates a new installation ticket. WSG order number. This order number identifies the service creation order to which the installation ticket belongs. Required if itIdWsgRef and dnVnNsn is missing [LOV-ID: 0320] Contract Element ID. Required if refOrderNr and itIdWsgRef are missing. Reference to installation ticket (2 nd intervention). Required if refOrderNr and dnVnNsn is missing DN, VN or NSN. Required if refOrderNr and itIdWsgRef is missing [LOV-ID: 4003] Onsite support. „None“ is not allowed. Required if contrEleId is missing.

2.3.34 createInstallationTicketResponse

ElementType		OccComment	
response	createInstallationTicketAckType	1..1	Acknowledge response for the CREATE_INSTALLATION_TICKET command.

2.3.35 modifyPendingInstallationTicket

ElementType		OccComment	
request	modifyPendingInstallationTicketRequestType	1..1	Purpose: Modify a pending installation ticket. WSG order

		number. This order number identifies the service creation order to which the installation ticket belongs. Requested Contract Element ID. Only relevant if the ticket has no reference by itIdWsgRef or refOrderNr. If missing, onsiteSupport is required. [LOV-ID: 0276] Broadband type. Required if contrEleId is specified. DN, VN or NSN. Only relevant if ticket has no reference by refOrderNr and itIdWsgRef. [LOV-ID: 4003] Onsite support. "None" is not allowed. Required if contrEleId is missing.
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2.3.36 modifyPendingInstallationTicketResponse

Element	Type	Occ	Comment
response	modifyPendingInstallationTicketAckType	1..1	Acknowledge response for the MODIFY_PENDING_INSTALLATION_TICKET command.

2.3.37 cancelPendingInstallationTicket

Element	Type	Occ	Comment
request	cancelPendingInstallationTicketRequestType	1..1	Purpose: cancel a pending installation ticket.

2.3.38 cancelPendingInstallationTicketResponse

Element	Type	Occ	Comment
response	cancelPendingInstallationTicketAckType	1..1	Acknowledge response for the CANCEL_PENDING_INSTALLATION_TICKET command.

2.3.39 getBusinessLines

Element	Type	Occ	Comment
request	getBusinessLinesRequestType	1..1	Purpose: Get a report for all business lines related to a DDI number.

2.3.40 getBusinessLinesResponse

Element	Type	Occ	Comment
response	getBusinessLinesAckType	1..1	Acknowledge response for the GET_BUSINESS_LINES command. Provides business lines related to a STNR or DDI number.

2.3.41 createChangeTicket

ElementType		OccComment	
request	createChangeTicketRequestType	1..1	Input for the createChangeTicket Operation This contact information is used to send the reminder This contact informations is used to send the 2 nd reminder (if not present customerContact1 is used for 2 nd reminder)

2.3.42 createChangeTicketResponse

ElementType		OccComment	
response	createChangeTicketResponseType	1..1	Output createChangeTicket Operation The change Ticket ID generated by WSG

2.3.43 modifyPendingChangeTicket

ElementType		OccComment	
request	modifyPendingChangeTicketRequestType	1..1	Input for the modifyPendingChangeTicket Operation

2.3.44 modifyPendingChangeTicketResponse

ElementType		OccComment	
response	modifyPendingChangeTicketResponseType	1..1	Output modifyPendingChangeTicket Operation

2.3.45 cancelPendingChangeTicket

ElementType		OccComment	
request	cancelPendingChangeTicketRequestType	1..1	Input cancelPendingChangeTicket Operation

2.3.46 cancelPendingChangeTicketResponse

ElementType		OccComment	
response	cancelPendingChangeTicketResponseType	1..1	Output cancelPendingChangeTicket Operation

2.3.47 getChangeTicketOverview

ElementType		OccComment	
request	getChangeTicketOverviewRequestType	1..1	Input getChangeTicketOverview Operation

2.3.48 getChangeTicketOverviewResponse

ElementType		OccComment	
response	getChangeTicketOverviewResponseType	1..1	Output getChangeTicketOverview Operation

2.3.49 getChangeTicketDetailRequestType

Used by: [getChangeTicketDetailRequestType](#)

Element Type		Occ Comment	
request	getChangeTicketDetailRequestType	1..1	Input getChangeTicketDetail Operation

2.3.50 getChangeTicketDetailResponse

ElementType		OccComment	
response	getChangeTicketDetailResponseType	1..1	Output getChangeTicketDetail Operation the requested change ticket List of the work log entries all previous data of the change ticket

2.3.51 readPredecessorEntityRequest

Element	Type	Occ	Comment
request	readPredecessorEntityRequestType	1..1	Purpose: search predecessor entities

2.3.52 readPredecessorEntityResponse

ElementType		OccComment	
response	readPredecessorEntityAckType	1..1	The acknowledge message returned after processing an readPredecessorEntity order request.

2.3.53 addPredecessorEntityRequest

Element	Type	Occ	Comment
request	addPredecessorEntityRequestType	1..1	Purpose:Add a predecessor Entity.

2.3.54 addPredecessorEntityResponse

ElementType		OccComment	
response	addPredecessorEntityAckType	1..1	The acknowledge message returned after processing an addPredecessorEntity order request.

2.3.55 updatePredecessorEntityRequest

Element	Type	Occ	Comment
request	updatePredecessorEntityRequestType	1..1	Purpose:update a predecessor Entity.

2.3.56 updatePredecessorEntityResponse

ElementType		OccComment	
response	updatePredecessorEntityAckType	1..1	The acknowledge message returned after processing an updatePredecessorEntity request.

2.3.57 removePredecessorEntityRequest

Element	Type	Occ	Comment
request	removePredecessorEntityRequestType	1..1	Purpose:remove a predecessor Entity.

2.3.58 removePredecessorEntityResponse

ElementType		OccComment	
response	removePredecessorEntityAckType	1..1	The acknowledge message returned after processing an removePredecessorEntity request.

2.3.59 lookUpPredecessorsRequest

Element	Type	Occ	Comment
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request	lookUpPredecessorRequestType	1..1	Purpose:search predecessor entrires.
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2.3.60 lookUpPredecessorsResponse

ElementType	OccComment		
response	lookUpPredecessorsAckType	1..1	The acknowledge message returned after processing an addPredecessorEntity order request.

2.4 Types

2.4.1 srvQualifByNumber

Description: Get information on possible broadband connections to a given destination by DN/VN/NSN.

ElementType	OccComment		
request	srvQualifByNumberType	1..1	Get information on possible broadband connections to a given destination by DN/VN/NSN.

2.4.2 srvQualifByNumberResponse

ElementType	OccComment		
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.4.3 srvQualifByAddress

Description: Get information on possible broadband connections to a given destination by address.

ElementType	OccComment		
request	srvQualifByAddressType	1..1	Get information on possible broadband connections to a given destination by address.

2.4.4 srvQualifByAddressResponse

ElementType	OccComment		
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an qualification request.

2.4.5 srvQualifByLocationId

Description: Get information on possible broadband connections to a given destination by Location Id.

ElementType	OccComment		
request	srvQualifByLocationIdType	1..1	Get information on possible broadband connections to a given destination by location.

2.4.6 srvQualifByLocationIdResponse

ElementType	OccComment		
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing an

			qualification request.
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2.4.7 **srvQualifByLlid**

Description: Get information on possible broadband connections to a given destination by LLID.

ElementType	Occ	Comment
request	srvQualifByLlidType 1..1	Get information on possible broadband connections to a given destination by LLID.

2.4.8 **srvQualifByLlidResponse**

ElementType	Occ	Comment
response	qualifAcknowledgeType 1..1	The acknowledge message returned after processing an qualification request.

2.4.9 **srvQualifByStartPoint**

Description: Get information on possible broadband connections to a given destination by start point.

ElementType	Occ	Comment
request	srvQualifByStartPointType 1..1	Get information on possible broadband connections to a given destination by start point.

2.4.10 **srvQualifByStartPointResponse**

ElementType	Occ	Comment
response	qualifAcknowledgeType 1..1	The acknowledge message returned after processing an qualification request.

2.4.11 **srvQualifBySocket**

Description: Get information on possible broadband connections to a given destination by Socket Id.

ElementType	Occ	Comment
request	srvQualifBySocketType 1..1	Get information on possible broadband connections to a given destination by socket ID (and opt. by PlugNr).

2.4.12 **srvQualifBySocketResponse**

ElementType	Occ	Comment
response	qualifAcknowledgeType 1..1	The acknowledge message returned after processing an qualification request.

2.4.13 **srvQualifByBindingId**

Description: Get information on possible broadband connections to a given destination by bindingId.

ElementType	Occ	Comment
request	srvQualifByBindingIdType 1..1	Get information on possible broadband connections to a given destination by binding ID (accesssId).

2.4.14 **srvQualifByBindingIdResponse**

ElementType	Occ	Comment
response	qualifAcknowledgeType 1..1	The acknowledge message returned after processing an qualification request.

2.4.15 getSrvStatus

ElementType	Occ	Comment
request	getServiceStatusRequestType 1..1	Purpose: Obtain status information on a currently installed product or service. Directory number to get the state of the service for. In case of PABX with DDI, VN has to be used. In case of broadband type SDSL a NSN has to be used.

2.4.16 getSrvStatusResponse

ElementType	Occ	Comment
response	getServiceStatusAckType 1..1	Acknowledge response for the GET_SERVICE_STATUS command. Provides status information on a currently installed product or service. Service status response

2.4.17 getTransactionOverview

Element	Type	Occ	Comment
request	getTransactionOverviewRequestType	1..1	Purpose: List transactions.

2.4.18 getTransactionOverviewResponse

ElementType	Occ	Comment
response	getTransactionOverviewAckType 1..1	This class represents a response message returned by the getTransactionOverview operation. A list of selected transaction records sorted descending by time. This class represents a transaction record documenting any action on a WORK_ORDER, a VOICE_MESSAGE, an ACCESS_TICKET, a WORK_TICKET or an ALARM. Timestamp of last modification. (not null) The name of the user that performed the last modification. (not null) if transType1 = WORK_ORDER, then transType2 = 1001 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = ACCESS_TICKET, then transType2 = empty if transType1 = WORK_TICKET, then transType2 = 4002 The transaction ID. (e.g. if transType1:=WORK_ORDER then transId:=ORDER_ID) (not null) The transaction state. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_STATE hence transType2=2 means 'HOLDING') (not null) The ID of the ISP involved in the transaction. (not

			null) The name of the ISP involved in the transaction. (not null) The ID of a second ISP involved in the transaction. The name of a second ISP involved in the transaction. The DN/VN/NSN associated to that transaction. (not null) A second DN/VN/NSN associated to that transaction. A transaction response message.
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2.4.19 getOrderDetail

Element	Type	Occ	Comment
request	getDetailRequestType	1..1	Purpose: Get details of a customer order.

2.4.20 getOrderDetailResponse

Element	Type	Occ	Comment
response	getDetailAckType	1..1	Acknowledge response for the GET_DETAIL command.

2.4.21 getInstallationTicketDetail

Element	Type	Occ	Comment
request	getInstallationTicketDetailRequestType	1..1	Purpose: Get details of an installation ticket.

2.4.22 getInstallationTicketDetailResponse

Element	Type	Occ	Comment
response	getInstallationTicketDetailAckType	1..1	LIST-response for the GET_INSTALLATION_TICKET_DETAIL command. Lists a bunch of matching installation ticket.

2.4.23 getTdmMsgDetail

Element	Type	Occ	Comment
request	getTdmMessageDetailRequestType	1..1	Purpose: Get a TDM message with a specific log ID.

2.4.24 getTdmMsgDetailResponse

Element	Type	Occ	Comment
response	getTdmMessageDetailAckType	1..1	

2.4.25 getOrderGroupNr

Element	Type	Occ	Comment
request	getOrderGroupNrRequestType	1..1	Purpose: Obtain a unique number for grouping customer orders. Order group numbers can be used by the ISP to identify related customer orders, e.g. in a LIST_ORDERS command. The resulting order group number will be returned in the ack file.

2.4.26 getOrderGroupNrResponse

Element	Type	Occ	Comment
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response	customerOrderAckType	1..1	The acknowledge message returned after processing an customer order request.
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2.4.27 getQualifHistory

ElementType		OccComment	
request	getQualifHistoryRequestType	1..1	Get qualification history from initially or re-qualification

2.4.28 getQualifHistoryResponse

ElementType		OccComment	
response	getQualifHistoryAckType	1..1	Get qualification history from initially or re- qualification

2.4.29 createCustomerOrder

ElementType		OccComment	
request	customerOrderRequestType	1..1	Purpose: Place a customer order. Data structure for wrapping related detail orders. Restriction: A customer order can contain at most 1 detail order related to a base product (BASIS_CREATE, BASIS_MODIFY, BASIS_DISCONNECT or ISP_CHANGE). The number of service related detail orders is not restricted. Only one basis order may be listed here.

2.4.30 createCustomerOrderResponse

ElementType		OccComment	
response	customerOrderAckType	1..1	The acknowledge message returned after processing an customer order request.

2.4.31 cancelPendingOrder

Element	Type	Occ	Comment
request	cancelPendingRequestType	1..1	Purpose: Cancel a pending order.

2.4.32 cancelPendingOrderResponse

ElementType		OccComment	
response	cancelPendingAckType	1..1	Acknowledge response for the CANCEL_PENDING_ORDER command.

2.4.33 createInstallationTicket

ElementType		OccComment	
request	createInstallationTicketRequestType	1..1	Purpose: creates a new installation ticket. WSG order number. This order number identifies the service creation order to which the installation ticket belongs. Required if itIdWsgRef and dnVnNsn is missing [LOV-ID: 0320] Contract Element ID. Required if refOrderNr and itIdWsgRef are missing. Reference to installation ticket (2 nd intervention). Required if refOrderNr and

			dnVnNsn is missing DN, VN or NSN. Required if refOrderNr and itIdWsgRef is missing [LOV-ID: 4003] Onsite support. „None“ is not allowed. Required if contrEleId is missing.
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2.4.34 createInstallationTicketResponse

Element	Type	Occ	Comment
response	createInstallationTicketAckType	1..1	Acknowledge response for the CREATE_INSTALLATION_TICKET command.

2.4.35 modifyPendingInstallationTicket

Element	Type	Occ	Comment
request	modifyPendingInstallationTicketRequestType	1..1	Purpose: Modify a pending installation ticket. WSG order number. This order number identifies the service creation order to which the installation ticket belongs. Requested Contract Element ID. Only relevant if the ticket has no reference by itIdWsgRef or refOrderNr. If missing, onsiteSupport is required. [LOV-ID: 0276] Broadband type. Required if contrEleId is specified. DN, VN or NSN. Only relevant if ticket has no reference by refOrderNr and itIdWsgRef. [LOV-ID: 4003] Onsite support. „None“ is not allowed. Required if contrEleId is missing.

2.4.36 modifyPendingInstallationTicketResponse

Element	Type	Occ	Comment
response	modifyPendingInstallationTicketAckType	1..1	Acknowledge response for the MODIFY_PENDING_INSTALLATION_TICKET command.

2.4.37 cancelPendingInstallationTicket

Element	Type	Occ	Comment
request	cancelPendingInstallationTicketRequestType	1..1	Purpose: cancel a pending installation ticket.

2.4.38 cancelPendingInstallationTicketResponse

Element	Type	Occ	Comment
response	cancelPendingInstallationTicketAckType	1..	Acknowledge response for the

	e	1	CANCEL_PENDING_INSTALLATION_TICKET command.
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2.4.39 getBusinessLines

ElementType	OccComment		
request	getBusinessLinesRequestType	1..1	Purpose: Get a report for all business lines related to a DDI number.

2.4.40 getBusinessLinesResponse

ElementType	OccComment		
response	getBusinessLinesAckType	1..1	Acknowledge response for the GET_BUSINESS_LINES command. Provides business lines related to a STNR or DDI number.

2.4.41 createChangeTicket

ElementType	OccComment		
request	createChangeTicketRequestType	1..1	Input for the createChangeTicket Operation This contact information is used to send the reminder This contact informations is used to send the 2 nd reminder (if not present customerContact1 is used for 2 nd reminder)

2.4.42 createChangeTicketResponse

ElementType	OccComment		
response	createChangeTicketResponseType	1..1	Output createChangeTicket Operation The change Ticket ID generated by WSG

2.4.43 modifyPendingChangeTicket

ElementType	OccComment		
request	modifyPendingChangeTicketRequestType	1..1	Input for the modifyPendingChangeTicket Operation

2.4.44 modifyPendingChangeTicketResponse

ElementType	OccComment		
response	modifyPendingChangeTicketResponseType	1..1	Output modifyPendingChangeTicket Operation

2.4.45 cancelPendingChangeTicket

ElementType	OccComment		
request	cancelPendingChangeTicketRequestType	1..1	Input cancelPendingChangeTicket Operation

2.4.46 cancelPendingChangeTicketResponse

ElementType	OccComment		
response	cancelPendingChangeTicketResponseType	1..1	Output cancelPendingChangeTicket Operation

2.4.47 getChangeTicketOverview

ElementType		OccComment	
request	getChangeTicketOverviewRequestType	1..1	Input getChangeTicketOverview Operation

2.4.48 getChangeTicketOverviewResponse

ElementType		OccComment	
response	getChangeTicketOverviewResponseType	1..1	Output getChangeTicketOverview Operation

2.4.49 getChangeTicketDetailRequestType

Used by: [getChangeTicketDetailRequestType](#)

Element Type		Occ Comment	
request	getChangeTicketDetailRequestType	1..1	Input getChangeTicketDetail Operation

2.4.50 getChangeTicketDetailResponse

ElementType		OccComment	
response	getChangeTicketDetailResponseType	1..1	Output getChangeTicketDetail Operation the requested change ticket List of the work log entries all previous data of the change ticket

2.4.51 readPredecessorEntityRequest

Element Type		Occ Comment	
request	readPredecessorEntityRequestType	1..1	Purpose: search predecessor entities

2.4.52 readPredecessorEntityResponse

ElementType		OccComment	
response	readPredecessorEntityAckType	1..1	The acknowledge message returned after processing an readPredecessorEntity order request.

2.4.53 addPredecessorEntityRequest

Element Type		Occ Comment	
request	addPredecessorEntityRequestType	1..1	Purpose: Add a predecessor Entity.

2.4.54 addPredecessorEntityResponse

ElementType		OccComment	
response	addPredecessorEntityAckType	1..1	The acknowledge message returned after processing an addPredecessorEntity order request.

2.4.55 updatePredecessorEntityRequest

Element Type		Occ Comment	
request	updatePredecessorEntityRequestType	1..1	Purpose: update a predecessor Entity.

2.4.56 updatePredecessorEntityResponse

ElementType		OccComment	
response	updatePredecessorEntityAckType	1..1	The acknowledge message returned after

			processing an updatePredecessorEntity request.
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2.4.57 removePredecessorEntityRequest

Element	Type	Occ	Comment
request	removePredecessorEntityRequestType	1..1	Purpose:remove a predecessor Entity.

2.4.58 removePredecessorEntityResponse

Element	Type	Occ	Comment
response	removePredecessorEntityAckType	1..1	The acknowledge message returned after processing an removePredecessorEntity request.

2.4.59 lookUpPredecessorsRequest

Element	Type	Occ	Comment
request	lookUpPredecessorRequestType	1..1	Purpose:search predecessor entrires.

2.4.60 lookUpPredecessorsResponse

Element	Type	Occ	Comment
response	lookUpPredecessorsAckType	1..1	The acknowledge message returned after processing an addPredecessorEntity order request.

2.4.61 srvQualifByBindingIdType

Description: Get information on possible broadband connections to a given destination by binding ID (accesssId).

Used by: [srvQualifByBindingId](#)

Extension of: [srvQualifType](#)

Element	Type	Occ	Comment
bindingId	xs:string (maxLength: 15)	1..1	The binding id (e.g. AC1.222.333.444).

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2.4.62 srvQualifByNumberType

Description: Get information on possible broadband connections to a given destination by DN/VN/NSN.

Used by: [srvQualifByNumber](#)

Extension of: [srvQualifType](#)

Element	Type	Occ	Comment
dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.

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2.4.63 srvQualifByLlIdType

Description: Get information on possible broadband connections to a given destination by LLID.

Used by: [srvQualifByLlid](#)

Extension of: [srvQualifType](#)

Element	Type	Occ	Comment
lId	xs:string (minLength: 1 , maxLength: 13)	1..1	The local loop ID.

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2.4.64 **srvQualifByAddressType**

Description: Get information on possible broadband connections to a given destination by address.

Used by: [srvQualifByAddress](#)

Extension of: [srvQualifType](#)

Element	Type	Occ	Comment
address	subjectAddressEnhancedType	1..1	A complete subject's postal address.

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2.4.65 **srvQualifByLocationIdType**

Description: Get information on possible broadband connections to a given destination by location.

Used by: [srvQualifByLocationId](#)

Extension of: [srvQualifType](#)

Element	Type	Occ	Comment
locationId	xs:int	1..1	A location id (GAIA ID)

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2.4.66 **srvQualifByStartPointType**

Description: Get information on possible broadband connections to a given destination by start point.

Used by: [srvQualifByStartPoint](#)

Extension of: [srvQualifType](#)

Element	Type	Occ	Comment
startPoint	startPointRequestType	1..1	start point request parameters

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2.4.67 **appointmentType**

Description: An appointment

Used by: [appointment](#)

Element	Type	Occ	Comment
appointmentId	xs:long (totalDigits: 10)	1..1	Appointment ID referencing an existing agreement.
appointmentDateTime	xs:dateTime	1..1	Date and Time of an Appointment
appointmentEndDateTime	xs:dateTime	0..1	End Date and Time of an Appointment

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2.4.68 **srvQualifType**

Description: Get information on possible broadband connections to a given destination. (abstract)

Extended by: [srvQualifByBindingIdType](#), [srvQualifByNumberType](#), [srvQualifByLIIdType](#), [srvQualifByAddressType](#), [srvQualifByLocationIdType](#), [srvQualifByStartPointType](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
basisContrEleId	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0320] A basis contract element ID
contrEleId	xs:int (totalDigits: 3)	0..n	[LOV-ID: 0320] A contract element ID.
bbType	xs:int (totalDigits: 3)	0..n	[LOV-ID: 0276] The BB type.
dnType	xs:int (totalDigits: 3)	0..n	[LOV-ID: 0109] The DN type.
qualifExtRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference (assigned by the ISP) for identification of the qualification request.
customerWishDate	xs:date	0..1	The customer wish date.
synchWithVoice	xs:boolean	0..1	Synchronize with voice.
lineState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1052] The copper line state.
newLoop	xs:boolean	0..1	Qualify for a new loop.
sfSlaId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.
hasOnp	xs:boolean	0..1	
businessType	xs:int (totalDigits: 3)	0..1	
returnSpeedAtNok	xs:boolean	0..1	
appointment	appointmentType	0..1	
customerLocationId	xs:int	0..1	

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2.4.69 orderAckType

Description: The acknowledge message returned after processing an order request.

Used by: [customerOrderAckType](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
orderNr	xs:string (pattern:[1-9]\d{ 25 })	0..1	The order ID.

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2.4.70 addPredecessorEntityAckType

Description: The acknowledge message returned after processing an addPredecessorEntity order request.

Used by: [addPredecessorEntityResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
predecessorEntityId	xs:long	0..1	The predecessor entity id.

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2.4.71 customerOrderAckType

Description: The acknowledge message returned after processing an customer order request.

Used by: [getOrderGroupNrResponse](#), [createCustomerOrderResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
customerOrderNr	xs:string (pattern:[1-9]\d{25})	0..1	The customer order ID.
orderGroupNr	xs:long (totalDigits:12)	0..1	The order group ID.
nsn	xs:string (pattern:010\d{7})	0..1	A Net Service Number
preOrderActivationCode	xs:string	0..1	The activation code for preOrders
orderItem	orderAckType	0..n	The acknowledge message returned after processing an order request.

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2.4.72 cancelPendingInstallationTicketAckType

Description: Acknowledge response for the CANCEL_PENDING_INSTALLATION_TICKET command.

Used by: [cancelPendingInstallationTicketResponse](#)

Extension of: [ackType](#)
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2.4.73 cancelPendingAckType

Description: Acknowledge response for the CANCEL_PENDING_ORDER command.

Used by: [cancelPendingOrderResponse](#)

Extension of: [ackType](#)
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2.4.74 createInstallationTicketAckType

Description: Acknowledge response for the CREATE_INSTALLATION_TICKET command.

Used by: [createInstallationTicketResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
itIdWsg	xs:decimal (totalDigits:10)	0..1	Installation ticket id assigned by WSG

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2.4.75 **getBusinessLinesAckType**

Description: Acknowledge response for the GET_BUSINESS_LINES command. Provides business lines related to a STNR or DDI number.

Used by: [getBusinessLinesResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
stnr	xs:string	0..1	STNR which belongs to the PABX.
vnRecord	vnRecord	0..n	A business line identity (VN) (= Verrechnungsnummer) record.

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2.4.76 **getDetailAckType**

Description: Acknowledge response for the GET_DETAIL command.

Used by: [getOrderDetailResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
customerOrder	customerOrderType	0..1	The generic customer order type. A list of orders (E.g. base or service order).

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2.4.77 **getInstallationTicketDetailAckType**

Description: LIST-response for the GET_INSTALLATION_TICKET_DETAIL command. Lists a bunch of matching installation ticket.

Used by: [getInstallationTicketDetailResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
ticket	ticket	0..1	An installation ticket and its details. [LOV-ID: 4003] Onsite support. "None" is not allowed. Required if contrEleId is missing. WSG order number. This order number identifies the service creation order to which the installation ticket belongs. Required if itIdWsgRef and dnVnNsn is missing DN, VN or NSN. Required if refOrderNr and itIdWsgRef is missing A history entry of the ticket

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2.4.78 **getOrderGroupNrAckType**

Description: Acknowledge response for the GET_ORDER_GROUP_NR command.

Extension of: [ackType](#)

Element	Type	Occ	Comment
orderGroupNr	xs:long (totalDigits:12)	0..1	The order group ID.

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2.4.79 **getServiceStatusAckType**

Description: Acknowledge response for the GET_SERVICE_STATUS command. Provides status information on a currently installed product or service.

Used by: [getSrvStatusResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
status	getServiceStatusResponseType	0..1	Service status response

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2.4.80 getTransactionOverviewAckType

Description: This class represents a response message returned by the getTransactionOverview operation.

Used by: [getTransactionOverviewResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment		
transaction	Element	Type	Occ	Comment	A list of selected transaction records sorted descending by time. This class represents a transaction record documenting any action on a WORK_ORDER, a VOICE_MESSAGE, an ACCESS_TICKET, a WORK_TICKET or an ALARM. Timestamp of last modification. (not null) The name of the user that performed the last modification. (not null) [LOV-ID: 9001] The type of transition. (1 = WORK_ORDER; 2 = VOICE_MESSAGE; 3 = ACCESS_TICKET; 4 = WORK_TICKET; 5 = ALARM) if transType1 = WORK_ORDER, then transType2 = 1001 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = ACCESS_TICKET, then transType2 = empty if transType1 = WORK_TICKET, then
	transDateT ime	xs:dateTime	1..1	Timestamp of last modification. (not null)	
	userName	xs:string	1..1	The name of the user that performed the last modification. (not null)	
	transType1	xs:int (totalDigits: 3)	1..1	[LOV-ID: 9001] The type of transition. (1 = WORK_ORDER; 2 = VOICE_MESSAGE; 3 = ACCESS_TICKET; 4 = WORK_TICKET; 5 = ALARM)	
	transType2	xs:int (totalDigits: 3)	0..1	if transType1 = WORK_ORDER, then transType2 = 1001 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = VOICE_MESSAGE, then transType2 = 1201 if transType1 = ACCESS_TICKET, then transType2 = empty if transType1 = WORK_TICKET, then	

			transType2 = 4002	transType2 = 4002 The transaction ID. (e.g. if transType1:=WORK_ORDER then transId:=ORDER_ID) (not null) The transaction state. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_STATE hence transType2=2 means 'HOLDING') (not null) The ID of the ISP involved in the transaction. (not null) The name of the ISP involved in the transaction. (not null) The ID of a second ISP involved in the transaction. The name of a second ISP involved in the transaction. The DN/VN/NSN associated to that transaction. (not null) A second DN/VN/NSN associated to that transaction. A transaction response message.
transId	xs:integer	1..1	The transaction ID. (e.g. if transType1:=WORK_ORDER then transId:=ORDER_ID) (not null)	
transState	xs:int (totalDigits: 3)	1..1	The transaction state. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_STATE hence transType2=2 means 'HOLDING') (not null)	
ispId1	xs:int (totalDigits: 6)	1..1	The ID of the ISP involved in the transaction. (not null)	
ispName1	xs:string (minLength: 1 , maxLength: 30)	1..1	The name of the ISP involved in the transaction. (not null)	
ispId2	xs:int (totalDigits: 6)	0..1	The ID of a second ISP involved in the transaction.	
ispName2	xs:string (minLength: 1 , maxLength: 30)	0..1	The name of a second ISP involved in the transaction.	
dnVnNsn1	xs:string (pattern: 0[1-9]\d{8})	1..1	The DN/VN/NSN associated to that transaction. (not null)	
dnVnNsn2	xs:string (pattern: 0[1-9]\d{8})	0..1	A second DN/VN/NSN associated to that transaction.	
response	xs:string	0..1	A transaction response message.	
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.	

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2.4.81 getTdmMessageDetailAckType

Used by: [getTdmMsgDetailResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
tdmMessage	tdmMessage	0..1	TDM message (step).

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2.4.82 modifyPendingInstallationTicketAckType

Description: Acknowledge response for the MODIFY_PENDING_INSTALLATION_TICKET command.

Used by: [modifyPendingInstallationTicketResponse](#)

Extension of: [ackType](#)

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2.4.83 lookUpPredecessorsAckType

Description: The acknowledge message returned after processing an addPredecessorEntity order request.

Used by: [lookUpPredecessorsResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
lookUpPredecessorEntities	lookUpPredecessorEntitiesType	1..1	the entities for the lookUpPredecessorsEntities call

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2.4.84 readPredecessorEntityAckType

Description: The acknowledge message returned after processing an readPredecessorEntity order request.

Used by: [readPredecessorEntityResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
predecessorEntity	predecessorEntityType	1..n	a predecessor entity

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2.4.85 updatePredecessorEntityAckType

Description: The acknowledge message returned after processing an updatePredecessorEntity request.

Used by: [updatePredecessorEntityResponse](#)

Extension of: [ackType](#)

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2.4.86 removePredecessorEntityAckType

Description: The acknowledge message returned after processing an *removePredecessorEntity* request.

Used by: [removePredecessorEntityResponse](#)

Extension of: [ackType](#)

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2.4.87 **qualifAcknowledgeType**

Description: The acknowledge message returned after processing an *qualification* request.

Used by: [srvQualifByNumberResponse](#), [srvQualifByAddressResponse](#), [srvQualifByLocationIdResponse](#), [srvQualifByLidResponse](#), [srvQualifByStartPointResponse](#), [srvQualifBySocketResponse](#), [srvQualifByBindingIdResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
dnStnr	xs:string (pattern: 0[1-9]\d{8})	0..1	The DN „Stammnummer“.
qualificationResult	qualificationResult	0..n	Represents a technology (bbType) specific qualification response. Is mandatory for the B2B Interface; The LQS Service Availability Qualification Interface does not use this element A list of qualification answers for this particular BB type and service mix combination. LQS Service Availability Qualification Interface: <i>qualifAnswer</i> occurs only once A fiber (bbcs-f) qualification answer

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2.4.88 **getQualifHistoryAckType**

Description: Get qualification history from initialy or re- qualification

Used by: [getQualifHistoryResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
qualifLogId	xs:long (totalDigits: 10)	1..1	Qualification Log Id
transDateTime	xs:dateTime	1..1	The transition date/time.
orderNr	xs:string (pattern: [1-9]\d{25})	0..1	The order ID.
groupId	xs:long (totalDigits: 10)	0..1	A group Id of a TDM message.
qualifHistoryRequest	qualifHistoryReqDataType	1..1	The qualification request from the history selected time slot
qualifHistoryResponse	qualifHistoryResDataType	1..1	The qualification response from the history

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2.4.89 createChangeTicketResponseType

Description: Output createChangeTicket Operation

Used by: [createChangeTicketResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
changeTicketId	xs:decimal (totalDigits: 10)	0..1	

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2.4.90 modifyPendingChangeTicketResponseType

Description: Output modifyPendingChangeTicket Operation

Used by: [modifyPendingChangeTicketResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
changeTicketId	xs:decimal (totalDigits: 10)	0..1	Change Ticket ID assigned by WSG

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2.4.91 cancelPendingChangeTicketResponseType

Description: Output cancelPendingChangeTicket Operation

Used by: [cancelPendingChangeTicketResponse](#)

Extension of: [ackType](#)

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2.4.92 getChangeTicketOverviewResponseType

Description: Output getChangeTicketOverview Operation

Used by: [getChangeTicketOverviewResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
list	changeTicketId	xs:decimal (totalDigits: 10)	0..1 Change Ticket ID assigned by WSG
	changeTicketStatus	xs:int (totalDigits: 3)	1..1 [LOV-ID: 3021 Change Ticket Status
	statusReason	xs:int (totalDigits: 3)	0..1 [LOV-ID: 3022] A Status Reason set by the backend system
	extRef	xs:string (minLength: 1 , maxLength: 80)	0..1 An external reference provided by the ISP.

exchangeDate	xs:date	1..1	designated date for the exchange
exchangeType	xs:int (totalDigits:3)	1..1	[LOV-ID: 3020] What must be exchanged (1 = CPE Hardware: 2 = CPE Firmware)
reminderProcess	xs:int (totalDigits:3)	1..1	[LOV-ID: 9012] LOV_REMINDER_PROCESS (1 = first reminder at exchange date, second reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)
creationDateTime	xs:dateTime	1..1	
lastModificationDateTime	xs:dateTime	1..1	

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2.4.93 **getChangeTicketDetailResponseType**

Description: Output *getChangeTicketDetail* Operation

Used by: [getChangeTicketDetailResponse](#)

Extension of: [ackType](#)

Element	Type	Occ	Comment
changeTicket	changeTicketType	0..1	
workLog	workLogType	0..n	List of the work log entries
historyItem	changeTicketType	0..n	

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2.4.94 **ackType**

Description: The generic acknowledge response type.

Extended by: [orderAckType](#), [addPredecessorEntityAckType](#), [customerOrderAckType](#), [cancelPendingInstallationTicketAckType](#), [cancelPendingAckType](#), [createInstallationTicketAckType](#), [getBusinessLinesAckType](#), [getDetailAckType](#), [getInstallationTicketDetailAckType](#), [getOrderGroupNrAckType](#), [getServiceStatusAckType](#), [getTransactionOverviewAckType](#), [getTdmMessageDetailAckType](#), [modifyPendingInstallationTicketAckType](#), [lookUpPredecessorsAckType](#), [readPredecessorEntityAckType](#), [updatePredecessorEntityAckType](#), [removePredecessorEntityAckType](#), [qualifAcknowledgeType](#), [getQualifHistoryAckType](#),

[createChangeTicketResponseType](#), [modifyPendingChangeTicketResponseType](#),
[cancelPendingChangeTicketResponseType](#),
[getChangeTicketOverviewResponseType](#), [getChangeTicketDetailResponseType](#)

Extension of: [messageType](#)

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:[\dA-Z]{3})	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:1, maxLength:256)	0..1	Some additional textual description for the reason.

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2.4.95 cancelPendingRequestType

Description: Purpose: Cancel a pending order.

Used by: [cancelPendingOrder](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
orderNr	xs:string (pattern:[1-9]\d{25})	1..1	The order ID.
comment	xs:string (minLength:1, maxLength:256)	0..1	A comment.

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2.4.96 cancelPendingInstallationTicketRequestType

Description: Purpose: cancel a pending installation ticket.

Used by: [cancelPendingInstallationTicket](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
itIdWsg	xs:decimal (totalDigits:10)	1..1	Installation ticket id assigned by WSG
comment	xs:string (minLength:1, maxLength:256)	0..1	A comment.

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2.4.97 createInstallationTicketRequestType

Description: Purpose: creates a new installation ticket.

Used by: [createInstallationTicket](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
refOrderNr	xs:string (pattern:[1-9]\d{25})	0..1	
contrEleId	xs:int (totalDigits:3)	0..1	
itIdWsgRef	xs:decimal (totalDigits:10)	0..1	
bbType	xs:int (totalDigits:3)	1..1	[LOV-ID: 0276] The BB type.

dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	0..1	
custBusinessNr	xs:string (maxLength: 12)	0..1	The customer business number.
onsiteSupport	xs:int (totalDigits: 3)	0..1	
ispItRef	xs:string (minLength: 1 , maxLength: 30)	0..1	An external reference (an ID assigned by the ISP) identifying the installation ticket
endUser	endUser	1..1	Contact information on the end user (name, phone numbers, etc)
holdFlag	xs:boolean	0..1	If set to true the Installation Ticket is hold until Hardware Delivery Date.
hwDeliveryState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4007] Hardware Delivery State.
hwDeliveryDate	xs:date	0..1	Hardware Delivery Date.
hwDeliveryLocation	xs:string (minLength: 1 , maxLength: 128)	0..1	Hardware delivery location
hwType	xs:string (minLength: 1 , maxLength: 128)	0..1	CPE Description
hwExtRefReq	xs:string (minLength: 1 , maxLength: 128)	0..1	Additional Information if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment requested
installDateTimeRange	dateTimeRangeType	0..1	Installation frame.
installationType	xs:string (minLength: 1 , maxLength: 30)	0..1	Additional installation description.
additionalInstallationReq	xs:int (totalDigits: 3)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.
wosId	xs:string (maxLength: 17)	0..1	The work order synchronisation ID.

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2.4.98 customerOrderRequestType

Description: Purpose: Place a customer order. Data structure for wrapping related detail orders. Restriction: A customer order can contain at most 1 detail order related to a base product (BASIS_CREATE, BASIS_MODIFY, BASIS_DISCONNECT or ISP_CHANGE). The number of service related detail orders is not restricted.

Used by: [createCustomerOrder](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
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customerOrderNr	xs:string (pattern: [1-9]\d{25})	0..1	The customer order ID.												
orderGroupNr	xs:long (totalDigits: 12)	0..1	The order group ID.												
wosId	xs:string (maxLength: 17)	0..1	The work order synchronisation ID.												
qualification	qualification	0..1	Required if the base product is not BBCS on TDM (Contract Element 110). The qualification Nr is optional for a base product with Contract Element 110. The qualification Nr must be valid and not expired.												
creationType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1003] The so-called "kind of creation" of an order.												
deliveryNotification	xs:boolean	0..1	Notification if x day before planned activation the order isn't ready.												
order	orderRequestType	1..n													
- choice:	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>dnVnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A DN/VN/NSN phone number.</td></tr><tr><td>oto</td><td>simpleOtoType</td><td>1..1</td><td>Optical termination outlet.</td></tr></table>	Element	Type	Occ	Comment	dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.	oto	simpleOtoType	1..1	Optical termination outlet.	0..1	
	Element	Type	Occ	Comment											
	dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.											
	oto	simpleOtoType	1..1	Optical termination outlet.											

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2.4.99 getBusinessLinesRequestType

Description: Purpose: Get a report for all business lines related to a DDI number.

Used by: [getBusinessLines](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
stnrDdi	xs:string (pattern:0[1-9]\d{8})	1..1	The base number ("Stammnummer") for DDI.

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2.4.100 getOrderGroupNrRequestType

Description: Purpose: Obtain a unique number for grouping customer orders. Order group numbers can be used by the ISP to identify related customer

orders, e.g. in a `LIST_ORDERS` command. The resulting order group number will be returned in the ack file.

Used by: [getOrderGroupNr](#)

Extension of: [requestType](#)

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2.4.101 **getServiceStatusRequestType**

Description: Purpose: Obtain status information on a currently installed product or service.

Used by: [getSrvStatus](#)

Extension of: [requestType](#)

ElementType					OccComment	
	Element	Type	Occ	Comment		
choice:	dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1		1..1	
	oto	simpleOtoType	1..1	Optical termination outlet.		

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2.4.102 **modifyPendingInstallationTicketRequestType**

Description: Purpose: Modify a pending installation ticket.

Used by: [modifyPendingInstallationTicket](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
itIdWsg	xs:decimal (totalDigits: 10)	1..1	Installation ticket id assigned by WSG
itIdWsgRef	xs:decimal (totalDigits: 10)	0..1	Reference to installation ticket (2 nd intervention)
refOrderNr	xs:string (pattern: [1-9]\d{25})	0..1	
contrEleId	xs:int (totalDigits: 3)	0..1	
bbType	xs:int (totalDigits: 3)	0..1	
dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	0..1	
custBusinessNr	xs:string (maxLength: 12)	0..1	The customer business number.
onsiteSupport	xs:int (totalDigits: 3)	0..1	
ispItRef	xs:string (minLength: 1 , maxLength: 30)	0..1	An external reference (an ID assigned by the ISP) identifying the installation ticket
endUser	endUser	1..1	Contact information on the end user

			(name, phone numbers, etc)
holdFlag	xs:boolean	0..1	If set to true the Installation Ticket is hold until Hardware Delivery Date.
hwDeliveryState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4007] Hardware Delivery State.
hwDeliveryDate	xs:date	0..1	Hardware Delivery Date.
hwDeliveryLocation	xs:string (minLength: 1 , maxLength: 128)	0..1	Hardware delivery location
hwType	xs:string (minLength: 1 , maxLength: 128)	0..1	CPE Description
hwExtRefReq	xs:string (minLength: 1 , maxLength: 128)	0..1	Additional Information if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment requested
installDateTimeRange	dateTimeRangeType	0..1	Installation frame.
installationType	xs:string (minLength: 1 , maxLength: 30)	0..1	Additional installation description.
additionalInstallationReq	xs:int (totalDigits: 3)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.
wosId	xs:string (maxLength: 17)	0..1	The work order synchronisation ID.

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2.4.103 **getDetailRequestType**

Description: Purpose: Get details of a customer order.

Used by: [getOrderDetail](#)

Extension of: [requestType](#)

ElementType					OccComment	
-	Element	Type	Occ	Comment	1..1	
	orderNr	xs:string (pattern:[1-9]\d{25})	1..1	The order ID.		
	customerOrderNr	xs:string (pattern:[1-9]\d{25})	1..1	The customer order ID.		

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2.4.104 **getInstallationTicketDetailRequestType**

Description: Purpose: Get details of an installation ticket.

Used by: [getInstallationTicketDetail](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
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itIdWsg	xs:decimal (totalDigits: 10)	1..1	Installation ticket id assigned by WSG
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2.4.105 **getTdmMessageDetailRequestType**

Description: Purpose: Get a TDM message with a specific log ID.

Used by: [getTdmMsgDetail](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
logId	xs:long	1..1	A log ID of a TDM message.

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2.4.106 **getTransactionOverviewRequestType**

Description: Purpose: List transactions.

Used by: [getTransactionOverview](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment	
dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.	
transType1	xs:int (totalDigits: 3)	0..n	[LOV-ID: 9001] The type of transition. (1 = WORK_ORDER; 2 = VOICE_MESSAGE; 3 = ACCESS_TICKET; 4 = WORK_TICKET; 5 = ALARM)	
- choice:	Element	Type	Occ	Comment
	transDateTimeRange	dateTimeRangeType	1..1	A range of transition dates/times.
	transDateTime	xs:dateTime	1..1	The transition date/time.

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2.4.107 **addPredecessorEntityRequestType**

Description: Purpose: Add a predecessor Entity.

Used by: [addPredecessorEntityRequest](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.
predecessorName	subjectAddressNameType	1..1	
phoneNr	xs:string (pattern: 0[1-9]\d{8})	0..1	The voice phone number.

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2.4.108 **lookupPredecessorRequestType**

Description: Purpose: search predecessor entires.

Used by: [lookupPredecessorsRequest](#)

Extension of: [requestType](#)

ElementType					Occ	Comment
choice:	Element	Type	Occ	Comment	1..1	
	phoneNr	xs:string (pattern: 0[1-9]\d{8})	1..1	The voice phone number.		

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2.4.109 **readPredecessorEntityTypeRequestType**

Description: Purpose: search predecessor entities

Used by: [readPredecessorEntityRequest](#)

Extension of: [requestType](#)

ElementType					Occ	Comment
choice:	Element	Type	Occ	Comment	1..1	
	dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.		
	phoneNr	xs:string (pattern: 0[1-9]\d{8})	1..1	The voice phone number.		
	predecessorEntityId	xs:long	1..1	The predecessor entity id.		

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2.4.110 **removePredecessorEntityTypeRequestType**

Description: Purpose: remove a predecessor Entity.

Used by: [removePredecessorEntityRequest](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
predecessorEntityId	xs:long	1..1	The predecessor entity id.

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2.4.111 **updatePredecessorEntityType**

Description: Purpose: update a predecessor Entity.

Used by: [updatePredecessorEntityRequest](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
predecessorEntityId	xs:long	1..1	The predecessor entity id.
predecessorName	subjectAddressNameType	1..1	
phoneNr	xs:string (pattern: 0[1-9]\d{8})	0..1	The voice phone number.

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2.4.112 **srvQualifBySocketType**

Description: Get information on possible broadband connections to a given destination by socket ID (and opt. by PlugNr).

Used by: [srvQualifBySocket](#)

Extension of: [srvQualifFiberType](#)

ElementType					Occ	Comment
plugNr	xs:int (totalDigits: 3)				0..1	
- choice:	Element	Type	Occ	Comment	1..1	
	socketId	xs:string (minLength: 13 , maxLength: 19)	1..1			
	cooperationId	xs:string (maxLength: 100)	1..1			

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2.4.113 **srvQualifFiberType**

Description: Get information on possible broadband connections to a given destination. (abstract)

Extended by: [srvQualifBySocketType](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
basisContrEleId	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0320] A basis contract element ID
contrEleId	xs:int (totalDigits: 3)	0..n	[LOV-ID: 0320] A contract element ID.
bbType	xs:int (totalDigits: 3)	0..n	[LOV-ID: 0276] The BB type.
dnType	xs:int (totalDigits: 3)	0..n	[LOV-ID: 0109] The DN type.
businessType	xs:int (totalDigits: 3)	0..1	
qualifExtRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference (assigned by the ISP) for identification of the qualification request.
customerWishDate	xs:date	0..1	The customer wish date.
sfSlaId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.

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2.4.114 getQualifHistoryRequestType

Description: Get qualification history from initialy or re- qualification

Used by: [getQualifHistory](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
orderNr	xs:string (pattern:[1-9]\d{25})	1..1	The order ID.

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2.4.115 createChangeTicketRequestType

Description: Input for the createChangeTicket Operation

Used by: [createChangeTicket](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment												
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.												
exchangeDate	xs:date	1..1	designated date for the exchange												
exchangeType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 3020] What must be exchanged (1 = CPE Hardware; 2 = CPE Firmware)												
reminderProcess	xs:int (totalDigits: 3)	1..1	[LOV-ID: 9012] LOV_REMINDER_PROCESS (1 = first reminder at exchange date, second reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)												
customerContact1	customerContactType	1..1													
customerContact2	customerContactType	0..1													
- choice:	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>dnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A DN/NSN phone number.</td></tr><tr><td>dslam</td><td>dslam</td><td>1..1</td><td></td></tr></table>	Element	Type	Occ	Comment	dnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/NSN phone number.	dslam	dslam	1..1		1..1	
	Element	Type	Occ	Comment											
	dnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/NSN phone number.											
	dslam	dslam	1..1												

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2.4.116 modifyPendingChangeTicketRequestType

Description: Input for the modifyPendingChangeTicket Operation

Used by: [modifyPendingChangeTicket](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
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changeTicketId	xs:decimal (totalDigits: 10)	1..1	Change Ticket ID assigned by WSG
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.
exchangeDate	xs:date	1..1	designated date for the exchange
exchangeType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 3020] What must be exchanged (1 = CPE Hardware; 2 = CPE Firmware)
reminderProcess	xs:int (totalDigits: 3)	1..1	[LOV-ID: 9012] LOV_REMINDER_PROCESS (1 = first reminder at exchange date, second reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)
customerContact1	customerContactType	1..1	Customer Contact 1
customerContact2	customerContactType	0..1	Customer Contact 2
changeReason	xs:string (minLength: 1 , maxLength: 100)	0..1	A reason why the ticket should be changed

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2.4.117 **cancelPendingChangeTicketRequestType**

Description: Input cancelPendingChangeTicket Operation

Used by: [cancelPendingChangeTicket](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
changeTicketId	xs:decimal (totalDigits: 10)	1..1	Change Ticket ID assigned by WSG
cancelReason	xs:string (minLength: 1 , maxLength: 100)	1..1	A reason why the ticket should be cancelled

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2.4.118 **getChangeTicketOverviewRequestType**

Description: Input getChangeTicketOverview Operation

Used by: [getChangeTicketOverview](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
changeTicketId	xs:decimal (totalDigits: 10)	0..1	Change Ticket ID assigned by WSG
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.
dnNsnRange	dnNsnRangeType	0..1	
changeTicketStatus	xs:int (totalDigits: 3)	0..1	[LOV-ID: 3021 Change Ticket Status
ticketCreationDateTimeRange	dateTimeRangeType	0..1	
lastModificationDateTimeRange	dateTimeRangeType	0..1	

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2.4.119 **getChangeTicketDetailRequestType**

Description: Input *getChangeTicketDetail* Operation

Used by: [getChangeTicketDetailRequestType](#)

Extension of: [requestType](#)

Element	Type	Occ	Comment
changeTicketId	xs:decimal (totalDigits: 10)	1..1	Change Ticket ID assigned by WSG

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2.4.120 **requestType**

Description: The abstract generic request message type.

Extended by: [cancelPendingRequestType](#),
[cancelPendingInstallationTicketRequestType](#),
[createInstallationTicketRequestType](#), [customerOrderRequestType](#),
[getBusinessLinesRequestType](#), [getOrderGroupNrRequestType](#),
[getServiceStatusRequestType](#), [modifyPendingInstallationTicketRequestType](#),
[getDetailRequestType](#), [getInstallationTicketDetailRequestType](#),
[getTdmMessageDetailRequestType](#), [getTransactionOverviewRequestType](#),
[addPredecessorEntityRequestType](#), [lookUpPredecessorRequestType](#),
[readPredecessorEntityRequestType](#), [removePredecessorEntityRequestType](#),
[updatePredecessorEntityRequestType](#), [srvQualifType](#), [srvQualifFiberType](#),
[getQualifHistoryRequestType](#), [createChangeTicketRequestType](#),
[modifyPendingChangeTicketRequestType](#),
[cancelPendingChangeTicketRequestType](#),
[getChangeTicketOverviewRequestType](#), [getChangeTicketDetailRequestType](#)

Extension of: [messageType](#)

Element	Type	Occ	Comment
ispId	xs:int (totalDigits: 6)	1..1	An ISP ID.

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2.4.121 **messageType**

Description: The abstract generic message type.

Extended by: [ackType](#), [requestType](#)

Attribute	Type	Use	Comment
correlationId	xs:string	optional	A unique ID to correlate request and answer(s) within a (ansynch.) batch process.

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2.4.122 **qualiResultDetailType**

Used by: [qualiResultDetail](#)

Element	Type	Occ	Comment
resultCode	xs:string (minLength: 1 , maxLength: 4)	1..1	Qualification Result Code
resultComment	xs:string (minLength: 1 ,	1..1	Some additional textual description for

	maxLength:256)		the result.
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2.4.123 equippedDateHistory

Description: *Equipped Date History: list the last 3 changes (if there are some)*

Used by: [plannedEndPoint](#)

Element	Type	Occ	Comment
sortNr	xs:int	1..1	Sort number: 1 (nearest) ... 3 (oldest)
changeDate	xs:string (pattern:2[0-9]{3}((-[01][0-9])?)(-([0-3][0-9])?))	1..1	
eventType	xs:int (totalDigits:3)	1..1	[LOV-ID: 1324] LOV_EQUIPPED_DATE_EVENT_TYPE 1=TargetDateChange; 2=ValidityClassException
from	xs:string (maxLength:10)	1..1	If EventType = 1 - TargetDateChange: Then the format is:2[0-9]{3}((-[01][0-9])?)(-([0-3][0-9])?); If EventType = 2 - ValidityClassException: Then the format is: string max length 5, example: from: GK4 to: GK98
to	xs:string (maxLength:10)	1..1	If EventType = 1 - TargetDateChange: Then the format is:2[0-9]{3}((-[01][0-9])?)(-([0-3][0-9])?); If EventType = 2 - ValidityClassException: Then the format is: string max length 5, example: from: GK4 to: GK98
changeReasonId	xs:int	1..1	Example: [1] Technology change; [2] Port shortage; [3] Missing material; [4] Veto major customer; [5] Veto municipality; [6] Management re-priorisation; [7] Acquisition delay; [8] Construction delay; [9] Changed in the planning phase; [10] Changed in the construction phase; [11] Changed by cooperation partner
changeReasonDescription	xs:string (maxLength:100)	1..1	

2.4.124 plannedEndPoint

Used by: [qualifAnswer](#)

Extension of: [endPointBaseType](#)

Element	Type	Occ	Comment
equippedDate	xs:string	1..1	Equipped date and target date are

	(pattern:2[0-9]{3}(-[01][0-9](-[0-3][0-9])?)?)		synonyms. Customers are able to order the service at this date.
equippedDateQuality	xs:int (totalDigits:2)	1..1	Equipped date quality and quality class are synonyms.
equippedDateComment	xs:string	1..1	The equippedDate embedded in a comment string
equippedDateHistory	equippedDateHistory	0..n	Equipped Date History: list the last 3 changes (if there are some) Sort number: 1 (nearest) ... 3 (oldest) [LOV-ID: 1324] LOV_EQUIPPED_DATE_EVENT_TYPE 1=TargetDateChange; 2=ValidityClassException If EventType = 1 - TargetDateChange: Then the format is:2[0-9]{3}((-[01][0-9]))((-[0-3][0-9])); If EventType = 2 - ValidityClassException: Then the format is: string max length 5, example: from: GK4 to: GK98 If EventType = 1 - TargetDateChange: Then the format is:2[0-9]{3}((-[01][0-9]))((-[0-3][0-9])); If EventType = 2 - ValidityClassException: Then the format is: string max length 5, example: from: GK4 to: GK98 Example: [1] Technology change; [2] Port shortage; [3] Missing material; [4] Veto major customer;[5] Veto municipality; [6] Management re-priorisation; [7] Acquisition delay; [8] Construction delay; [9] Changed in the planning phase; [10] Changed in the construction phase; [11] Changed by cooperation partner
plannedSpeed	duplexSpeedType	1..1	The planned bitrate (up/down).
extensionCategory	xs:int (totalDigits:3)	1..1	[LOV-ID: 9023] LOV_EXTENSION_CATEGORY: Ausbau Kategorie: 1 = PUS Neubau; 2 = FTTS/B Neubau; 3 = Vectoring Ausbau/Aktivierung

2.4.125 **duplexSpeedType**

Description: A upstream/downstream speed pair.

Used by: [speedProfileType](#), [effectiveSpeed](#), [plannedSpeed](#)

Element	Type	Occ	Comment
up	xs:int	1..1	Upload speed in kbit/sec.
down	xs:int	1..1	Download speed in kbit/sec.

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2.4.126 **speedProfileType**

Description: A speed profile type.

Used by: [fiberQualifProfileType](#), [plugType](#), [qualifProfileType](#), [serviceOrderHistoryType](#), [serviceOrderType](#), [serviceStatusServiceType](#), [tdmMessageBaseType](#), [accessSpeed](#), [speedProfile](#), [qualifAnswer](#)

Element	Type	Occ	Comment
speedProfileNr	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1010] A speed profile number.
description	xs:string (minLength: 1 , maxLength: 60)	0..1	
max	duplexSpeedType	0..1	A upstream/downstream speed pair. Upload speed in kbit/sec. Download speed in kbit/sec.
min	duplexSpeedType	0..1	A upstream/downstream speed pair. Upload speed in kbit/sec. Download speed in kbit/sec.
technologyType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was used for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring; 3 = G.FAST

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2.4.127 **subjectAddressEnhancedType**

Description: A complete subject's postal address.

Used by: [lookUpPredecessorRequestType](#), [srvQualifByAddressType](#)

Extension of: [subjectAddressType](#)

Element	Type	Occ	Comment
subjectAddressName	subjectAddressNameType	0..1	Person or company name.

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2.4.128 **contactAddressType**

Description: Contact Information

Used by: [inhouseInstallationInfoType](#), [inhouseInstallationRequestType](#)

Extension of: [subjectAddressType](#)

Element	Type	Occ	Comment
firstName	xs:string (minLength: 1 , maxLength: 30)	0..1	A subject's first name.
lastName	xs:string (minLength: 1 , maxLength: 30)	0..1	A subject's last name.
language	xs:string	0..1	ISO 639-1 (Codes for the representation of names of languages) (de = german; fr = french; it = italian)
eMail	xs:string (minLength: 5 , maxLength: 100)	0..1	An E-Mail address (a.b@x.com)
phone	xs:string (pattern:(\+)?([0-9]){7,15})	0..1	phone number
phone2	xs:string	0..1	Second phone number

	(pattern:(\+)?([0-9]){7,15})		
comment	xs:string (minLength:1, maxLength:256)	0..1	a comment to this address Informations

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2.4.129 **subjectAddressType**

Description: A subject's postal address.

Used by: [predecessorAddress](#), [qualifHistoryReqDataType](#)

Extended by: [subjectAddressEnhancedType](#), [contactAddressType](#)

Extension of: [addressType](#)

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2.4.130 **addressType**

Description: An (geographical) address entity.

Used by: [baseProductOrderType](#), [qualifAnswer](#), [fiberQualifAnswer](#)

Extended by: [subjectAddressType](#)

Element	Type	Occ	Comment
street	xs:string (minLength:1, maxLength:30)	0..1	The street name of an address.
houseNr	xs:string (minLength:1, maxLength:12)	0..1	The house number of an address.
building	xs:string (minLength:1, maxLength:30)	0..1	The building information of an address.
zip	xs:int (minInclusive:1000, maxInclusive:99999)	0..1	The zip of an address.
city	xs:string (minLength:1, maxLength:25)	0..1	The city of an address.
additionalCity	xs:string (minLength:1, maxLength:25)	0..1	The additional city information of an address.

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2.4.131 **qualifProfileType**

Description: Represents a speed profile making up a part of a qualification result.

Used by: [qualifAnswer](#)

Element	Type	Occ	Comment
qualifIndex	xs:long (totalDigits:10)	0..1	The index identifying a profile within a qualification response.
nrOfWires	xs:int (totalDigits:2)	0..1	The number of wires (only copper).
usedAccessSpeed	speedProfileType	0..1	A speed profile type.
serviceSpeed	speedProfileType	1..1	A speed profile type.
effectiveSpeed	duplexSpeedType	0..1	The effective speed.

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2.4.132 **IIDateType**

Description: Local Loop Date

Used by: [qualifAnswer](#)

Element	Type	Occ	Comment
activationDate	xs:date	0..1	
disconnectionDate	xs:date	0..1	

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2.4.133 **qualifAnswer**

Description: Represents a (per start point) answerblock as part of the qualification result.

Used by: [qualificationResult](#)

Element	Type	Occ	Comment
qualiResultState	xs:string (Enumeration: ok, ok_stao, planned, nok)	0..1	State of the Qualification Result.
qualiResultDetail	qualiResultDetailType	0..n	
endPoint	endPointType	0..1	An end point (consisting of a DN office and a BB device location) and port information.
plannedEndPoint	plannedEndPoint	0..1	A planned end point (plannedEndpoint wird abgefüllt, wenn bekannt ist, dass der Startpunkt in Zukunft von einem neuen Breitbandziel bedient wird.).
cpeInfo	cpeInfo	0..1	Information about the CPE.
maxAccessSpeed	speedProfileType	0..1	The speed profile identifying the maximum possible access speed.
averageFlag	xs:int (totalDigits:3)	0..1	[LOV-ID: 1050] The average flag marking the average answer within a multi-answer qualif response (0=The non-average qualif answer; 1=The average qualif answer)

			(strict address qualif); 2=The average qualif answer (fuzzy address qualif)).																
nrOfWires	xs:int (totalDigits: 2)	0..1	The number of wires (only copper).																
billingZone	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1503] The billing zone.																
fulfillmentTimeSlot	fulfillmentTimeSlot	0..n	A list of fulfillment time slots																
startPoint	startPointType	0..1																	
address	addressType	0..1	The address associated with this start point.																
resourceAvailability	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>available</td><td>xs:boolean</td><td>1..1</td><td>true if the resource is available, else false.</td></tr><tr><td>resourceType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1055] Resource Type (1 = Port; 2 = Copper, 3 = WARP Port).</td></tr><tr><td>upgradePlanDateTime</td><td>xs:dateTime</td><td>0..1</td><td>The planned upgrade time if resource unavailabl e.</td></tr></table>	Element	Type	Occ	Comment	available	xs:boolean	1..1	true if the resource is available, else false.	resourceType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1055] Resource Type (1 = Port; 2 = Copper, 3 = WARP Port).	upgradePlanDateTime	xs:dateTime	0..1	The planned upgrade time if resource unavailabl e.	0..n	A list of resource availability statements. true if the resource is available, else false. The planned upgrade time if resource unavailable.
	Element	Type	Occ	Comment															
	available	xs:boolean	1..1	true if the resource is available, else false.															
	resourceType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1055] Resource Type (1 = Port; 2 = Copper, 3 = WARP Port).															
upgradePlanDateTime	xs:dateTime	0..1	The planned upgrade time if resource unavailabl e.																
qualifProfile	qualifProfileType	0..n	Represents a speed profile making up a part of a qualification result.																
currentDnType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0109] The current DnType																
currentAccessSpeed	speedProfileType	0..	The current access																

ed		1	speed profile
IIId	xs:string (minLength: 1 , maxLength: 13)	0..1	The local loop ID.
IIDate	IIDateType	0..1	Local Loop Date
jumperAction	xs:boolean	0..1	Ueberfuehrungsrelevant (true/false).
bbrRecommendation	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1051] Broadband ready recommendation of Field Service (FS) Installation: 0 = na (it is not possible to give a self install recommendation); 1 = BBR necessary (no self install recommended); 2 = no BBR necessary (selfinstall possible); 3 = no BBR necessary (selfinstall possible); 4 = BBR necessary (no self install recommended); 5 = BBR Socket installed;
potentialAvailable	xs:int (totalDigits: 1)	0..1	[LOV-ID 1054] Potential available that after a BBR an upgrooming could be started - so the access speed will may be higher and the quality will not be worse.
reasonOfPotential	reasonOfPotential	0..1	Reason of Potential - why is the Current Access Speed lower then the maximum
technologyType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was used for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring; 3 = G.FAST
lineState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1052] The copper line state.

vectorized	xs:boolean	0..1	true if line is currently vectorized
siteDevelopment	siteDevelopment	0..1	site development information, quantity of basic connectivities and utilized units
swisscomReady	xs:boolean	0..1	Flag indicating if the line is currently swisscom ready, means a All-IP access is provisioned

2.4.134 availableTechnologyType

Used by: [endPointerType](#)

Element	Type	Occ	Comment
technologyType	xs:int (totalDigits:3)	1..n	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was used for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring; 3 = G.FAST

2.4.135 bbPortInfoType

Used by: [bbPortInfo](#)

Element	Type	Occ	Comment
dslamName	xs:string (maxLength:30)	0..1	name of the DSLAM (e.g.: ipc-aar730-s-vd-05)
dslamType	xs:int (totalDigits:3)	0..1	[LOV-ID: 1064]: DSLAM Type.
bbPortNr	xs:string (minLength:1, maxLength:15)	0..4	Splitter Port
bbAdslEmulated	xs:int (totalDigits:3)	0..1	[LOV-ID: 0401]: ADSL emulated flag.
bbPortLineType	xs:int (totalDigits:3)	0..1	[LOV-ID: 1353] bb Port Line Type
vendor	xs:string (maxLength:32)	0..1	The vendor of the DSLAM

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2.4.136 endPointType

Description: An end point (consisting of a DN office and a BB device location) and port information.

Used by: [endPoint](#)

Extension of: [endPointBaseType](#)

Element	Type	Occ	Comment
availableTechnologyType	availableTechnologyType	0..1	An (geographical) address entity.
bbPortInfo	bbPortInfoType	0..1	Information about the Port in the loop.

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2.4.137 endPointBaseType

Description: An end point (consisting of a DN office and a BB device location).

Used by: [fiberQualifAnswer](#)

Extended by: [endPointType](#), [plannedEndPoint](#)

Element	Type	Occ	Comment
taxRegion	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").
accessNet	xs:string (minLength: 1 , maxLength: 5)	0..1	The access net part of a start- or end-point (e.g. "ALL").
site	xs:string (maxLength: 4)	0..1	Site of the Broad Band Device Location.
siteCategory	xs:int (totalDigits: 3)	0..1	[LOV-ID: 9008] The site categorization.
bbDeviceLocation	xs:string (minLength: 1 , maxLength: 20)	0..1	The broad band device location. (e.g. "AES")

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2.4.138 availability

Used by: [fiberQualifAnswer](#)

Element	Type	Occ	Comment
availabilityDate	xs:date	0..1	Availability date and target date are synonyms. Customers are able to order the service at this date.
validityClass	xs:string (minLength: 1 , maxLength: 12)	1..1	Validity class and quality class are synonyms. Possible values are: "GK1", "GK2", "GK3", "GK4", "GK5", "GK98", "GK99"
reason	xs:string (minLength: 1 , maxLength: 256)	0..1	

2.4.139 events

Used by: [fiberQualifAnswer](#)

Element	Type	Occ	Comment																				
event	<table> <tr> <th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr> <tr> <td>eventType</td><td>xs:string (maxLength:32)</td><td>1..1</td><td>possible values are: "1 - TargetDateChange", "2 - ValidityClassException", "99 - Reserve"</td></tr> <tr> <td>sequenceNumber</td><td>xs:int</td><td>1..1</td><td></td></tr> <tr> <td>eventTimeStamp</td><td>xs:dateTime</td><td>1..1</td><td></td></tr> <tr> <td>from</td><td>xs:string (maxLength:10)</td><td>0..1</td><td></td></tr> </table>	Element	Type	Occ	Comment	eventType	xs:string (maxLength: 32)	1..1	possible values are: "1 - TargetDateChange", "2 - ValidityClassException", "99 - Reserve"	sequenceNumber	xs:int	1..1		eventTimeStamp	xs:dateTime	1..1		from	xs:string (maxLength: 10)	0..1		1..1	possible values are: "1 - TargetDateChange", "2 - ValidityClassException", "99 - Reserve"
Element	Type	Occ	Comment																				
eventType	xs:string (maxLength: 32)	1..1	possible values are: "1 - TargetDateChange", "2 - ValidityClassException", "99 - Reserve"																				
sequenceNumber	xs:int	1..1																					
eventTimeStamp	xs:dateTime	1..1																					
from	xs:string (maxLength: 10)	0..1																					

	)		
to	xs:string (maxLength:10)	0..1	
eventReason	xs:string (maxLength:100)	0..1	

2.4.140 **fiberQualifAnswer**

Description: Represents a fiber qualification answer.

Used by: [qualificationResult](#)

Element	Type	Oc c	Comment				
qualiResultsState	xs:string (Enumeration: ok, ok_stao, planned, nok)	1..1	State of the Qualification Result.				
qualiResultDetail	qualiResultDetailType	0..n					
endPoint	endPointBaseType	0..1	An end point (consisting of a DN office and a BB device location).				
address	addressType	0..1	The address associated with this start point.				
locationId	xs:int	0..1					
socket	socketType	0..n	List of sockets				
bep	<table> <tr> <th>Element</th><th>Type</th><th>Oc c</th><th>Comment</th></tr> </table>	Element	Type	Oc c	Comment		Building Entry Point The BEP State (connected, available, planned or not connected) possible values are: "available", "not available", "not checked" possible values are: "SCS", "KOPA" possible values are: "standard", "remote_fan_fibre"
Element	Type	Oc c	Comment				
locationId	xs:int	1..1	A location id.				
bepState	xs:int (totalDigits: 3)	0..1	The BEP State (connected, available, planned or not connected)				
availability	availability	0..1	Validity class and quality class are synonyms. Possible values are: "GK1",				

				"GK2", "GK3", "GK4", "GK5", "GK98", "GK99"	
	inHouseAllowed	xs:boolean	1..1	In house installation allowed	
	firstInHouse	xs:boolean	1..1		
	maxAccessSpeedKbps	xs:int	1..n		
	initialMountingShaftCapacity	xs:string (maxLength:32)	1..1	possible values are: "available", "not available", "not checked"	
	bepBuilder	xs:string (maxLength:8)	0..1	possible values are: „SCS“, „KOPA“	
	siteCategory	xs:string (maxLength:32)	0..1	possible values are: „standard“, „remote_fan_fibre_spot“	
	events	events	0..1	possible values are: „1 - TargetDateChange“, „2 - ValidityClassException“, „99 - Reserve“	
	address	addressType	0..1	An (geographical) address entity.	
siteDevelopment	siteDevelopment		0..1	site development information, quantity of basic connectivities and utilized units	

2.4.141 **qualificationResult**

Description: Represents a technology (bbType) specific quali response.

Used by: [qualifAcknowledgeType](#)

Element Type	OccComment
contrEleId xs:int (totalDigits:3)	0..n [LOV-ID: 0320] A contract element ID.
bbType xs:int (totalDigits:3)	0..1 [LOV-ID: 0276] The BB

			type.		
dnType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0109] The DN type.		
qualifNr	xs:long (totalDigits: 10)	0..1			
lineState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1052] The copper line state.		
- choice:					1..1
	Element	Type	Occ	Comment	
	qualifAnswer	qualifAnswer	1..n		
	fiberQualifAnswer	fiberQualifAnswer	1..n		

2.4.142 **subjectAddressNameType**

Description: Person or company name.

Used by: [predecessorInfoType](#), [subjectAddressEnhancedType](#), [predecessorName](#)

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2.4.143 **startPointRequestType**

Description: start point request parameters

Used by: [srvQualifByStartPointType](#), [qualifHistoryReqDataType](#)

Element	Type	Occ	Comment
taxRegion	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").
accessNet	xs:string (minLength: 1 , maxLength: 5)	1..1	The access net part of a start- or end-point (e.g. "ALL").
unitType	xs:int (totalDigits: 3)	1..1	The type of unit for UP.
unitNumber	xs:int (totalDigits: 6)	1..1	The number of unit for UP.
sse	xs:int (totalDigits: 2)	1..1	The ,sse' for UP.
contactType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0115] The type of contact for UP.
contactNr	xs:int (totalDigits: 6)	0..1	The contact number for UP.

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2.4.144 **simpleOtoType**

Description: Socket (Fiber)

Used by: [oto](#)

ElementType					Occ	Comment
- choice:	Element	Type	Occ	Comment	1..1	
	socketId	xs:string (minLength: 13 , maxLength: 19)	1..1	A socket id (e.g. A.123.456.789).		
	cooperationId	xs:string (maxLength: 100)	1..1			
plug	xs:int (totalDigits: 3)				1..1	the plug

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2.4.145 **sla**

Used by: [createType](#), [modifyPendingBaseOrdType](#), [modifyType](#), [ispChangeType](#), [addType](#), [changeType](#), [modifyPendingSrvOrdType](#), [baseOrderType](#), [getServiceStatusResponseType](#), [orderHistoryType](#), [serviceStatusServiceType](#), [tdmMessageBaseType](#)

Element	Type	Occ	Comment
sfSlaId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.
saSlaId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0283] The service level assurance id

2.4.146 **startPointType**

Description: The start point associated with this qualification result.
(example: "79,TET,UP,2,1")

Used by: [startPoint](#)

Element	Type	Occ	Comment
taxRegion	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").
accessNet	xs:string (minLength: 1 , maxLength: 5)	1..1	The access net part of a start- or end-point (e.g. "ALL").
unitType	xs:int (totalDigits: 3)	1..1	The type of unit for UP.
unitNumber	xs:int (totalDigits: 6)	1..1	The number of unit for UP.
sse	xs:int (totalDigits: 2)	1..1	The ,sse' for UP.
contactType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0115] The type of contact for UP.
contactNr	xs:int (totalDigits: 6)	0..4	The contact number for UP.
upPreparation	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1070] Copper minimal development (1 = Normal, 2 =Copper minimal development, 3...5 = Reserve)

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2.4.147 **potential**

Description: Description of Potential

Used by: [reasonOfPotential](#)

Element	Type	Occ	Comment
potentialCode	xs:int (minInclusive:- 9999 , maxInclusive: 9999)	1..1	Potential Code negative value: reason why the maximum speed is lower then the current access profile. -1000: Pending downgrooming without service impact -1001: Pending downgrooming with service impact -1100: Pending devloc change (lengthing order) -1200: The profile is set manually -1300: -1400: The access is unstable -1501: ICA problem - impact on stability: BridgeTap -1502: ICA problem - impact on stability:

			Degraded Contact -1503: ICA problem - impact on speed: Missing Splitter -1504: ICA problem - impact on stability: Missing Splitter on alarm system (Business Decision) -1505: ICA problem - impact on stability: External Interference detected -1506: ICA problem - impact on stability: Intermittent contact -1507: ICA problem - impact on stability: Loop unbalanced -1508: ICA problem - impact on stability: Untwisted in-house wiring -1509: ICA problem - impact on stability: Time varying noise (crosstalk and RFI) -1510: ICA problem - impact on stability: CPE interoperability problem -1511: ICA problem - impact on stability: Black-listed CPE -1517: ICA problem - impact on stability: Abnormal crosstalk -1518: ICA problem - impact on stability: Defect switched power supply -1519: ICA problem - impact on speed: BridgeTap on overhead line -1600: Stability reached with downgrade positive value: reason why the maximum speed is higher then the current access profile 1000: outstanding upgrooming 1100: pending devloc change (short order) 1200: the profile is set manually 1300: Old CPE hardware 1301: CPE hardware doesnt support Vectoring. 1302: CPE firmware doesnt support Vectoring
potentialDescription	xs:string (minLength: 1 , maxLength: 256)	1..1	Potential Description

2.4.148 **reasonOfPotential**

Description: Reason of Potential - why is the Current Access Speed lower then the maximum

Used by: [customerOrderType](#), [getServiceStatusResponseType](#), [qualifAnswer](#)

ElementType	OccComment
potential	potential 1..n Description of Potential Potential Code negative value: reason why the maximum speed is lower then the current access profile. -1000: Pending downgrooming without service impact -1001: Pending downgrooming with service impact -1100: Pending devloc change (lengthing order) -1200: The profile is set manually -1300: -1400: The access is unstable -1501: ICA problem - impact on stability: BridgeTap -1502: ICA problem - impact on stability: Degraded Contact -1503: ICA problem - impact on speed: Missing Splitter -1504: ICA problem - impact on stability: Missing Splitter on alarm system (Business Decision) -1505: ICA problem - impact on stability: External

		Interference detected -1506: ICA problem - impact on stability: Intermittent contact -1507: ICA problem - impact on stability: Loop unbalanced -1508: ICA problem - impact on stability: Untwisted in-house wiring -1509: ICA problem - impact on stability: Time varying noise (crosstalk and RFI) -1510: ICA problem - impact on stability: CPE interoperability problem -1511: ICA problem - impact on stability: Black-listed CPE -1517: ICA problem - impact on stability: Abnormal crosstalk -1518: ICA problem - impact on stability: Defect switched power supply -1519: ICA problem - impact on speed: BridgeTap on overhead line -1600: Stability reached with downgrade positive value: reason why the maximum speed is higher then the current access profile 1000: outstanding upgrooming 1100: pending devloc change (short order) 1200: the profile is set manually 1300: Old CPE hardware 1301: CPE hardware doesnt support Vectoring. 1302: CPE firmware doesnt support Vectoring Potential Code negative value: reason why the maximum speed is lower then the current access profile. -1000: Pending downgrooming without service impact -1001: Pending downgrooming with service impact -1100: Pending devloc change (lengthing order) -1200: The profile is set manually -1300: -1400: The access is unstable -1501: ICA problem - impact on stability: BridgeTap -1502: ICA problem - impact on stability: Degraded Contact -1503: ICA problem - impact on speed: Missing Splitter -1504: ICA problem - impact on stability: Missing Splitter on alarm system (Business Decision) -1505: ICA problem - impact on stability: External Interference detected -1506: ICA problem - impact on stability: Intermittent contact -1507: ICA problem - impact on stability: Loop unbalanced -1508: ICA problem - impact on stability: Untwisted in-house wiring -1509: ICA problem - impact on stability: Time varying noise (crosstalk and RFI) -1510: ICA problem - impact on stability: CPE interoperability problem -1511: ICA problem - impact on stability: Black-listed CPE -1517: ICA problem - impact on stability: Abnormal crosstalk -1518: ICA problem - impact on stability: Defect switched power supply -1519: ICA problem - impact on speed: BridgeTap on overhead line -1600: Stability reached with downgrade positive value: reason why the maximum speed is higher then the current access profile 1000: outstanding upgrooming 1100: pending devloc change (short order) 1200: the profile is set manually 1300: Old CPE hardware 1301: CPE hardware doesnt support Vectoring. 1302: CPE firmware doesnt support Vectoring Potential Description
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2.4.149 **cableBox**

Description: The cable box (aka. "Ueberfuehrungspunkt", "UP").

Used by: [baseProductOrderType](#), [getServiceStatusResponseType](#), [tdmMessageBaseType](#), [vnRecord](#)

Element	Type	Occ	Comment
boardNr	xs:int (totalDigits:6)	1..1	UP Board Nr.
switchingPlaceNr	xs:int (totalDigits:6)	1..1	UP Switching Place Nr.

contactType	xs:int (totalDigits:3)	1..1	[LOV-ID: 0115] The type of contact for UP.
contactNr	xs:int (totalDigits:6)	1..4	The contact number for UP.
coordinateX	xs:int (totalDigits:6)	0..1	X coordinate of UP.
coordinateY	xs:int (totalDigits:6)	0..1	Y coordinate of UP.

2.4.150 **dslamTypeAllowed**

Description: DSLAM Type(s) which are supported from the cpe - only current Technologie is in focus

Used by: [cpeInfo](#)

Element	Type	Occ	Comment
technology	xs:int (totalDigits:3)	1..1	
dslamType	xs:int (totalDigits:3)	0..n	[LOV-ID: 1064]: DSLAM Type.

2.4.151 **capability**

Used by: [cpeInfo](#)

Element	Type	Occ	Comment
technologyType	xs:int (totalDigits:3)	1..1	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE (1 = VDSL; 2 = VDSL vectoring; 3 = G.FAST)
capabilityOverall	xs:int (totalDigits:3)	1..1	[LOV-ID: 9009] LOV_CPE_CAPABILITY_OVERALL (former LOV_VECTORING_CAPABILITY) (1 = Capable; 2 = Friendly; 3 = Forced Friendly; 4 = Disturber....)
capabilityHardware	xs:int (totalDigits:3)	1..1	[LOV-ID: 1350] LOV_CPE_CAPABILITY Does this CPE Hardware or Firmware support the declared TechnologyType? (0 = no; 1 = yes; 2 = yes, but SFP needed)
capabilityFirmware	xs:int (totalDigits:3)	1..1	[LOV-ID: 1350] LOV_CPE_CAPABILITY Does this CPE Hardware or Firmware support the declared TechnologyType? (0 = no; 1 = yes; 2 = yes, but SFP needed)

2.4.152 **cpeInfo**

Description: Information about the CPE.

Used by: [customerOrderType](#), [getServiceStatusResponseType](#), [qualifHistoryResDataType](#), [qualifAnswer](#)

Element	Type	Occ	Comment
cpeName	xs:string (maxLength:100)	1..1	CPE (Customer Modem) Name
dslamTypeAllowed	dslamTypeAllowed	0..n	DSLAM Type(s) which are supported from the cpe - only current Technologie is in focus
capability	capability	0..n	CPE Capability, used in case of VDSL2 qualification to shows the TechnologyType (VDSL2 Legacy, Vectoring, g.fast) capability. [LOV-ID: 9025] LOV_TECHNOLOGY_TYPE (1 = VDSL; 2 = VDSL vectoring; 3 = G.FAST) [LOV-ID: 9009]

			LOV_CPE_CAPABILITY_OVERALL (former LOV_VECTORING_CAPABILITY) (1 = Capable; 2 = Friendly; 3 = Forced Friendly; 4 = Disturber....) [LOV-ID: 1350] LOV_CPE_CAPABILITY Does this CPE Hardware or Firmware support the declared TechnologyType? (0 = no;1 = yes; 2 = yes, but SFP needed) [LOV-ID: 1350] LOV_CPE_CAPABILITY Does this CPE Hardware or Firmware support the declared TechnologyType? (0 = no;1 = yes; 2 = yes, but SFP needed)
comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.

2.4.153 **socketSmallType**

Description: Socket (Fiber)

Used by: [getServiceStatusResponseType](#)

Element	Type	Occ	Comment
socketId	xs:string (minLength: 13 , maxLength: 19)	1..1	A socket id (e.g. A.123.456.789).
cooperationId	xs:string (maxLength: 100)	0..1	A cooperation id (e.g. FreeFormText).
plugNr	xs:int (totalDigits: 3)	1..1	

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2.4.154 **serviceStatusServiceType**

Description: The service part of a service status response.

Used by: [getServiceStatusResponseType](#)

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0320] A contract element ID.
sla	sla	0..1	
speedProfile	speedProfileType	0..1	The speed profile.
speedProfileReq	speedProfileType	0..1	A speed profile type.
effectiveSpeed	duplexSpeedType	0..1	The effective speed.
bbQuality	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1009] The BB quality.
classOfService	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1108] The Class of Service.
fairUseSpeedProfileNr	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1109] The requested fair use profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.

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2.4.155 **getServiceStatusResponseType**

Description: *Reponse of a get service status*

Used by: [getServiceStatusAckType](#)

Element	Type	OccComment
contrEleId	xs:int (totalDigits: 3)	0..1 [LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1 An external reference provided by the ISP.
sla	sla	0..1
ispId	xs:int (totalDigits: 6)	1..1 An ISP ID.
ispName	xs:string (minLength: 1 , maxLength: 30)	0..1 The name of the ISP.
dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	0..1 A DN/VN/NSN phone number.
billingZone	xs:int (totalDigits: 3)	0..1 [LOV-ID: 1503] The billing zone.
bbType	xs:int (totalDigits: 3)	0..1 [LOV-ID: 0276] The BB type.
endPoint	endPointType	0..1 An end point (consisting of a DN office and a BB device location) and port information.
startPoint	startPointType	0..1
reasonOfPotential	reasonOfPotential	0..1 Reason of Potential - why is the Current Access Speed lower then the maximum
bbAccess	xs:int (totalDigits: 3)	0..1 [LOV-ID: 0205] Info used in manual exception handling.
dnType	xs:int (totalDigits: 3)	0..1 [LOV-ID: 0109] The DN type.
cableBox	cableBox	0..1 The cable box (aka. „Ueberfuehrungspunkt“, „UP“).
region	xs:int (totalDigits: 3)	0..1 [LOV-ID: 1501] The region.
nrOfWires	xs:int (totalDigits: 2)	0..1 The number of wires (only copper).
accessSpeed	speedProfileType	0..1
poolType	xs:string (minLength: 1)	0..1 The DHCP Pool-Type (named item) of the subscriber (e.g. "pool2"); the LOV-ID 1007 shows the currently available Pool-Type names.
cpeInfo	cpeInfo	0..1 Information about the CPE.
cpeOwner	xs:int (totalDigits: 3)	0..1 [LOV-ID: 4006] The CPE owner. (aka „modem owner“)
sessionType	xs:int (totalDigits: 3)	0..1 [LOV-ID: 1005] The session type.
interleaveMode	xs:int (totalDigits: 3)	0..1 [LOV-ID: 1008] The interleave mode.
termination	xs:int (totalDigits: 3)	0..1 [LOV-ID: 1006] The termination type.
vectorized	xs:boolean	0..1 true if line is currently vectorized
technologyType	xs:int (totalDigits: 3)	0..1 [LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was used for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring; 3 = G.FAST

opStatus	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1014] The OP Status.
socket	socketSmallType	0..1	A socket (fiber)
service	serviceStatusServiceType	0..n	The service part of a service status response.

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2.4.156 **dateTimeRangeType**

Description: A range of dateTimes.

Used by: [installDateTimeRange](#), [transDateTimeRange](#), [lastModificationDateTimeRange](#), [ticketCreationDateTimeRange](#)

Element	Type	Occ	Comment
from	xs:dateTime	1..1	
to	xs:dateTime	1..1	

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2.4.157 **oldConnectionType**

Used by: [plugType](#)

Element	Type	Occ	Comment
basisContrEleId	xs:int (totalDigits: 3)	1..1	
ispId	xs:int (totalDigits: 6)	0..1	
patchType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1334] LOV_ALO_PATCH_TYPE: Type of the cross connection (V1, V1+, V2)

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2.4.158 **fiberQualifProfileType**

Description: Represents a fiber speed profile making up a part of a qualification result.

Used by: [plugType](#)

Element	Type	Occ	Comment
qualifIndex	xs:long (totalDigits: 10)	0..1	The index identifying a profile within a qualification response.
usedAccessSpeed	speedProfileType	0..1	A speed profile type.
serviceSpeed	speedProfileType	1..1	A speed profile type.
effectiveSpeed	duplexSpeedType	0..1	The effective speed.

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2.4.159 **plugType**

Description: A plug on a Optical Termination Outlet OTO or Fiber Dose FD

Used by: [socketType](#)

Element	Type	Occ	Comment
plugNr	xs:int (totalDigits: 3)	1..1	A plug number (1..4).

fiberLineState	xs:int (totalDigits: 3)	0..1	[LOV_FIBER_LINE_STATE] The state for the whole fiber line
otoState	xs:int (totalDigits: 3)	0..1	[LOV_FIBER_LINE_STATE] The state of the OTO (optical termination outlet)
availabilityDate	xs:date	0..1	
remark	xs:string	0..1	a remark
isActive	xs:boolean	0..1	true if a service is active on this line
activeConnectionInfo	oldConnectionType	0..1	only set in case of isActive=true
maxAccessSpeed	speedProfileType	0..1	access profiles
qualifProfile	fiberQualifProfileType	0..n	qualification profiles
jumperAction	xs:boolean	0..1	Ueberfuehrungsrelevant (true/false).
fulfillmentTimeSlot	fulfillmentTimeSlot	0..n	A list of fulfillment time slots
portState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1111] The state of the port 1 = Connected 2 = Available 3 = Planned
portAvailabilityDate	xs:dateTime	0..1	Port availability date

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2.4.160 **socketType**

Description: Socket (Fiber)

Used by: [customerOrderType](#), [fiberQualifAnswer](#)

Element	Type	Occ	Comment
flatId	xs:string (maxLength: 6 false)	0..1	A flat id (e.g. 02.01).
flatMemo	xs:string (maxLength: 64)	0..1	
socketId	xs:string (minLength: 13 , maxLength: 19)	1..1	
cooperationId	xs:string (maxLength: 100)	0..1	A cooperation id (e.g. FreeFormText).
fiberLineState	xs:int (totalDigits: 3)	0..1	State of fiber line. Populated here, if no plug exists, else under plug
otoState	xs:int (totalDigits: 3)	0..1	The state of the OTO (optical termination outlet). Populated here, if no plug exists, else under plug
firstInHouse	xs:boolean	0..1	Is this the first socket in the house?
availabilityDate	xs:date	0..1	
plug	plugType	0..n	A list of plugs

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2.4.161 **baseProductOrderType**

Description: An order for a base product.

Used by: [customerOrderType](#)

Extension of: [baseOrderType](#)

Element	Type	Oc c	Comment
disconDate	xs:date	0..1	The date of service deactivation.
bbType	xs:int (totalDigits:3)	0..1	[LOV-ID: 0276] The BB type.
startPoint	startPointType	0..1	
bbAccess	xs:int (totalDigits:3)	0..1	[LOV-ID: 0205] Info used in manual exception handling.
bbPortNr	xs:string (minLength:1, maxLength:15)	0..1	Splitter Port
dnType	xs:int (totalDigits:3)	0..1	[LOV-ID: 0109] The DN type.
dnVnNsnReq	xs:string (pattern:0[1-9]\d{8})	0..1	The requested DN/VN/NSN.
stnrDdi	xs:string (pattern:0[1-9]\d{8})	0..1	The base number ("Stammnummer") for DDI.
cableBox	cableBox	0..1	The cable box (aka. „Ueberfuehrungspunkt“, „UP“).
region	xs:int (totalDigits:3)	0..1	[LOV-ID: 1501] The region.
address	addressType	0..1	In case of BBCS standalone
sgMm	xs:int (totalDigits:3)	0..1	[LOV-ID: 0107] The „Schalt-Merkmal“.
nrOfWires	xs:int (totalDigits:2)	0..1	The number of wires (only copper).
accessSpeed	speedProfileType	0..1	
accessSpeedChange	xs:int (totalDigits:3)	0..1	[LOV-ID: 1064] The access speed changed.
poolType	xs:string (minLength:1)	0..1	The DHCP Pool-Type (named item) of the subscriber (e.g.

			"pool2"); the LOV-ID 1007 shows the currently available Pool-Type names.																												
cpeOwner	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4006] The CPE owner. (aka „modem owner“)																												
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.																												
appointmentDateTime	xs:dateTime	0..1	Date and Time of an Appointment																												
selfInstall	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4005] Type of Self Installation.																												
opStatus	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1014] The OP Status.																												
inhouseInstallationInfo	inhouseInstallationInfoType	0..1	Information about a fiber in house installation																												
previousActiveConnectionInfo	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>ispId</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>An ISP ID.</td></tr><tr><td>plugNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td></td></tr><tr><td>contractElementId</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 0320] A contract element ID.</td></tr><tr><td>nsn</td><td>xs:string (pattern:010\d{7})</td><td>0..1</td><td>A Net Service Number</td></tr><tr><td>patchType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1334] LOV_ALO_PATCH_TYPE: Type of the cross connection (V1, V1+, V2)</td></tr><tr><td>breakout</td><td>breakoutType</td><td>0..1</td><td>Breakout cable The name of the breakout cable Number of the</td></tr></table>	Element	Type	Occ	Comment	ispId	xs:int (totalDigits: 6)	1..1	An ISP ID.	plugNr	xs:int (totalDigits: 3)	1..1		contractElementId	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0320] A contract element ID.	nsn	xs:string (pattern: 010\d{7})	0..1	A Net Service Number	patchType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1334] LOV_ALO_PATCH_TYPE: Type of the cross connection (V1, V1+, V2)	breakout	breakoutType	0..1	Breakout cable The name of the breakout cable Number of the	0..1	
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	ispId	xs:int (totalDigits: 6)	1..1	An ISP ID.																											
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	patchType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1334] LOV_ALO_PATCH_TYPE: Type of the cross connection (V1, V1+, V2)																											
breakout	breakoutType	0..1	Breakout cable The name of the breakout cable Number of the																												

	☐ ☐ ☐ Fiber		
predecessorInfo	predecessorInfoType	0..1	a predecessor information
jumperAction	xs:boolean	0..1	Ueberfuehrungsrelevant (true/false).
preOrderActivationCode	xs:string	0..1	The activation code for preOrders
onpNumber	xs:string (maxLength:32)	0..1	ONP Nummer (I-NET order)
missingDisconnectInfo	missingDisconnectInfoType	0..1	line is still used by a former ISP
history	baseProductOrderHistoryType	0..n	An order history for a base product.

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2.4.162 **ispChangeDonorOrderType**

Description: An isp change donor order that reports the new isp receiver to the isp donor.

Used by: [customerOrderType](#)

Extension of: [baseOrderType](#)

Element	Type	Occ	Comment
newIspId	xs:int (totalDigits:6)	1..1	
newIspName	xs:string (minLength:1, maxLength:30)	1..1	
history	ispChangeDonorOrderHistoryType	0..n	An history order of isp change donor order.

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2.4.163 **serviceOrderType**

Description: An order for a service.

Used by: [customerOrderType](#)

Extension of: [baseOrderType](#)

Element	Type	Occ	Comment
speedProfile	speedProfileType	0..1	The speed profile.
speedProfileReq	speedProfileType	0..1	A speed profile type.
accessSpeed	speedProfileType	0..1	
accessSpeedChange	xs:int (totalDigits:3)	0..1	[LOV-ID: 1064] The access speed changed.
effectiveSpeed	duplexSpeedType	0..1	The effective speed.

bbQuality	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1009] The BB quality.
classOfService	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1108] The Class of Service.
fairUseSpeedProfileNr	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1109] The requested fair use profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").
history	serviceOrderHistoryType	0..n	An order for a service.

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2.4.164 **baseOrderType**

Description: The abstract order definition.

Extended by: [baseProductOrderType](#), [ispChangeDonorOrderType](#), [serviceOrderType](#)

Extension of: [abstractOrderType](#)

Element	Type	Occ	Comment
creationType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1003] The so-called "kind of creation" of an order.
orderNr	xs:string (pattern:[1-9]\d{ 25 })	1..1	The order ID.
contrEleId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0320] A contract element ID.
orderType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1001] The order type.
orderState	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1002] The order status.
customerWishDate	xs:date	0..1	The customer wish date.
estimatedDueDateTimeStart	xs:dateTime	0..1	The estimated due date and time start.
estimatedDueDateTimeEnd	xs:dateTime	0..1	The estimated due date and time end.
transDateTime	xs:dateTime	1..1	The transition date/time.
comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.
reason	xs:string (pattern:[\dA-Z]{ 3 })	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength: 1 , maxLength: 256)	0..1	Some additional textual description for the reason.
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.
sla	sla	0..1	

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2.4.165 **abstractOrderType**

Description: The generic order type used in responses.

Extended by: [baseOrderType](#)

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2.4.166 inhouseAppointmentType

Description: An inhouse appointment

Used by: [inhouseAppointment](#)

Element	Type	Occ	Comment
appointmentId	xs:long (totalDigits: 10)	1..1	Appointment ID referencing an existing agreement.
appointmentDateTime	xs:dateTime	0..1	Date and Time of an Appointment
appointmentEndDateTime	xs:dateTime	0..1	End Date and Time of an Appointment
slaAppointmentDateTime	xs:dateTime	1..1	SLA Date and Time of an Appointment
slaAppointmentEndDateTime	xs:dateTime	1..1	SLA End Date and Time of an Appointment

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2.4.167 processingStepType

Used by: [processingStep](#)

Element	Type	Occ	Comment
stepCode	xs:int (totalDigits: 3)	1..1	[LOV-ID: 5012] LOV_FIBER_WFM_FIO_STATE (10 = New; 20 = Waiting; 30 = CustomerPending; 40 = ReadyToClean; 50 = Clean; 60 = Ready; 70 = Forwarded; 80 = Assigned; 100 = Suspended; 110 = Acknowledged; 120 = Rejected; 130 = Accepted; 140 = TripStarted; 150 = InWork; 160 = OnHold; 180 = Completed; 190 = Canceled; 200 = Closed; 210 = Aborted; 230 = Pull)
stepDateTime	xs:dateTime	1..1	

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2.4.168 reportDataType

Description: Information about Order completion

Used by: [reportData](#)

Element	Type	Occ	Comment
completionCode	xs:int (totalDigits: 3)	1..1	[LOV-ID: 5011] LOV_FIBER_COMPLETION_CODE
completionComment	xs:string (minLength: 1 , maxLength: 256)	0..1	Further information on the execution by the installation partner

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2.4.169 workInfoType

Description: Work information

Used by: [workInfo](#)

Element	Type	Occ	Comment
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workInfoCode	xs:int (totalDigits: 3)	1..1	[LOV-ID: 5010] LOV_FIBER_WORKINFO_CODE (10=Order Pending; 20=Customer not reached; 30=Delay for technical reason; 40=Cancel order not possible)
workInfoComment	xs:string (minLength: 1 , maxLength: 256)	1..1	Further information on the execution by the installation partner

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2.4.170 inventoryDataType

Used by: [inventoryData](#)

Element	Type	Occ	Comment
otoType	xs:string (maxLength: 20)	0..1	example: 4/2
partnerLabel	xs:string (maxLength: 20)	0..1	cooperation id
installationDate	xs:dateTime	0..1	The time as the installation was completed
flatId	xs:string (minLength: 1 , maxLength: 6)	0..1	A flat id (e.g. 02.01).
flatMemo	xs:string (maxLength: 64)	0..1	
lengthInhouseCable	xs:int	0..1	the cable length between OTO and BEP in meter
inventoryComment	xs:string (minLength: 1 , maxLength: 256)	0..1	Comment to the inventory

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2.4.171 inhouseInstallationInfoType

Description: Information about a fiber in house installation

Used by: [inhouseInstallationInfo](#)

Element	Type	Occ	Comment
ContactAddress	contactAddressType	1..1	Customer Contact Information
InstallationNotice	xs:string (minLength: 1 , maxLength: 256)	0..1	Comment for dispatching and service engineer
inhouseAppointment	inhouseAppointmentType	0..1	An inhouse Appointment
outOfSla	xs:boolean	0..1	
outOfSlaReason	xs:int (totalDigits: 3)	0..1	[LOV-ID: 5009] LOV_COPA_OUTOFSLA_REASON (10 = Appointment outside of SLA due to customer preference; 20 = Appointment outside of SLA caused by Installation Partner Swisscom; 30 = Appointment outside of SLA caused by Installation Partner KoPa)
outOfSlaComment	xs:string (minLength: 1 ,)	0..1	Notice text with the reason for Out of

	maxLength: 256)		SLA
earliestCustomerContact	xs:date	0..1	earliest customer contact of the inhouse installation
moveToSameAddress	xs:boolean	0..1	enduser moves to another flat in the same building
processingStep	processingStepType	0..1	
reportData	reportDataType	0..1	
workInfo	workInfoType	0..1	
inventoryData	inventoryDataType	0..1	

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2.4.172 breakoutType

Description: Breakout cable

Used by: [createType](#), [baseProductOrderType](#)

Element	Type	Occ	Comment
breakoutCable	xs:string (minLength: 1 , maxLength: 40)	1..1	The name of the breakout cable
breakoutFiber	xs:string (minLength: 1 , maxLength: 30)	0..1	Number of the Fiber

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2.4.173 predecessorInfoType

Description: An predecessor Info

Used by: [predecessorInfo](#)

Element	Type	Occ	Comment
phoneNr	xs:string (pattern: 0[1-9]\d{8})	0..1	The voice phone number.
name	subjectAddressNameType	0..1	Person or company name.

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2.4.174 missingDisconnectInfoType

Used by: [missingDisconnectInfo](#)

Element	Type	Occ	Comment
predecessorDisconnectNeeded	xs:boolean	1..1	
predecessorDisconnectMissing	xs:boolean	0..1	
predecessorDnVnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A nomalized phone number (e.g. "0312223344")
predecessorIspId	xs:int (totalDigits: 6)	1..1	An isp ID.
predecessorDisconDate	xs:date	0..1	

2.4.175 baseProductOrderHistoryType

Description: An order history for a base product.

Used by: [baseProductOrderType](#)

Extension of: [orderHistoryType](#)

Element	Type	Occ	Comment
disconDate	xs:date	0..1	The date of service deactivation.
bbType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0276] The BB type.
accessSpeed	speedProfileType	0..1	
accessSpeedChange	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1064] The access speed changed.
poolType	xs:string (minLength: 1)	0..1	The DHCP Pool-Type (named item) of the subscriber (e.g. "pool2"); the LOV-ID 1007 shows the currently available Pool-Type names.
cpeOwner	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4006] The CPE owner. (aka „modem owner“)

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2.4.176 ispChangeDonorOrderHistoryType
Description: An history order of isp change donor order.

Used by: [ispChangeDonorOrderType](#)
Extension of: [orderHistoryType](#)
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2.4.177 serviceOrderHistoryType
Description: An order for a service.

Used by: [serviceOrderType](#)
Extension of: [orderHistoryType](#)

Element	Type	Occ	Comment
speedProfile	speedProfileType	0..1	The speed profile.
speedProfileReq	speedProfileType	0..1	A speed profile type.
effectiveSpeed	duplexSpeedType	0..1	The effective speed.
bbQuality	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1009] The BB quality.

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2.4.178 orderHistoryType
Description: The abstract order history definition.

Extended by: [baseProductOrderHistoryType](#),
[ispChangeDonorOrderHistoryType](#), [serviceOrderHistoryType](#)

Element	Type	O	Comment
orderState	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1002] The order

			status.
customerWishDate	xs:date	0.1	The customer wish date.
estimatedDueDateTimeStart	xs:dateTime	0.1	The estimated due date and time start.
estimatedDueDateTimeEnd	xs:dateTime	0.1	The estimated due date and time end.
transDateTime	xs:dateTime	1.1	The transition date/time.
comment	xs:string (minLength:1, maxLength:256)	0.1	A comment.
reason	xs:string (pattern:[\dA-Z]{3})	0.1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:1, maxLength:256)	0.1	Some additional textual description for the

			reason	
extRef	xs:string (minLength:1, maxLength:80)		0..1	An external reference provided by the ISP.
sla	sla		0..1	
fiberInhouseInstallation	Element	Type	Occ	Comment
	processingStep	processingStepType	1..1	FIO Order State in W

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2.4.179 customerOrderType

Description: The generic customer order type.

Used by: [getDetailAckType](#)

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:6)	1..1	An ISP ID.
ispName	xs:string (minLength:1, maxLength:30)	1..1	The name of the ISP.
customerOrderNr	xs:string (pattern:[1-9]\d{25})	1..1	The customer order ID.
extRef	xs:string (minLength:1, maxLength:80)	0..1	An external reference provided by the ISP.
dnVnNsn	xs:string (pattern:0[1-9]\d{8})	0..1	A DN/VN/NSN phone number.
businessType	xs:int (totalDigits:3)	0..1	[LOV-ID: 1301] 1=New; 2=Relocation; 3=ProductChange; 4=NewOnActive; 5=IspChange ...
creationType	xs:int (totalDigits:3)	0..1	[LOV-ID: 1003] The so-called "kind of creation" of an order.
reason	xs:string (pattern:[\dA-Z]{3})	0..1	A 3-letter error code (aka

			messageId) where "000" means "ok".
reasonComment	xs:string (minLength: 1 , maxLength: 256)	0..1	Some additional textual description for the reason.
qualifNr	xs:long (totalDigits: 10)	0..1	The qualification ID.
qualifIndex	xs:long (totalDigits: 10)	0..1	The index identifying a profile within a qualification response.
fulfillmentTimeSlotQualifIndex	xs:long (totalDigits: 10)	0..1	The index identifying a profile within a qualification response.
billingZone	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1503] The billing zone.
wosId	xs:string (maxLength: 17)	0..1	The work order synchronisation ID.
wosIdReq	xs:string (maxLength: 17)	0..1	The requested work order synchronisation ID.
endPoint	endPointType	0..1	An end point (consisting of a DN office and a BB device location) and port information.
reasonOfPotential	reasonOfPotential	0..1	Reason of Potential - why is the Current Access Speed lower then the maximum
cpeInfo	cpeInfo	0..1	Information about the CPE.
socket	socketType	0..1	Socket (Fiber) A flat id (e.g. 02.01). State of fiber line. Populated here, if no plug exists, else under plug

					The state of the OTO (optical termination outlet). Populated here, if no plug exists, else under plug Is this the first socket in the house? an availability date A list of plugs
order	Element	Type	Occ	Comment	1..1 A list of orders (E.g. base or service order).
	baseProductOrder	baseProductOrderType	0..1	An order for a base product. In case of BBCS standalone	
	serviceOrder	serviceOrderType	0..n	An order for a service.	
	ispChangeDonorOrder	ispChangeDonorOrderType	0..1	An isp change donor order that reports the new isp receiver to the isp donor. The ISP ID of the new ISP (receiver). The	

			name of the new ISP (receiv er).	
sessionType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1005] The session type.	
termination	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1006] The termination type.	
vectorized	xs:boolean	0..1	true if line is currently vectorized	
technologyType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was used for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring; 3 = G.FAST	

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2.4.180 additionalInstallationSupport

Description: The additional installation support with it's state.

Used by: [ticket](#)

Element	Type	Occ	Comment
additionalInstallationReq	xs:int (totalDigits: 3)	1..1	[LOV-ID: 4004] The requested additional installation support.
aiState	xs:int (totalDigits: 3)	1..1	[LOV-ID: --] The additional installation support state.

2.4.181 billingInformation

Description: Billing relevant informations.

Used by: [itHistoryType](#), [ticket](#)

Element	Type	Occ	Comment
billingAction	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1502] Billing actions.
matCost	xs:decimal (totalDigits: 10)	0..1	Total material costs in CHF. (example: '12.25'; pattern: '10d.2d')
ppId	xs:int (totalDigits: 3)	0..1	Flat rate code in CHF. (E.g. 7 = xxx CHF)
ppCount	xs:int (totalDigits: 3)	0..1	Number of flat rates per TT. (Generally 1)
stdId	xs:int (totalDigits: 3)	0..1	Expense ratio code. (E.g. 01=140 CHF, 02=120 CHF)

expense	xs:int (totalDigits:5)	0..1	Work expense in minutes. (Conversion into hours and multiply with STD_ID rate not done)
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2.4.182 **itHistoryType**

Description: A base type for installation tickets (used for history-items).

Used by: [ticket](#)

Element	Type	Occ	Comment
itState	xs:int	1..1	[LOV-ID: 4001] The WSG state of an installation ticket: 1=ENTERED; 2=REJECTED; 3=CHECKED; 4=PROCESSING; 5=INWORK; 6=CLOSED; 7=CANCELLED).
lastModifiedDateTime	xs:dateTime	1..1	The last modification date and time of the corresponding entity.
lastModifiedUsername	xs:string (minLength:1, maxLength:60)	1..1	The username of the modifying user.
responseComment	xs:string (minLength:1, maxLength:256)	0..1	Text if it is necessary to give some additional detail information. Remark: same attribute as MESSAGE_TEXT in previous .vmg record definitions.
responseCommentCode	xs:int (totalDigits:3)	0..1	The response comment code. Code of correction action taken. (LOV).
progressComment	xs:string (minLength:1, maxLength:256)	0..1	An information about progress
progressCommentCode	xs:int (totalDigits:3)	0..1	[LOV-ID: --] The code of the progress information.
progressDateTime	xs:dateTime	0..1	The date and time of the progress
billingInformation	billingInformation	0..1	Billing relevant informations.
installDateTimeRange	dateTimeRangeType	0..1	Installation frame.

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2.4.183 **ticket**

Description: An installation ticket and its details.

Used by: [getInstallationTicketDetailAckType](#)

Element	Type	Occ	Comment
onsiteSupport	xs:int (totalDigits:3)	0..1	
ispItRef	xs:string (minLength:1, maxLength:30)	0..1	An external reference (an ID assigned by the ISP) identifying the installation ticket
endUser	endUser	1..1	Contact information on the end user (name, phone numbers, etc)
holdFlag	xs:boolean	0..1	If set to true the Installation Ticket is hold until Hardware

			Delivery Date.
hwDeliveryState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4007] Hardware Delivery State.
hwDeliveryDate	xs:date	0..1	Hardware Delivery Date.
hwDeliveryLocation	xs:string (minLength: 1 , maxLength: 128)	0..1	Hardware delivery location
hwType	xs:string (minLength: 1 , maxLength: 128)	0..1	CPE Description
hwExtRefReq	xs:string (minLength: 1 , maxLength: 128)	0..1	Additional Information if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment requested
installDateTimeRange	dateTimeRangeType	0..1	Installation frame.
installationType	xs:string (minLength: 1 , maxLength: 30)	0..1	Additional installation description.
additionalInstallationReq	xs:int (totalDigits: 3)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.
itIdWsg	xs:decimal (totalDigits: 10)	1..1	Installation ticket id assigned by WSG
itIdSys	xs:string (maxLength: 30)	0..1	IT system generated number identifying the installation ticket.
refOrderNr	xs:string (pattern: [1-9]\d{25})	0..1	
ispId	xs:int (totalDigits: 6)	1..1	An ISP ID.
ispName	xs:string (minLength: 1 , maxLength: 30)	1..1	The name of the ISP.
orderType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1001] The order type.
dnVnNsn	xs:string (pattern: 0[1-9]\d{8})	0..1	
dnVnNsnReq	xs:string (pattern: 0[1-9]\d{8})	0..1	The requested DN/VN/NSN.
entryDateTime	xs:dateTime	0..1	The entry dateTime.
closedDateTime	xs:dateTime	0..1	The date and time when the ticket has been closed.
contrEleId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0320] A contract element ID.
bbType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0276] The BB type.
itIdWsgRef	xs:decimal (totalDigits: 10)	0..1	Reference to installation ticket (2 nd intervention)
dnType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0109] The DN type.

speedProfileNr	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1010] The speed profile number.
hwExtRefInst	xs:string (minLength: 1 , maxLength: 128)	0..1	CPE SAP Order-Number of equipment installed. Semicolon separate list with Number,Counter pairs. E.g. 5555.676.6,02;555.600.6,01 for 2 CPEs of Order-Number 555.676.6 and 1 CPE of Order-Number 555.600.6
additionalInstallationSupport	additionalInstallationSupport	0..n	The additional installation support with it's state.
fieldForceComment	xs:string (minLength: 1 , maxLength: 256)	0..1	An information from the field force.
wosId	xs:string (maxLength: 17)	0..1	The work order synchronisation ID.
itState	xs:int	1..1	[LOV-ID: 4001] The WSG state of an installation ticket: 1=ENTERED; 2=REJECTED; 3=CHECKED; 4=PROCESSING; 5=INWORK; 6=CLOSED; 7=CANCELLED).
lastModifiedDateTime	xs:dateTime	1..1	The last modification date and time of the corresponding entity.
lastModifiedUsername	xs:string (minLength: 1 , maxLength: 60)	1..1	The username of the modifying user.
responseComment	xs:string (minLength: 1 , maxLength: 256)	0..1	Text if it is necessary to give some additional detail information. Remark: same attribute as MESSAGE_TEXT in previous .vmg record definitions.
responseCommentCode	xs:int (totalDigits: 3)	0..1	The response comment code. Code of correction action taken. (LOV).
progressComment	xs:string (minLength: 1 , maxLength: 256)	0..1	An information about progress
progressCommentCode	xs:int (totalDigits: 3)	0..1	[LOV-ID: --] The code of the progress information.
progressDateTime	xs:dateTime	0..1	The date and time of the progress
billingInformation	billingInformation	0..1	Billing relevant informations.
historyItem	itHistoryType	0..n	A history entry of the ticket

2.4.184 **tdmMessageBaseType**

Description: A base type for tdm message (used for tdmMessageType and tdmMessageGroupedPartType).

Extended by: [tdmMessage](#)

Element	Type	Occ	Comment
tdmMessageType	xs:string (minLength:1, maxLength:40)	1..1	[LOV-ID: 1201] A voice message type. (e.g. 4:="GV04")
tdmMessageRef	xs:string (minLength:1, maxLength:40)	1..1	Reference from TERCO or other TDM application.
dnVn1	xs:string (pattern:0[1-9]\d{8})	1..1	
dnVn2	xs:string (pattern:0[1-9]\d{8})	0..1	
responseComment	xs:string (minLength:1, maxLength:256)	0..1	Text if it is necessary to give some additional detail information. (free Text)
transDateTime	xs:dateTime	0..1	
processFlowNr	xs:string (minLength:1, maxLength:20)	1..1	Reference from OMS or other Voice application.
validActiDateTime	xs:dateTime	0..1	
actiDateTime	xs:dateTime	0..1	
validDisconDateTime	xs:dateTime	0..1	
disconDateTime	xs:dateTime	0..1	
dnTypeOld	xs:int (totalDigits:3)	0..1	[LOV-ID: 0109] The dn type.
dnTypeNew	xs:int (totalDigits:3)	0..1	[LOV-ID: 0109] The dn type.
bbAccess	xs:int (totalDigits:3)	0..1	[LOV-ID: 0205] Info used in manual exception handling.
bbTypeOld	xs:int (totalDigits:3)	0..1	[LOV-ID: 0276] The Broadband type.
bbTypeNew	xs:int (totalDigits:3)	0..1	[LOV-ID: 0276] The Broadband type.
lId	xs:string (minLength:1, maxLength:13)	0..1	The local loop ID.
sessionTypeOld	xs:int (totalDigits:3)	0..1	[LOV-ID: 1005] Broadband Session Type.
sessionTypeNew	xs:int (totalDigits:3)	0..1	[LOV-ID: 1005] Broadband Session Type.
backMessageText	xs:string (minLength:1, maxLength:80)	0..1	Free text if it is necessary to give some additional detail information (e.g. port shortage).
cableBox	cableBox	0..1	The cable box (aka. „Ueberfuehrungspunkt“, „UP“).

bbOkStatus	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1004] BB OK status.
custBusinessNr	xs:string (maxLength: 12)	1..1	The customer business number.
groupState	xs:int	1..1	[LOV-ID: 1202] The state of the tdm message group: 1=OPEN; 2=DELAYED; 3=DONE)
previousGroupState	xs:int	0..1	[LOV-ID: 1203] TDM message previous state.
groupType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1204] TDM message group type Remark: this type can change until the "tdm message group" has reached the state DONE.
sla	sla	0..1	
bbQualityOld	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1009] The bbQuality.
bbQualityNew	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1009] The bbQuality.
speedProfileOld	speedProfileType	0..1	Old service speed profile
speedProfileNew	speedProfileType	0..1	New service speed profile
contrEleId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0320] A contract element ID.

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2.4.185 **tdmMessage**

Description: TDM message (step).

Used by: [getTdmMessageDetailAckType](#)

Extension of: [tdmMessageBaseType](#)

Element	Type	Occ	Comment
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2.4.186 **fulfillmentTimeSlot**

Description: A list of fulfillment time slots

Used by: [plugType](#), [qualifHistoryReqDataType](#), [qualifAnswer](#)

Element	Type	Occ	Comment
fulfillmentTimeSlotQualifIndex	xs:long (totalDigits: 10)	1..1	The index identifying a profile within a qualification response.
fulfillmentTimeSlotStart	xs:dateTime	1..1	Start Date Time of the Fulfillment Time Slot
fulfillmentTimeSlotEnd	xs:dateTime	0..1	End Date Time of the Fulfillment Time Slot

2.4.187 **qualifHistoryReqDataType**

Description: The qualification request from the history

Used by: [getQualifHistoryAckType](#)

Element	Type	Occ	Comment
qualifNr	xs:long (totalDigits: 10)	1..1	The qualification ID.
qualifIndex	xs:long (totalDigits: 10)	0..1	The index identifying a

			profile within a qualification response.																								
fulfillmentTimeSlot	fulfillmentTimeSlot	0..1																									
ispId	xs:int (totalDigits: 6)	1..1	An ISP ID.																								
contrEleId	xs:int (totalDigits: 3)	1..n	[LOV-ID: 0320] A contract element ID.																								
bbType	xs:int (totalDigits: 3)	0..n	[LOV-ID: 0276] The BB type.																								
dnType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0109] The DN type.																								
- choice:	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>dnVnNs</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A DN/VN/NSN phone number.</td></tr><tr><td>lId</td><td>xs:string (minLength:1, maxLength:13)</td><td>1..1</td><td>The local loop ID.</td></tr><tr><td>startPoint</td><td>startPointRequestType</td><td>1..1</td><td>start point request parameters</td></tr><tr><td>address</td><td>subjectAddressType</td><td>1..1</td><td>A subject's postal address.</td></tr><tr><td>bindingId</td><td>xs:string (maxLength:15)</td><td>1..1</td><td>The binding id (e.g. AC1.222.333.444).</td></tr></table>	Element	Type	Occ	Comment	dnVnNs	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.	lId	xs:string (minLength: 1 , maxLength: 13)	1..1	The local loop ID.	startPoint	startPointRequestType	1..1	start point request parameters	address	subjectAddressType	1..1	A subject's postal address.	bindingId	xs:string (maxLength: 15)	1..1	The binding id (e.g. AC1.222.333.444).	1..1	
	Element	Type	Occ	Comment																							
	dnVnNs	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.																							
	lId	xs:string (minLength: 1 , maxLength: 13)	1..1	The local loop ID.																							
	startPoint	startPointRequestType	1..1	start point request parameters																							
	address	subjectAddressType	1..1	A subject's postal address.																							
bindingId	xs:string (maxLength: 15)	1..1	The binding id (e.g. AC1.222.333.444).																								
qualifExtRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference (assigned by the ISP) for identification of the qualification request.																								
customerWishDate	xs:date	0..1	The customer wish date.																								
synchWithVoice	xs:boolean	0..1	Synchronize with voice.																								
lineState	xs:int (totalDigits: 3)	0..	[LOV-ID: 1052]																								

		1	The copper line state.
newLoop	xs:boolean	0..1	Qualify for a new loop.
sfSlaId	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.
hasOnp	xs:boolean	0..1	Has Operator Number Portability
businessType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1301] 1=New; 2=Relocation; 3=ProductChange; 4=NewOnActive; 5=IspChange ...
returnSpeedAtNo k	xs:boolean	0..1	If true speed profiles will be mapped also in case of Copper/Space Shortage
appointment	appointmentType	0..1	An Appointment
customerLocation Id	xs:int	0..1	

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2.4.188 **siteDevelopment**

Description: site development information, quantity of basic connectivities and utilized units

Used by: [qualifHistoryResDataType](#), [qualifAnswer](#), [fiberQualifAnswer](#)

Element	Type	Occ	Comment
fullyDeveloped	xs:boolean	1..1	indicates if the site is fully developed
nrOfBasicConnectivities	xs:int	0..1	Nr of basic connectivities
nrOfUtilisationUnits	xs:int	0..1	Nr of utilisation units

2.4.189 **qualifHistoryResDataType**

Description: The qualification response from the history

Used by: [getQualifHistoryAckType](#)

Element	Type	Occ	Comment
---------	------	-----	---------

qualifNr	xs:long (totalDigits: 10)	0..1	The qualification ID.								
dnStnr	xs:string (pattern: 0[1-9]\d{8})	0..1	The DN „Stammnummer“.								
lId	xs:string (minLength: 1 , maxLength: 13)	0..1	The local loop ID.								
serviceProfile	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1010] A speed profile number.								
availableServiceProfiles	<table border="1"> <thead> <tr> <th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr> </thead> <tbody> <tr> <td>nr</td><td>xs:int (totalDigits:3)</td><td>1..n</td><td>[LOV-ID: 1010] A speed profile number.</td></tr> </tbody> </table>	Element	Type	Occ	Comment	nr	xs:int (totalDigits: 3)	1..n	[LOV-ID: 1010] A speed profile number.	0..1	
Element	Type	Occ	Comment								
nr	xs:int (totalDigits: 3)	1..n	[LOV-ID: 1010] A speed profile number.								
dnType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 0109] The DN type.								
endPoint	endPointType	0..1	An end point (consisting of a DN office and a BB device location) and port information.								
jumperAction	xs:boolean	0..1	Ueberfuehrungsrelevant (true/false).								
socketId	xs:string (minLength: 13 , maxLength: 19)	0..1									
plugNr	xs:int (totalDigits: 3)	0..1									
messageIdLqs	xs:string (pattern: [\dA-Z]{3})	0..1	An error code where '000' indicates 'OK'.								
messageIdQualif	xs:string (pattern: [\dA-Z]{3})	0..1	An error code where '000' indicates 'OK'.								
reasonComment	xs:string (minLength: 1 , maxLength: 256)	0..1	Some additional textual description for the reason.								
cpeInfo	cpeInfo	0..1	Information about the CPE.								
nrOfWires	xs:int (totalDigits: 2)	0..1	The number of wires (only copper).								
technologyType	xs:int (totalDigits: 3)	0..1	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE : Which standard was used for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring; 3 =								

			G.FAST
vectorized	xs:boolean	0..1	true if line is currently vectorized
siteDevelopment	siteDevelopment	0..1	site development information, quantity of basic connectivities and utilized units

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2.4.190 **qualification**

Description: Required if the base product is not BBCS on TDM (Contract Element 110). The qualification Nr is optional for a base product with Contract Element 110. The qualification Nr must be valid and not expired.

Used by: [customerOrderRequestType](#)

Element	Type	Occ	Comment
qualifNr	xs:long (totalDigits: 10)	1..1	The qualification ID.
qualifIndex	xs:long (totalDigits: 10)	1..1	The index identifying a profile within a qualification response.
fulfillmentTimeSlotQualifIndex	xs:long (totalDigits: 10)	0..1	The index identifying a profile within a qualification response.

2.4.191 **layer2Req**

Description: A layer2 type with some required elements.

Used by: [createType](#)

Element	Type	Occ	Comment
bbType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0276] The BB type.
sessionType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 1005] The session type.
termination	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1006] The termination type.
poolType	xs:string (minLength: 1)	0..1	

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2.4.192 **inhouseInstallationRequestType**

Description: Information needed for a fiber in house installation

Used by: [inhouseInstallationRequest](#)

Element	Type	Occ	Comment
ContactAddress	contactAddressType	1..1	Customer Contact Information
InstallationNotice	xs:string (minLength: 1 , maxLength: 256)	0..1	Comment for dispatching and service engineer
earliestCustomerContact	xs:date	0..1	
moveToSameAddress	xs:boolean	0..1	

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2.4.193 **createType**

Description: Part of a customer order. Purpose: Create a BBCS connection as a base for services.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment										
contrEleId	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0320] A contract element ID.										
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.										
customerWishDate	xs:date	0..1	The customer wish date.										
disconDate	xs:date	0..1	The date of service deactivation.										
comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.										
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.										
selfInstall	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4005] Type of Self Installation.										
layer2	layer2Req	1..1	A layer2 type with some required elements. Required if SESSION_TYPE is DHCP.										
sla	sla	0..1											
processWithLowPriority	xs:boolean	0..1	Process an order with low priority										
inhouseInstallationRequest	inhouseInstallationRequestType	0..1	Information needed for a fiber in house installation										
predecessorInfo	predecessorInfoType	0..1	a predecessor information										
activeConnectionInfo	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>breakout</td><td>breakoutType</td><td>0..1</td><td>Breakout cable The name of the</td></tr></table>			Element	Type	Occ	Comment	breakout	breakoutType	0..1	Breakout cable The name of the	0..1	used for product change ALO -> BBCS-F (Connection to disconnect)
	Element	Type	Occ	Comment									
breakout	breakoutType	0..1	Breakout cable The name of the										

				breakout cable Number of the Fiber		
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2.4.194 **disconnectType**

Description: Part of a customer order. Purpose: Disconnect all services and the base product.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
extRef	xs:string (minLength:1, maxLength:80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
comment	xs:string (minLength:1, maxLength:256)	0..1	A comment.
processWithLowPriority	xs:boolean	0..1	Process an order with low priority

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2.4.195 **layer2**

Description: Layer2 information.

Used by: [modifyPendingBaseOrdType](#), [modifyType](#), [ispChangeType](#)

Element	Type	Occ	Comment
bbType	xs:int (totalDigits:3)	0..1	[LOV-ID: 0276] The BB type.
sessionType	xs:int (totalDigits:3)	0..1	[LOV-ID: 1005] The session type.
termination	xs:int (totalDigits:3)	0..1	[LOV-ID: 1006] The termination type.
poolType	xs:string (minLength:1)	0..1	

2.4.196 **modifyPendingBaseOrdType**

Description: Part of a customer order. Purpose: Modify a pending BBCS base product order.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
extRef	xs:string (minLength:1, maxLength:80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength:1, maxLength:256)	0..1	A comment.
appointmentId	xs:long (totalDigits:10)	0..1	Appointment ID referencing an existing agreement.

selfInstall	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4005] Type of Self Installation.
layer2	layer2	0..1	Layer2 information. Required if SESSION_TYPE is DHCP.
sla	sla	0..1	
processWithLowPriority	xs:boolean	0..1	Process an order with low priority
predecessorInfo	predecessorInfoType	0..1	a predecessor information
inhouseInstallationRequest	inhouseInstallationRequestType	0..1	Information needed for a fiber in house installation

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2.4.197 **modifyType**

Description: Part of a customer order. Purpose: Modify an installed BBCS base product.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.
selfInstall	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4005] Type of Self Installation.
layer2	layer2	0..1	Layer2 information. Required if SESSION_TYPE is DHCP.
sla	sla	0..1	
processWithLowPriority	xs:boolean	0..1	Process an order with low priority
predecessorInfo	predecessorInfoType	0..1	a predecessor information

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2.4.198 **coCreateIntType**

Description: Part of a customer order. Purpose: Create an onsite installation ticket as part of the customer order. Note: The whole customer order will be aborted if a CO_CREATE_INT detail order is submitted without a preceding order for a BBCS service (within the same customer order).

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
onsiteSupport	xs:int (totalDigits: 3)	0..1	

ispItRef	xs:string (minLength: 1 , maxLength: 30)	0..1	An external reference (an ID assigned by the ISP) identifying the installation ticket
endUser	endUser	1..1	Contact information on the end user (name, phone numbers, etc)
holdFlag	xs:boolean	0..1	If set to true the Installation Ticket is hold until Hardware Delivery Date.
hwDeliveryState	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4007] Hardware Delivery State.
hwDeliveryDate	xs:date	0..1	Hardware Delivery Date.
hwDeliveryLocation	xs:string (minLength: 1 , maxLength: 128)	0..1	Hardware delivery location
hwType	xs:string (minLength: 1 , maxLength: 128)	0..1	CPE Description
hwExtRefReq	xs:string (minLength: 1 , maxLength: 128)	0..1	Additional Information if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment requested
installDateTimeRange	dateTimeRangeType	0..1	Installation frame.
installationType	xs:string (minLength: 1 , maxLength: 30)	0..1	Additional installation description.
additionalInstallationReq	xs:int (totalDigits: 3)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.

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2.4.199 ispChangeType

Description: Part of a customer order. Purpose: Let a recipient ISP order the take over of a BBCS service currently operated by a donor ISP. Note: The ISP_CHANGE detailorder is not sufficient for completing the ISP change operation. At least 1 SRV_ADD must follow within the context of the same logical customer order.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.
selfInstall	xs:int (totalDigits: 3)	0..1	[LOV-ID: 4005] Type of Self

			Installation.
layer2	layer2	0..1	Layer2 information. Required if SESSION_TYPE is DHCP.
sla	sla	0..1	
processWithLowPriority	xs:boolean	0..1	Process an order with low priority
predecessorInfo	predecessorInfoType	0..1	a predecessor information
onpNumber	xs:string (maxLength:32)	0..1	ONP Nummer (I-NET order)

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2.4.200 addType

Description: Part of a customer order. Purpose: Add a service to an existing BBCS connection.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:3)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:1, maxLength:80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength:1, maxLength:256)	0..1	A comment.
speedProfileNrReq	xs:int (totalDigits:3)	0..1	[LOV-ID: 1010] The requested speed profile number.
sla	sla	0..1	
processWithLowPriority	xs:boolean	0..1	Process an order with low priority
appointmentId	xs:long (totalDigits:10)	0..1	Appointment ID referencing an existing agreement.
classOfService	xs:int (totalDigits:3)	0..1	[LOV-ID: 1108] The Class of Service.

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2.4.201 changeType

Description: Part of a customer order. Purpose: Modify an existing service.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:3)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:1, maxLength:80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.

comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.
speedProfileNrReq	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1010] The requested speed profile number.
sla	sla	0..1	
processWithLowPriority	xs:boolean	0..1	Process an order with low priority
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.
classOfService	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1108] The Class of Service.
fairUseSpeedProfileNr	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1109] The requested fair use profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").

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2.4.202 **modifyPendingSrvOrdType**

Description: Part of a customer order. Purpose: Change an existing service related order.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.
speedProfileNrReq	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1010] The requested speed profile number.
sla	sla	0..1	
processWithLowPriority	xs:boolean	0..1	Process an order with low priority
appointmentId	xs:long (totalDigits: 10)	0..1	Appointment ID referencing an existing agreement.
classOfService	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1108] The Class of Service.
fairUseSpeedProfileNr	xs:int (totalDigits: 3)	0..1	[LOV-ID: 1109] The requested fair use profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").

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2.4.203 **reduceType**

Description: Part of a customer order. Purpose: Remove an installed service.

Extension of: [orderRequestType](#)

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits: 3)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
comment	xs:string (minLength: 1 , maxLength: 256)	0..1	A comment.
processWithLowPriority	xs:boolean	0..1	Process an order with low priority

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2.4.204 **orderRequestType**

Description: An abstract order request as part of a customer order request.

Used by: [order](#)

Extended by: [createType](#), [disconnectType](#), [modifyPendingBaseOrdType](#), [modifyType](#), [coCreateIntType](#), [ispChangeType](#), [addType](#), [changeType](#), [modifyPendingSrvOrdType](#), [reduceType](#)

Attribute	Type	Use	Comment
correlationId	xs:string	optional	A unique ID to correlate request and answer(s) within a (ansynch.) batch process.

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2.4.205 **endUser**

Description: Contact information on the end user (name, phone numbers, etc)

Used by: [createInstallationTicketRequestType](#), [modifyPendingInstallationTicketRequestType](#), [coCreateIntType](#), [ticket](#)

Element	Type	Occ	Comment
name	xs:string (minLength: 1 , maxLength: 60)	0..1	A name.
phone	xs:string (pattern:(\+)?([0-9]){7,15})	1..1	A nomalized phone number (e.g. "+41312223344")
comment	xs:string (minLength: 1 , maxLength: 2048)	0..1	

2.4.206 **vnRecord**

Description: A business line identity (VN) (= Verrechnungsnummer) record.

Used by: [getBusinessLinesAckType](#)

Element	Type	Occ	Comment
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vn	xs:string	1..1	VN.
cableBox	cableBox	0..1	The cable box (aka. „Ueberfuehrungspunkt“, „UP“).
bbAssigned	xs:boolean	0..1	BB already assigned: true=“Yes”, false=“No”.
bbInfo	xs:string (maxLength: 256)	0..1	Additional information.

2.4.207 **dslam**

Used by: [createChangeTicketRequestType](#),
[getChangeTicketOverviewResponseType](#), [changeTicketType](#)

Element	Type	Occ	Comment
dslamName	xs:string (maxLength: 30)	1..1	name of the DSLAM (e.g.: ipc-aar730-s-vd-05)
dslamPort	xs:string (maxLength: 20)	1..1	DSLAM Port notation (e.g.: 1/1/2/12)

2.4.208 **customerContactType**

Used by: [customerContact1](#), [customerContact2](#)

Element	Type	Occ	Comment
greetingCode	xs:int (totalDigits: 3)	0..1	[LOV-ID: 9011] LOV_GREETING_CODE Anrede (Mr.,Ms., Firm, Unknown ...)
firstName	xs:string (minLength: 1 , maxLength: 30)	0..1	A subject's first name.
lastName	xs:string (minLength: 1 , maxLength: 30)	1..1	A subject's last name.
street	xs:string (minLength: 1 , maxLength: 30)	0..1	The street name of an address.
houseNr	xs:string (minLength: 1 , maxLength: 12)	0..1	The house number of an address.
building	xs:string (minLength: 1 , maxLength: 30)	0..1	The building information of an address.
streetAppendix	xs:string (minLength: 1 , maxLength: 30)	0..1	An additional street information (for instance: Chalet Sonneblick)
zip	xs:int (minInclusive: 1000 , maxInclusive: 999999)	0..1	The zip of an address.
city	xs:string (minLength: 1 , maxLength: 25)	0..1	The city of an address.
eMail	xs:string (minLength: 5 , maxLength: 100)	0..1	An email address
mobilePhone	xs:string (pattern:(\+)?([0-9]){7,15})	0..1	Mobile phone number
language	xs:string	1..1	ISO 639-1 (Codes for the representation of names of languages) (de = german; fr = french; it = italian)
communicationChannel	xs:int (totalDigits: 3)	1..1	[LOV-ID: 3020] The way the

		customer should be notified
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2.4.209 dnNsnRangeType

Used by: [dnNsnRange](#)

Element	Type	Occ	Comment
from	xs:string (pattern: 0[1-9]\d{8})	1..1	A normalized phone number (e.g. "0312223344")
to	xs:string (pattern: 0[1-9]\d{8})	0..1	A normalized phone number (e.g. "0312223344")

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2.4.210 changeTicketType

Used by: [changeTicket](#), [historyItem](#)

Element	Type	Occ	Comment												
ispId	xs:int (totalDigits: 6)	1..1	An ISP ID.												
changeTicketId	xs:decimal (totalDigits: 10)	1..1	Change Ticket ID assigned by WSG												
changeTicketStatus	xs:int (totalDigits: 3)	1..1	[LOV-ID: 3021 Change Ticket Status												
statusReason	xs:int (totalDigits: 3)	0..1	[LOV-ID: 3022] A Status Reason set by the backend system												
extRef	xs:string (minLength: 1 , maxLength: 80)	0..1	An external reference provided by the ISP.												
- choice:	<table border="1"> <tr> <th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr> <tr> <td>dnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A DN/NSN phone number.</td></tr> <tr> <td>dslam</td><td>dslam</td><td>1..1</td><td></td></tr> </table>	Element	Type	Occ	Comment	dnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/NSN phone number.	dslam	dslam	1..1		1..1	
Element	Type	Occ	Comment												
dnNsn	xs:string (pattern: 0[1-9]\d{8})	1..1	A DN/NSN phone number.												
dslam	dslam	1..1													
exchangeDate	xs:date	1..1	designated date for the exchange												
exchangeType	xs:int (totalDigits: 3)	1..1	[LOV-ID: 3020] What must be exchanged (1 = CPE Hardware: 2 = CPE Firmware)												
reminderProcess	xs:int (totalDigits: 3)	1..1	[LOV-ID: 9012] LOV_REMINDER_PROCESS (1 = first reminder at exchange date, second												

			reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)
customerContact1	customerContactType	1..1	
customerContact2	customerContactType	0..1	Customer Contact 2
creationDateTime	xs:dateTime	1..1	
lastModificationDateTim e	xs:dateTime	1..1	

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2.4.211 workLogType

Used by: [getChangeTicketDetailResponseType](#)

Element	Type	Occ	Comment
workLogDateTime	xs:dateTime	1..1	
workLogSummary	xs:string (minLength:1, maxLength:100)	1..1	A summary of the work log entry.
workLogNotes	xs:string (maxLength:32768)	0..1	An additional comprehensive description.

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2.4.212 predecessorEntityType

Description: An predecessor Entity

Used by: [predecessorEntity](#)

Extension of: [predecessorEntitySmallType](#)

Element	Type	Occ	Comment
predecessorEntityId	xs:long	1..1	The predecessor entity id.
lastModifiedDateTime	xs:dateTime	1..1	The last modification date and time of the corresponding entity.
lastModifiedUsername	xs:string (minLength:1, maxLength:60)	1..1	The username of the modifying user.
entryDateTime	xs:dateTime	1..1	The entry dateTime.
entryUserName	xs:string (minLength:1, maxLength:60)	1..1	The username who added the 1 st entry.

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2.4.213 predecessorEntitySmallType

Used by: [predecessorEntities](#)

Extended by: [predecessorEntityType](#)

Element	Type	Occ	Comment
dnVnNsn	xs:string (pattern:0[1-9]\d{8})	0..1	A DN/VN/NSN phone number.

predecessorName	subjectAddressNameType	0..1	
predecessorAddress	subjectAddressType	1..1	The address of the predecessor
locationId	xs:int	0..1	A location id (GAIA ID)
IIId	xs:string (minLength: 1 , maxLength: 13)	0..1	The local loop ID.
lastModifiedDate	xs:date	0..1	The last modification date of the corresponding entity.

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2.4.214 predecessorAddressType

Used by: [predecessorAddresses](#)

Element	Type	Occ	Comment
predecessorAddress	subjectAddressType	1..1	The address of the predecessor
locationId	xs:int	0..1	A location id (GAIA ID)

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2.4.215 lookUpPredecessorEntitiesType

Description: *the response for the lookup entities call*

Used by: [lookUpPredecessorEntities](#)

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3 List of Values (LOVs)

See document 0 for a list of LOVs. The Id's are referenced in Annex of the WSDL definition.

Sample:

"[LOV-ID: 4004] The requested additional installation support."

4 TDM Message types

4.1 Principles

3200.01:	Is the Completion of the deactivation part of a Voice transaction.
3200.02:	Is the Completion of the activation part of a Voice transaction.
Copying enabled "Y":	Used in the following Message-Types: For Message Type 03 (Umzug), 04 Umzug CH-weit), 17 (Accesstype-change) and 16 (Change of number. Note: is always Yes for this message type): On request of an ISP WSG copies a BB-Service from the "old" location to the new location if possible. The ISP will be notified by Voice-Messages.
Copying enabled "N":	Used in the following Message-Types: For Message Type 03 (Umzug), 04 Umzug CH-weit), 17 (Accesstype-change): On request of an ISP WSG does not copy a BB-Service from the "old" location to the new location if possible. Only the disconnection is done. The ISP will be notified by Voice-Messages about the disconnection. The ISP may create the new BB-Service on his own at the "new" location or constellation.
Is activation "Y":	Indicates that the order is an activation.
Is activation "N":	Indicates that the order is a deactivation.
PONR:	Point Of No Return. From this point onwards a cancellation / annulment of the order is no longer possible.

A TDM Message (Time-Division-Multiplexing Telephone technique, formerly called "Voice Message") is uniquely identified by a type and a reference from the producer system. The following list shows the available types and reference codes.

Reference	Description
APVWSG	

4.2 GV01 / Neuanschluss

Type	Process-Flow Nr.	Description
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GV01 / Neuanschluss Summary	Steps	copying enabled	is activation
	3010.11	-	Y
	3091/3071/3061.09	-	Y
	3091/3071/3061.09	-	Y
	3190.11	-	Y
	5240.05	-	Y
	3200.02	-	Y
GV 01 / Neuanschluss	3010.11	Neuanschluss: Einschaltbegehren	
		Voice Message Text: <i>New Voice Line was assigned for DN: <DN1></i>	
	3091.09	Neuanschluss: 3091.09 Schaltmeldung WSG/Einschaltung terminiert	
	3071.09	3071.09 Schaltmeldung WSG/Schalt. durch Servispartner	
	3061.09	3061.09 Schaltmeldung WSG/Schaltung durch Kunde PONR (Point of no Return)	
		Voice Message Text: <i>PONR for DN: <DN1>. For this Voice-Line with synchronised DSL order the activation process has started. Cancellation not possible anymore.</i>	
	3091.10	Neuanschluss: 3091.10 Schaltbestätigung/Einschaltung terminiert	
	3071.10	3071.10 Schaltbestätigung/Schalt. durch Servispartner	
	3061.10	3061.10 Schaltbestätigung/Schaltung durch Kunde	
		Voice Message Text: <i>Physical activation for DN: <DN1> confirmed. Physical activation of DSL is successful done. Waiting for configuration of DSL.</i>	
	3190.11	Neuanschluss: Annullation der Einschaltung	
		Voice Message Text: <i>Cancellation of Voice-Order for DN: <DN1>. A pending synchronised BB-Order has to wait until a new Voice-Order is submitted</i>	
	5240.05	Neuanschluss: Terminverschiebung der Einschaltung	
		Voice Message Text: <i>Change of Activation date to <VALID_ACTI_DATE></i>	
	3200.02	Neuanschluss: Abschluss der Einschaltung	
		Voice Message Text: <i>Closure of Voice-transaction. DSL will be configured</i>	

4.3 GV14 / Kündigung

GV14 / Kündigung Summary	Steps	copying enabled	is activation
	3130.06	-	N
	3141.07/3151.07	-	N
	3141.08/3151.08	-	N
	3190.11	-	N
	5240.05	-	N
	3200.01	-	N
D i s c o	3130.06	Kündigung: Ausschaltbegehren	

		Voice Message Text: <i>Disconnect Voice: Request for voice disconnection DN: <DN1>. An existing DSL will automatically be disconnected.</i>
	3141.07 3151.07	Kündigung: 3141.07 Ausschaltmeldung WSG/Ausschaltung durch Kunde/Servicepartner 3151.07 Ausschaltmeldung WSG/Ausschaltung terminiert PONR (Point of no Return) Der Ausschaltungsprozess für die Voice-Kündigung wurde gestartet. Voice Message Text: <i>Disconnection PONR for DN: <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.</i>
	3141.08 3151.08	Kündigung: 3141.08 Ausschaltbestätigung / Ausschaltung durch Kunde/Servicepartner 3151.08 Ausschaltbestätigung / Ausschaltung terminiert Bestätigung der physikalischen Ausschaltung des Ports. Voice Message Text: <i>Physical deactivation for DN <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.</i>
	3190.11	Kündigung: Annullation der Ausschaltung Voice Message Text: <i>Request of Disconnection: Cancellation of Voice-Order for DN: <DN1>. A pending synchronised BB-Order has to wait until a new Voice-Order is submitted</i>
	5240.05	Kündigung: Terminverschiebung der Ausschaltung Voice Message Text: <i>Request for Disconnection: Change of Activation date to <VALID_ACTI_DATE></i>
	3200.01	Kündigung: Abschluss der Ausschaltung Voice Message Text: <i>Request for disconnection: Closure of Voice-transaction. DSL will be disconnected.</i>

4.4 GV16 / Nummerwechsel

GV16 / Nummerwechsel Summary	Steps	copying enabled	is activation
	3010.11	Y	Y
	3091/3071/3061.09	Y	Y
	3091/3171/3061.10	Y	Y
	3190.11	Y	Y
	3200.02	Y	Y
	3130.06	N	N
	3151.07	N	N
	3151.08	N	N
	3190.11	N	N
	3200.01	N	N
16: Nummernwechsel	3010.11	Nummernwechsel: Einschaltbegehren	
		Voice Message Text: <i>Change of telephone number: from <DN1> to <DN2> at <VALID_ACTI_DATE>: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. DN old <DN1>. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i>	
	3091.09 3071.09 3061.09	Nummernwechsel: 3091.09 Schaltmeldung WSG/Einschaltung terminiert 3071.09 Schaltmeldung WSG/Schaltung durch Servispartner 3061.09 Schaltmeldung WSG/Schaltung durch Kunde PONR (Point of no Return)	
		Voice Message Text: <i>Change of telephone number: from <DN1> to <DN2> at <VALID_ACTI_DATE>: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i>	
		Nummernwechsel: 3091.10 Schaltbestätigung/Einschaltung terminiert 3071.10 Schaltbestätigung/Schaltung durch Servispartner 3061.10 Schaltbestätigung/Schaltung durch Kunde	
	3091.10 3071.10 3061.10	Voice Message Text: <i>Change of telephone number: from <DN1> to <DN2> at <VALID_ACTI_DATE>: Physical activation for DN new <DN2> confirmed. Physical activation of DSL is successful done. Waiting for automatic configuration of DSL</i>	
	3190.11	Nummernwechsel: Annullation der Einschaltung	

		Voice Message Text: <i>Change of telephone number: from <DN1> to <DN2>: Cancellation of Voice-Order for DN new <DN2>. The automatically created pending synchronised BB-Order will also be cancelled and will only be set up again after a new Voice-Activation Order is submitted</i>
	3200.02	Nummernwechsel: Abschluss der Einschaltung Voice Message Text: <i>Closure of Voice-Activation transaction. DSL will be configured. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i>

	3130.06	Nummernwechsel: Ausschaltbegehren Voice Message Text: <i>Change of telephone number: from <DN1> to <DN2>: Request for disconnection of Voice service. Please check also the automatically created Broadband Disconnect order</i>
	3151.07	Nummernwechsel: 3151.07 Ausschaltmeldung WSG / Ausschaltung terminiert PONR (Point of no Return) Voice Message Text: <i>Change of telephone number: from <DN1> to <DN2>: Disconnection PONR for DN old <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.</i>
	3151.08	Nummernwechsel: 3151.08 Ausschaltbestätigung / Ausschaltung terminiert Voice Message Text: <i>Change of telephone number: fom <DN1> to <DN2>: Physical deactivation for DN old <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.</i>
	3190.11	Nummernwechsel: Annullation der Ausschaltung Voice Message Text: <i>Change of telephone number: from <DN1> to <DN2>: Cancellation of Voice-Disconnect Order for DN old <DN1>. The automatically created synchronised BB-Disconnect Order will be cancelled and only be set up after a new Voice-Disconnect Order is submitted</i>

	3200.01	Nummernwechsel: Abschluss der Ausschaltung
		Voice Message Text: <i>Closure of Voice-Disconnect transaction for DN old <DN1>. DSL will be disconnected</i>

GV25 / Sistierung Aktivierung

GV25 / Sistierung Aktivierung	Summary	Steps	copying enabled	is activation
		3171.05	-	N
		3171.06	-	N
		3200.01	-	N
25.1: Sistierung aktiv		3171.05	Sistierungs aktiv: Meldung des Prozess-starts für die Sistierung.	
			Voice Message Text: <i>Temporary disconnection of voice and Broadband: Due to temporary disconnection of the voice connection, the subscriber with the telephone number <DN1> will be disconnected at <VALID_DISCON_DATE>. Swisscom will inform the customer for the temporary Voice-disconnect by letter. Please inform the Customer about the Broadband disconnection and check the Broadband Disconnect Order for DN <DN1>.</i>	
		3171.06	Sistierungs aktiv: Meldung des Beginns der Sistierung der Voice-Line	
			Voice Message Text: <i>Temporary disconnection of voice and Broadband: Confirmation of Disconnection date <VALID_DISCON_DATE>. Swisscom will inform the customer for the temporary Voice-disconnect by letter. Please inform the Customer about the Broadband disconnection and check the Broadband Disconnect Order for DN <DN1>.</i>	
		3200.01	Sistierung aktiv: Prozessabschluss des Beginns der Sistierung	
			Voice Message Text: <i>Temporary Disconnection: confirmation of disconnection.</i>	

GV25 / Sistierung deaktiv Summary	Steps	copying enabled	is activation
	3171.05	-	Y
	3171.06	-	Y
	3190.11	-	Y
	3200.02	-	Y
25.2: Sistierung deaktiv	3171.05	Sistierung deaktiv: Ankündigung der Reaktivierung der Voice-Linie	
		Voice Message Text: <i>Reactivation of Temporary disconnection of voice: the temporary disconnection of the voice connection for subscriber with telephone number <DN1> will be reactivated at <VALID_ACTI_DATE>. Swisscom will inform the customer for the Voice-line by letter. Please inform the Customer that Broadband services are possible again from <VALID_ACTI_DATE> onwards.</i>	
	3171.06	Sistierung deaktiv: Mutation nicht leitungsrelevante Dienste	
		Voice Message Text: <i>Reactivation of Temporary disconnection of voice: Confirmation that the temporary disconnection of the voice connection for subscriber with telephone number <DN1> will be reactivated at <VALID_ACTI_DATE>. Swisscom will inform the customer for the Voice-line by letter. Please inform the Customer that Broadband services are possible again from <VALID_ACTI_DATE> onwards.</i>	
	3190.11	Sistierung deaktiv: Annullation der Reaktivierung	
		Voice Message Text: <i>Cancellation of Reactivation of Temporary disconnection for <DN1> . A new Activation date will follow.</i>	
	3200.02	Sistierung deaktiv: Prozessabschluss	
		Voice Message Text: <i>Reactivation of Temporary disconnection of voice: Confirmation that the temporary disconnection of the voice connection for subscriber with telephone number <DN1> was reactivated at <VALID_ACTI_DATE>. From <VALID_ACTI_DATE> onwards Broadband can be provisioned again.</i>	

4.5 GV12 / Übernahme

GV12 / Übernahme Summary	Steps	copying enabled	is activation
	5201.01	-	Y
	3190.11	-	Y
	3200.02	-	Y
	5201.03	-	Y
12: Übernahme	5201.01	Übernahme: Start der Übernahme	
		Voice Message Text: <i>Take-over Voice connection (incl. DSL) for DN: <DN1> Please clarify with your customer</i>	
	3190.11	Übernahme: Annulation der Übernahme	
		Voice Message Text: <i>Cancellation for Take-over done</i>	
	3200.02 (5201.03)	Übernahme: Abschluss der Übernahme	
		Voice Message Text: <i>Closure of transaction</i>	

4.6 GV17 / Nummerntypwechsel Deaktivierung

GV17 / Nummern- typwechsel Deaktivierung Summary	Steps	copying enabled	is activation
	3130.06	Y/N	N
	3141.07 / 3151.07	Y/N	N
	3141.08 / 3151.08	Y/N	N
	3190.11	Y/N	N
	5240.05	Y/N	N
	3200.01	Y/N	N
17: Nummerntyp Wechsel (Änderung Anschlussart) (ISDN <--> PSTN), Deaktivierung	3130.06	Nummerntypwechsel: Ausschaltbegehren	
		Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Request for disconnection of Voice service. Please check also the automatically created Broadband Disconnect order for disconnecting the BB-Service at the old location.</i>	
	3141.07 3151.07	Nummerntypwechsel: 3141.07 Ausschaltmeldung WSG / Ausschaltung durch Kunde/Servicepartner 3151.07 Ausschaltmeldung WSG / Ausschaltung terminiert PONR (Point of no Return)	
		Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Disconnection PONR for DN old <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.</i>	

	3141.08 3151.08	Nummerntypwechsel: 3141.08 Ausschaltbestätigung / Ausschaltung durch Kunde/Servicepartner 3151.08 Ausschaltbestätigung / Ausschaltung terminiert	
		<i>Change of connection type DN old <DN1> and DN new <DN2>: Physical deactivation for DN old <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.</i>	
	3190.11	Nummerntypwechsel: Annulation der Ausschaltung Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Cancellation of Voice-Disconnect Order for DN old <DN1>. The automatically created synchronised BB-Disconnect Order will be cancelled and only be set up after a new Voice-Disconnect Order is submitted</i>	
	5240.05	Nummerntypwechsel: Terminverschiebung der Ausschaltung Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Change of Deactivation date to <VALID_DISCON_DATE></i>	
	3200.01	Nummerntypwechsel: Abschluss der Ausschaltung Voice Message Text: <i>Closure of Voice-Disconnect transaction for DN old <DN1>. DSL will be disconnected</i>	
GV17 / Nummerntypwechsel Aktivierung Summary	Steps 3010.11 3091/3071/3061.09 3091/3071/3061.10 3190.11 5240.05 3200.02 3301.14	copying enabled Y/N Y/N Y/N Y/N Y/N Y/N Y/N	is activation Y Y Y Y Y Y Y
chius	3010.11	Nummerntypwechsel: Einschaltbegehren	

		Copying enabled = Y: / Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i> Copying enabled = N: / Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>.</i>
	3091.09 3071.09 3061.09	Nummerntypwechsel: 3091.09 Schaltmeldung WSG / Einschaltung terminiert 3071.09 Schaltmeldung WSG / Schalt. durch Servispartner 3061.09 Schaltmeldung WSG / Schaltung durch Kunde PONR (Point of no Return) Copying enabled = Y: / Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i> Copying enabled = N: / Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore.</i>
	3091.10 3071.10 3061.10	Nummerntypwechsel: 3091.10 Schaltbestätigung / Einschaltung terminiert 3071.10 Schaltbestätigung / Schaltung durch Servispartner 3061.10 Schaltbestätigung / Schaltung durch Kunde Copying enabled = Y: / Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Physical activation for DN new <DN2> confirmed. Physical activation of DSL is successful done. Waiting for automatic configuration of DSL</i> Copying enabled = N: / Voice Message Text: <i>Relocation: Physical activation for DN new <DN2> confirmed.</i>
	3190.11	Nummerntypwechsel: Annullation der Einschaltung

		Copying enabled = Y: / Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>. The automatically created pending synchronised BB-Order will also be cancelled and will only be set up again after a new Voice-Activation Order is submitted</i> Copying enabled = N: / Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>.</i>
	5240.05	Nummerntypwechsel: Terminverschiebung der Einschaltung Voice Message Text: <i>Change of connection type DN old <DN1> and DN new <DN2>: Change of Activation date for DN new <DN2> to <VALID_ACTI_DATE></i>
	3200.02	Nummerntypwechsel: Abschluss der Einschaltung Copying enabled = Y: / Voice Message Text: <i>Closure of Voice-Activation transaction. DSL will be configured. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i> Copying enabled = N: / Voice Message Text: <i>Closure of Voice-Activation transaction.</i>
	3301.14 SPEZIALFALL	Nummerntypwechsel: Reine Voice-Transaktion kann die Provisionierung eines BB-Orders während der Dauer der Transaktion verhindern. Voice Message Text: <i>Change of configuration of Voice-line: This voice-line is currently blocked for Broadband Orders until <VALID_ACTI_DATE></i>

4.7 GV03 / 04 / 15 Umzug Deaktivierung

GV03 / 04 / 15 Umzug Deaktivierung Summary	Steps	copying enabled	is activation
	3130.06	Y/N	N
	3141.07 / 3151.07	Y/N	N
	3141.08 / 3151.08	Y/N	N
	3190.11	Y/N	N
	5240.05	Y/N	N
	3200.01	Y/N	N
03 / 04 / 15: Umzug (Deaktivierungsteil)	3130.06	Umzug: Ausschaltbegehren	
		Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Request for disconnection of Voice service. Please check also the automatically created Broadband Disconnect order for disconnecting the BB-Service at the old location.</i>	
	3141.07 3151.07	Umzug: 3141.07 Ausschaltmeldung WSG / Ausschaltung durch Kunde/Servicepartner 3151.07 Ausschaltmeldung WSG / Ausschaltung terminiert PONR (Point of no Return)	
		Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Disconnection PONR for DN old <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.</i>	
	3141.08 3151.08	Umzug: 3141.08 Ausschaltbestätigung / Ausschaltung durch Kunde/Servicepartner 3151.08 Ausschaltbestätigung / Ausschaltung terminiert	
		Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Physical deactivation for DN old <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.</i>	
	3190.11	Umzug: Annullation der Ausschaltung	
		Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Cancellation of Voice-Disconnect Order for DN old <DN1>. The automatically created synchronised BB- Disconnect Order will be cancelled and only be set up after a new Voice-Disconnect Order is submitted</i>	
	5240.05	Umzug: Terminverschiebung der Ausschaltung	
		Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Change of Deactivation date to <VALID_DISCON_DATE></i>	
	3200.01	Umzug: Abschluss der Ausschaltung	

		Voice Message Text: <i>Closure of Voice-Disconnect transaction for DN old <DN1>. DSL will be disconnected</i>
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GV03 / 04 / 15 Umzug Aktivierung Summary	Steps	copying enabled	is activation
	3010.11	Y/N	Y
	3091/3071/3061.09	Y/N	Y
	3091/3071/3061.10	Y/N	Y
	3190.11	Y/N	Y
	5240.05	Y/N	Y
	3200.02	Y/N	Y

03 / 04 / 15: Umzug (Aktivierungsteil)	3010.11	Umzug: Einschaltbegehren Copying enabled = Y / Voice Message Text: <i>Relocation: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. DN old <DN1>. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i> Copying enabled = N / Voice Message Text: <i>Relocation: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. DN old <DN1>.</i>
	3091.09 3071.09 3061.09	Umzug: 3091.09 Schaltmeldung WSG / Einschaltung terminiert 3071.09 Schaltmeldung WSG / Schalt. durch Servispartner 3061.09 Schaltmeldung WSG / Schaltung durch Kunde PONR (Point of no Return) Copying enabled = Y / Voice Message Text: <i>Relocation: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i> Copying enabled = N / Voice Message Text: <i>Relocation: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore.</i>
	3091.10 3071.10 3061.10	Umzug: 3091.10 Schaltbestätigung / Einschaltung terminiert 3071.10 Schaltbestätigung / Schaltung durch Servispartner 3061.10 Schaltbestätigung / Schaltung durch Kunde Copying enabled = Y / Voice Message Text: <i>Relocation: Physical activation for DN new <DN2> confirmed. Physical activation of DSL is successful done. Waiting for automatic configuration of DSL</i> Copying enabled = N / Voice Message Text: <i>Relocation: Physical activation for DN new <DN2> confirmed.</i>
	3190.11	Umzug: Annullation der Einschaltung

03 / 04 / 15: Umzug (Aktivierung)		Copying enabled = Y / Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>. The automatically created pending synchronised BB-Order will also be cancelled and will only be set up again after a new Voice-Activation Order is submitted.</i> Copying enabled = N / Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>.</i>
	5240.05	Umzug: Terminverschiebung der Einschaltung Voice Message Text: <i>Relocation DN old <DN1> and DN new <DN2>: Change of Activation date for DN new <DN2> to <VALID_ACTI_DATE></i>
	3200.02	Umzug: Abschluss der Einschaltung. Copying enabled = Y / Voice Message Text: <i>Closure of Voice-Activation transaction. DSL will be configured. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.</i> Copying enabled = N / Voice Message Text: <i>Closure of Voice-Activation transaction.</i>

4.8 05 / 06 : Zeitweiliger Anschluss

05 / 06 : Zeitweiliger Anschluss	3301.00	Zeitweiliger Anschluss: Mutation leitungsrelevanter Dienst Temporary connection
	3010.03	Zeitweiliger Anschluss: ISLK ok. Temporary connection: Line quality is good for ADSL
	3020.01	Zeitweiliger Anschluss: ISLK nok. Temporary connection: Line quality is not sufficient for ADSL
	6010.01	Zeitweiliger Anschluss: ISLK Rückmeldung Mutation Temporary connection: Line is to be modified for the voice service
	6030.01	Zeitweiliger Anschluss: Zur Zeit keine Ports verfügbar Temporary connection: Currently no ports available
	3200.01	Zeitweiliger Anschluss: Anschluss ausgeschaltet Temporary connection: Disconnected (closure of transaction)
	3200.02	Zeitweiliger Anschluss: Anschluss eingeschaltet Temporary connection: Connection is activated
	0000.00	Zeitweiliger Anschluss: Annullation Temporary connection: Cancellation

4.9 37 Änderung

37 Änderung	3272.04	Korrektur Leitungs-Verlauf auf aktivem Anschluss Voice Message Text: <i>Adjustment of active line, new cablebox infos.</i> ----- <i>NSN</i> <DN> <i>Prozess Flow Nr.</i> 3272.04 <i>Transaction Date/Time</i> <TRANS_DATETIME>
	3272.05	Korrektur Leitungs-Verlauf auf aktivem Anschluss Voice Message Text: <i>Adjustment of active line, new Port Nr. infos</i> ----- <i>NSN</i> <DN> <i>Prozess Flow Nr.</i> 3272.05 <i>Transaction Date/Time</i> <TRANS_DATETIME>

4.10 GV11 Korrektur Voice

GV11 Korrektur Voice Summary	Steps 3301.14 3190.11 3200.02	copying enabled - - -	is activation Y Y Y
11 Korrektur Voice	3301.14	Voice Message Text: <i>KORR: Currently a Voice-Order is inhibiting Broadband Orders to be provisioned. Information about finishing of KORR will be sent with Message 3200.02 or 3190.11</i>	
	3190.11	Voice Message Text: <i>Cancellation for Take-over done</i>	
	3200.02	Voice Message Text: <i>KORR: the Voice-Order KORR is done. Provsioning of BB-Orders again possible</i>	
11 Special Voice- Messages	3010.90	Voice Message Text: <i>"Broadband not possible at new location for DN: <DN2>. Please contact your customer."</i> Important Note: This voice-message is generated when the flag Copying Enabled = Yes is set but at the new location it is not possible to provide the same service as before (For example: VDSL at "old" place, but at new place only ADSL or "no Broadband" is possible)	
	3010.91	Voice Message Text: <i>"This voice-line does not allow BB because of S21 fix. DN: <DN2>."</i> Important Note: This voice-message is generated when the flag Copying Enabled = Yes is set but at the new location it is not possible to provide the BB-service because of S21 Fix, which inhibits the provision of BB-Services.	
	3010.92	Voice Message Text: <i>"For this DN <DN2> WSG will open a voice-driven order at <HOLD_DATE>."</i> Important Note: This voice-message is generated when WSG identifies in the south-bound Fulfillment system a pending voice-Order but will not yet open the order due to technical restrictions. In this case WSG notifies the date, when (Date) the automatically created order will be opened.	

5 Web Service Interface

5.1 Security

The following sections describe the implemented precautions aiming to improve the security of data transport in terms of confidentiality and non-repudiation.

5.1.1 Encryption

To meet the confidentiality aspect of information security the data transport between the web service client and its server is protected using the https schema.

Https is a URI scheme equivalent to the http scheme, originally intended to be used with the HTTP protocol, but with added encryption layer. The URI structure is the same, except that URIs begins with “https:” rather than “http:”. The scheme was invented by Netscape Communications Corporation to provide authentication and encrypted communication and is widely used on the Web for security-sensitive communication, such as payment transactions.

Instead of using plain text socket communication, the session data is encrypted using either a version of the SSL (Secure Socket Layer) protocol or the TLS (Transport Layer Security) protocol, thus ensuring reasonable protection from eavesdroppers, and man in the middle attacks. The default TCP port of https: is 443.

5.1.2 Authentication, Authorization, and Accounting (AAA)

To meet the accountability and non-repudiation aspects of information security each Web Service requires username tokens according to the OASIS Web Service Security (WS-Security) definition. Please consult Appendix A for further details.

5.2 Model: WSDL and XML Schemas

Overview

The interface is defined by the **wsgBbOutbound.wsdl (B2B)** and the **wsgLqsSaq.wsdl (SAQ)**. Both WSDL imports Data Types from XSD-files. The files are included in document in a ZIP file (see chapter 2.1 Overview)

Overview of supported Versions

The following table lists the supported versions for XML fulfillment requests

Port	Namespace	Remark
WsgBbV036	http://www.swisscom.com/wsg/bb/v36	current fulfillment interface
WsgBbV035	http://www.swisscom.com/wsg/bb/v35	deprecated Fulfillment interface
LqsQualiV036	http://www.swisscom.com/wsg/bb/v36	current SAQ interface
LqsQualiV035	http://www.swisscom.com/wsg/bb/v35	deprecated SAQ interface

5.2.1 The WSG BB Outbound Web Service

The WSG BB Outbound Web is published under the following URLs:

Platform	URL	Description
Production	https://webservices.swisscom.com/wsg/prod/bb/WsgBbV036	Production environment, actual version.
	https://webservices.swisscom.com/wsg/prod/bb/WsgBbV035	Production environment, previous version.
ISP-Test	https://webservices.swisscom.com/wsg/isp/bb/WsgBbV036	Test environment for ISPs, actual version.
	https://webservices.swisscom.com/wsg/isp/bb/WsgBbV035	Test environment for ISPs, previous version.

5.2.2 The WSG LQS Service Availability Qualification (SAQ)

The WSG LQS Service Availability Qualification is published under the following URLs:

Platform	URL	Description
Production	https://webservices.swisscom.com/wsg/prod/lqs/LqsQualiV036	Production environment, actual version.
	https://webservices.swisscom.com/wsg/prod/lqs/LqsQualiV035	Production environment, previous version.
ISP-Test	https://webservices.swisscom.com/wsg/isp/lqs/LqsQualiV036	Test environment for ISPs, actual version.
	https://webservices.swisscom.com/wsg/isp/lqs/LqsQualiV035	Test environment for ISPs, previous version.

Deprecated Versions

With this software release a new version of the Fulfillment B2B specification is provided (according the table above); all new development activities shall use this version. The previous version (version number one level lower than the new one) remains valid, but will become deprecated as soon as a possible next version of this interface will be created and published.

5.2.3 Multiple Versions

The XML schemas are versioned by their namespace. The ISP have thus to provide the correct namespace within the submitted XML-request according to the version of interface which is being invoked (correct declaration of root-attribute “**xmlns**”).

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
    ...
  </soapenv:Header>
  <soapenv:Body>
    <createCustomerOrder xmlns="http://www.swisscom.com/wsg/bb/v16">
      <request correlationId="abc1234510001">
        <ispld>777710</ispld>
        ...
      </request>
    </createCustomerOrder>
  </soapenv:Body>
```

</soapenv:Envelope>

5.2.4 Correlation from request to response

The attribute **correlationId**, which is to provide within each **request**-element of uploaded requests and which is returned within each **response**-element, serves to correlate from a request to its response. Pay attention to provide a unique identifier to permit this correlation.

Example:

Request:

```
<?xml version="1.0" encoding="UTF-8"?>

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v16="http://www.swisscom.com/wsg/bb/v16" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
...
</soapenv:Header>
  <soapenv:Body>
    <v16:createCustomerOrder>
      <v16:request correlationId="abc1234510001">
        <v16:ispId>777710</v16:ispId>
        ...
        ...
        <v16:order xsi:type="v16:modifyType" correlationId="xyz1">
          ...
          ...
        </v16:order>
        <v16:order xsi:type="v16:addType" correlationId="zyx2">
          ...
          ...
        </v16:order>
      </v16:request>
    </v16:createCustomerOrder>
  </soapenv:Body>
</soapenv:Envelope>
```

Acknowledge-response:

5.2.4.1 <?xml version="1.0" encoding="UTF-8"?>

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
```

5.2.4.2 <soapenv:Body>

```

<createCustomerOrderResponse xmlns="http://www.swisscom.com/wsg/bb/v16">
  <response correlationId="abc1234510001">
    ...
  ...
    <orderItem correlationId="xyz1">
      ...
    ...
  </orderItem>
    <orderItem correlationId="ord2">
      ...
    ...
  </orderItem>
</response>
</createCustomerOrderResponse>
</soapenv:Body>
</soapenv:Envelope>

```

6 General Qualification Information

This section gives special information on the use of the qualification Service

The WSG-interface to the Qualification Service enables ISPs to implement the LQS qualification as an on-line xDSL query service on their website using the BBCS Qualification Web-Service.

The term "xDSL" stands for: ADSL, SDSL, VDSL and since November 2009: BX

Definition of profile types for this document:

Item	Definition
Service-Profile	The service-profile characterizes the product (speed) which the customer uses. The price for the customer results from the used product.
Access-Profile	The access-profile characterizes the speed with that the network-access is configured. Other term wich means the same: network profile
Fair Use Profile	This is a specific profile for fibre-provisioning. Technically it is a access profile but can be ordered by the ISP similar to a service profile

6.1 Purpose of the xDSL check facility

6.1.1 The xDSL Check enables end customers to find out whether their subscriber lines are suitable for ADSL, VDSL, SDSL or BX and if so, which speed profiles are available.

Availability differs for analogue (POTS) and digital (ISDN) lines, but a POTS customer can query as if he had an ISDN connection and vice versa. If the subscriber line is not suitable for ADSL, VDSL, SDSL or BX the xDSL check reports the technical limitation. The facility also

detects whether or not the end customer's local exchange presently supports xDSL. If not, the xDSL check will convey the date planned for the upgrade of the central exchange, if available.

- Advantages of the Check-Facility:
- This Service enables ISPs to meet End customer needs quickly and easily.
- As the data is always current, the responses are up to date.
- For those exchanges which do not yet support xDSL, the customer is informed of the anticipated implementation date, if it is scheduled
 - The xDSL Check Facility is provided free of charge by FWS.

6.2 Qualification

6.2.1 ADSL

The ISP can use the xDSL Check to qualify for ADSL by setting the Parameter Technology to 'ADSL' during the request. The qualification can occur using the address or the active telephone number (DN). If the address is entered without the active telephone number, the xDSL check will respond with Status OK_STAO, meaning that ADSL is theoretically deliverable but cannot be verified for a specific line or speed profile. The effective bandwidth may differ from the speed profile indicated in the xDSL response. Further, a variety of additional customer premise equipment could hinder the implementation of ADSL at the customer site.

If the address is entered and an existing voice line can be identified, the xDSL check will respond with a Status OK meaning that ADSL is definitely qualified for this specific line. However, when the address is entered and no subscriber could be identified or no voice line exists, the xDSL check will respond with a Status OK_STAO, meaning that ADSL is theoretically deliverable but cannot be verified for a specific line or speed profile.

Queries using the active Directory Number (DN) will always generate a definitive qualification, or Status OK.

With regard to other faults and technical limitations on the circuit, the standard message codes apply.

6.2.2 SDSL

The ISP can use the xDSL Check to qualify for SDSL by setting the Parameters Technology to 'SDSL' during the request. The qualification can occur using the address, the active telephone number (DN), or the Billing number (NSN or 'Network Service Number'). If the check is performed with the address but without the name, the Status "OK_STAO" is given. This means that SDSL is (in principle) possible but since no specific connection could be qualified the actual effective transmission rate can vary from the values provided with the check. In this case, the effective bandwidth may differ from the speed profile indicated in the xDSL response.

If the check is performed successfully with the name and address, and the subscriber exists, and has an active SDSL connection the Status "OK" is given since the connection was able to be qualified. If the check is performed with the name and address but only a voice connection is active, the status "OK_STAO" is given since the connection could not be identified.

Queries using the active Network Service Number (NSN) with SDSL Service will always generate a definitive qualification, or Status OK.

Queries using the active Voice Number (DN) will always generate a conditional qualification, or Status OK_STAO, because the specific circuit could not be identified.

With regard to other faults and technical limitations on the circuit, the standard message codes apply.

6.2.3 VDSL

The ISP can now use the xDSL Check to qualify for VDSL by setting the Parameter Technology to 'VDSL2' during the request. The qualification can occur using the address or the active telephone number (DN).

The ADSL rules apply also to VDSL!

6.2.4 BX

The ISP can use the xDSL Check to qualify for BX by setting the Parameter Technology to BX and contract element to 'BBCS-F (Fiber)' during the request. The qualification can occur using the socket id

and plug nr (optional). If no plug nr is entered, the xDSL check will respond with Status OK and a list of the plugs are returned. The effective bandwidth may differ from the speed profile indicated in the xDSL response. Queries using the socket id/plug nr will always generate a definitive qualification. Further, a variety of additional customer premise equipment could hinder the implementation of BX at the customer site.

With regard to other faults and technical limitations on the circuit, the standard message codes apply. Qualification by address is available by Service Availability Qualification (SAQ) only. SAQ will respond a location with the sockets, or a list of locations only, if the address is not specific enough. The SAQ response will never contain speed profiles.

6.2.5 Qualification with Address

The parameter “street” in an address request is not obligatory. If there are no value for street or the parameters are not transmitted in the request (that means a request only with zip or city), the Public Check will do a Qualification with an average result of the entire city if there are not too many possible starting points.

This feature is implemented for the qualification of locations with no street names, which happens to appear in very small villages.

If there are too many possible starting points, the Public Check will return an error message.

If the result of a request with an address and the name (first / last name) includes more than one active number, than the Public Check response has the status “OK_STAO”. For example, that happens if the same person has an active voice number and an active SDSL number.

6.3 General Response Description

6.3.1 Speed profiles in case of positive response

The long distance service is based upon a max. 1000 Kbps downstream / 100 Kbps upstream profile that operates in adaptive rate mode. This means that the xDSL modem and the DSLAM select in minimum the highest possible bandwidth between 600 Kbps downstream / 100 Kbps upstream and 300 Kbps downstream / 50 Kbps upstream.

The business offering for xDSL contains four profiles: 300 Kbps downstream / 300 Kbps upstream, max. 600 Kbps downstream / 600 Kbps upstream and 6000 Kbps downstream / 600 Kbps upstream. For each main profile, there is a fallback profile, which shall be applied if the main profile cannot be offered to the customer for distance reasons. The highest possible profile within a profile group will be delivered. The actual delivered profile may or may not be shown to the ISP or End customer.

For a list of possible speed profiles please refer the document [4] B2B Speed Profiles.

6.4 Possible reasons for a negative response

The system may provide a negative qualification result ("nok") and a specific error code (Q<nn>).

Please refer the document [1] WSG Messages for a list of possible qualification error codes and their meaning.

7 Appendix A

Securing a WEB-Service with Powergate

A WEB-Service can be secured by using WSS Security (ref. OASIS Standard <http://www.oasis-open.org/specs/index.php#wssv1.0>). WSS Security Tokens have to be included in the header of the SOAP Requests. Realizing this feature is dependent of the implementation of the WS Clients.

The header has to look as follows:

```
<soapenv:Header>
  <wsse:Security
    soapenv:actor="http://schemas.xmlsoap.org/soap/actor/next"
    soapenv:mustUnderstand="0"
    xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
    <wsse:UsernameToken>
      <wsse:Username>586221</wsse:Username>
      <wsse:Password>xxxxxx</wsse:Password>
    </wsse:UsernameToken>
  </wsse:Security>
</soapenv:Header>
```

Concerning “Username” and “Password” please refer to 0 Login .

7.1 Setting up a new WEB-Service

1. Determining the URL for the WEB-Service
2. Implementing the client in such a way that the WSS Security Tokens are included in the SOAP (see following example).

Sample Client with wss4j

wss4j will be used for creating the WSS Header (ref. <http://ws.apache.org/wss4j/>). The called service offers the method “list()” which will return the received header as a string.

```
public String[] doCall(
com.swisscom.powergate.ws.TestwsSoapBindingStub binding)
throws Exception {
  String userName = "58622141964";
  String pwd = "tXVLsD43";
```

```
Stub bindingStub = (Stub) binding;
```

```

    Document doc = DocumentBuilderFactory.newInstance()
    .newDocumentBuilder().newDocument();

    Element element = doc.createElementNS(WSConstants.WSSE_NS_OASIS_1_0,
    "wsse:" + WSConstants.USERNAME_TOKEN_LN);

    WSSecurityUtil.setNamespace(element, WSConstants.WSSE_NS_OASIS_1_0,
    WSConstants.WSSE_PREFIX);
    // create username element
    Element elementUsername = doc.createElementNS(
    - WSConstants.WSSE_NS_OASIS_1_0, "wsse:"
    + WSConstants.USERNAME_LN);

    WSSecurityUtil.setNamespace(elementUsername,
    WSConstants.WSSE_NS_OASIS_1_0, WSConstants.WSSE_PREFIX);
    elementUsername.appendChild(doc.createTextNode(userName));
    element.appendChild(elementUsername);

    // create password element
    Element elementPassword = doc.createElementNS(
    - WSConstants.WSSE_NS_OASIS_1_0, „wsse:“
    + WSConstants.PASSWORD_LN);

    WSSecurityUtil.setNamespace(elementPassword,
    WSConstants.WSSE_NS_OASIS_1_0, WSConstants.WSSE_PREFIX);
    elementPassword.appendChild(doc.createTextNode(pwd));
    element.appendChild(elementPassword);

    // set the header
    bindingStub.setHeader(WSConstants.WSSE_NS_OASIS_1_0, "wsse:Security",
    element);

    assertNotNull("binding is null", binding);
    // Time out after a minute
    binding.setTimeout(60000);

    return binding.list();
}

public void testHeaders() throws Exception {
    com.swisscom.powergate.ws.TestwsSoapBindingStub binding;

```

```

try {
    binding = (com.swisscom.powergate.ws.TestwsSoapBindingStub) new
com.swisscom.powergate.ws.TestWSServiceLocator()
        .gettestws(new URL(
            "https://www.zugang.ch:44300/bg/services/testws"));
    Stub bindingStub = (Stub) binding; // keep session
    bindingStub.setMaintainSession(true);
    System.out.println("\nCALL 1");
    String[] headers = doCall(binding);
    for (int i = 0; i < headers.length; i++) {
        System.out.println(headers[i]);
    }

    System.out.println("\nCALL 2");
    headers = doCall(binding);
    for (int i = 0; i < headers.length; i++) {
        System.out.println(headers[i]);
    }

} catch (javax.xml.rpc.ServiceException jre) {
    if (jre.getLinkedCause() != null)
        jre.getLinkedCause().printStackTrace();
    throw new junit.framework.AssertionFailedError(
        "JAX-RPC ServiceException caught: " + jre);
}

assertNotNull("binding is null", binding);
// Time out after a minute
binding.setTimeout(60000);
}

```

8 Errors

8.1 Authentication error

In case of an authentication error the system will return *HTTP Status 403 Forbidden*. The error will be returned inside the SOAP body as <SOAP-ENV:Fault>:

```

<SOAP-ENV:Fault>
<faultcode>SOAP-ENV:Client</faultcode>
<faultstring>Authentication required (realm='soap')</faultstring>

```

</SOAP-ENV:Fault>

8.2 Backend Server not available:

HTTP/1.1 502 Bad Gateway

Date: Thu, 20 Apr 2006 11:49:22 GMT
Server: Apache
Pragma: no-cache
Connection: close
Cache-Control: no-cache

Content-Type: text/xml

```
<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Body>
<SOAP-ENV:Fault>
<faultcode>SOAP-ENV:Server</faultcode>
<faultstring>Upstream server is not available</faultstring>
<faultactor>https://wstest.swisscom.com/wsg/omsol/bb/WsgBb</faultactor>
<detail>Upstream server is not available</detail>
</SOAP-ENV:Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

9 Error on the Backend Server

9.1 Here an example in the form of a standard http error:

HTTP/1.1 500 Internal Server Error

Date: Wed, 19 Apr 2006 14:27:03 GMT
Server: Apache
Set-Cookie:
Navajo=AUCaUVoasEVlDVm29EUVyRYuqxwWRG4ozwlKJEewSpvKoVwVEz9mjI
clAEQ0goalIH3ZnB9g/RXA-; path=/; secure; HttpOnly
Set-Cookie: JSESSIONID=AEC47F88F1B35E4329C5C58F40841B4E;
path=/wsg/e2e/bb/wsg-outbound; secure; HttpOnly
Content-Type: text/xml; charset=utf-8

Connection: close

```
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
<soapenv:Fault>
<faultcode xmlns:ns1="http://xml.apache.org/axis/">
ns1:Client
</faultcode>
<faultstring>No such operation 'list'</faultstring>
<detail>
```

```
<ns2:hostname xmlns:ns2="http://xml.apache.org/axis/">
sbe18304.swissptt.ch
</ns2:hostname>
</detail>
</soapenv:Fault>
</soapenv:Body>
</soapenv:Envelope>
```

9.2 Wrong URL (Webservice not existing)

HTTP/1.1 404 Not Found

Date: Wed, 19 Apr 2006 14:30:38 GMT
Server: Apache
Pragma: no-cache
Connection: close
Cache-Control: no-cache

Content-Type: text/xml

```
<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Body>
<SOAP-ENV:Fault>
<faultcode>SOAP-ENV:Client</faultcode>
<faultstring>mapping for request URI '/wsgdf/e2e/bb/WsgBb' not
found</faultstring>
<faultactor>https://wstest.swisscom.com/wsgdf/e2e/bb/WsgBb</faultactor>
<detail>mapping for request URI '/wsgdf/e2e/bb/WsgBb' not found</detail>
</SOAP-ENV:Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

9.3 No authorisation for the service but valid Login

HTTP/1.1 403 Forbidden

Date: Wed, 19 Apr 2006 14:31:40 GMT
Server: Apache
Pragma: no-cache
Connection: close
Cache-Control: no-cache

Content-Type: text/xml

```
<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Body>
<SOAP-ENV:Fault>
<faultcode>SOAP-ENV:Client</faultcode>
<faultstring>Your are not authorized to access the requested
resource</faultstring>
<faultactor>https://wstest.swisscom.com/wsg/prod/bb/WsgBb</faultactor>
<detail>Your are not authorized to access the requested resource</detail>
```

```
</SOAP-ENV:Fault>  
</SOAP-ENV:Body>  
</SOAP-ENV:Envelope>
```

Login from the user point of view

- Two possibilities can be used for Login:
 - Login with **PUI** (Personal User Identification: 11-digit number) and **Password** (4 – 15 characters). The PUI will be sent to the user by email or letter after registration. It has to be used for the first Login.
The password will be sent to the user by letter and can be changed arbitrarily by the user after the first Login.
 - Login with username (unique alphanumeric identification) and **Password** (4 – 15 digits).
The username (formerly also known as synonym) can be created by the user after the first login with the PUI. It must start with an alphabetic character, must be 8-20 characters in length and must be unique. Maybe the user needs several trials till a unique and not yet used name could be found.
The password will be sent to the user by letter and can be changed arbitrarily by the user after the first Login.