



Wholesale API interface specification

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Version History

Version	Date	Author	Description of Change
1.0	24/03/2014	Yoeri Van De Velde	Baselined version of the API Interface specification.
1.1	21/05/2014	Yoeri Van De Velde	<p>Corrections</p> <ul style="list-style-type: none"> - Removed invalid error messages that will not be thrown to AO: <ul style="list-style-type: none"> • XSD validation: ERRCPPE_0001, ERRCPPE_0034, ERRCPPE_0042, B_INV_002_LOCID, B_INV_002_COID, B_INV_002_CO • OSB internal data: B_INV_002_TNT - Added new errors: <ul style="list-style-type: none"> • General (no mapping): IEWHS_0001 • PFC for failed SFC: B-INV-005-FC - Updated error: B-INV-005-RULE: Will throw specific message for failed business rule - Updated basic SFC and PFC samples to contain multiple STBs - Added some basic rules regarding combination of "NEW", "MODIFY" and "DISCONNECT" actions in 1 customer order - Clarification added for Epithet element - Clarification added for notification language element - Error code ERRADDID_0003 added for the retrieveAddressIdentifier API - Added feasibility NOK reason "Service not available on location" - Modified http error code in case the request limit is exceeded
V1.2	13/06/2014	Yoeri Van De Velde	<p>Corrections:</p> <ul style="list-style-type: none"> - Updated Feasibility check reason "Service is not available on location" - Removed retrieveProductInstance as possible scenario for error B-INV-002-PIID as productInstanceCeld is not mandatory on this operation - STB whitelist: added note that STB ID can be same as SERIAL NUMBER - Add information to state that a SOAP error will be returned in the event of an invalid XML being sent. - B-INV-005-CO error code updated as it is only valid for the retrieve order and cancel order cases - Updated to state that we get ERRWHS_0100 for install appointments and ERRWHS_0200 for repair

			<p>appointments</p> <ul style="list-style-type: none"> - Error code IGW045 removed as it is not relevant for Mobistar - The following new error codes were added: <ul style="list-style-type: none"> • ERRWHS_0003 • ERRWHS_0004 • ERRWHS_0005 • ERRWHS_0006 • ERRWHS_0007 • ERRWHS_0008 • ERRWHS_0009 • ERRWHS_0012
V1.3	02/07/2014	Nicola Johnston	<p>Version sent to Mobistar</p> <p>Added error code ERRCOM_0007</p> <p>Added new createDropCableConnectionAppointmentTicket API</p> <p>Added error codes for new createDropCableConnectionAppointmentTicket API</p> <p>Updated retrieve ticket example to include the new modification timesheet element</p> <p>Added DropCableConnection XML example</p> <p>Additional not feasible reasons added</p>
V1.4	10/07/2014	Nicola Johnston	<p>Added the following new problem codes for the repair appointment ticket:</p> <ul style="list-style-type: none"> • Installatie signaallevels • Gezamenlijke analyse • Heraansluiten dropkabel <p>Whitelist section corrected due to errors found during testing</p> <p>New not feasible reason 'Address data for this location is incomplete. Please create "address data completion" ticket' added</p>
1.5	1/9/2014	Nicola Johnston	<p>Corrections in section 2.2 and 5.1 (on request Mobistar)</p>
1.6	23/9/2014	Nicola Johnston	<ul style="list-style-type: none"> - Added new checkMajorOutageOnAddress API - Clarifications on whitelist file preparation were added
1.7	30/10/2014	Wim Uyttebroek	<ul style="list-style-type: none"> - Added new logoffPassiveCpes API

			<ul style="list-style-type: none"> - Updated FeasibilityCheck (added reasonForIntervention) - Updated PortfolioChange (added reasonForIntervention) - Updated retrieveAddressIdentifier (municipality optional) - Clarification added in cancelOrder, RetrieveTicket, updateTicket and whitelist upload
1.8	28/01/2015	Wim Uyttebroek	<ul style="list-style-type: none"> - Whitelist (§6.3): update CUSTOMER field in example to reflect specifications (modify from "MOBISTAR" to "Mobistar") - Add constraints on logoffPassiveCpes (CustomerOrderId) - Modification of optional/mandatory argument of ReasonForIntervention(List) in Feasibility check result (API: FeasibilityCheck + PortfolioChange) - Modification of namespace in WholesaleChannelService WSDL/XSD's
1.9	28/8/2018	André Devalck	Update with the new CRC conclusion of 29/6/2018
2.0	01/02/2019	Raf Leppens	<ul style="list-style-type: none"> • Updated error section. Added extra info. • Updated 4.2 FeasibilityCheck • Update retrieveAddressIdentifier • Updated section 3.2 and 3.3. Internet Only specifications • Updated error section. Added extra info. • Updated the section 4.2 for CableNetworkOperatorId , section 4.9 for KIW case creation. • Added new sections 4.16 to 4.24 for the functionality where orange technician can fulfill the dropcable and filter interventions. • Changes are highlighted in BLUE color.

2.1	22/02/2019	Steve Van Acker	<ul style="list-style-type: none"> • Update on 4.17 UpdateServiceAccessPointForInstalledDropCable ServiceAccessPointStatus changed to InterventionCompletionStatus InterventionCompletionStatus values EXECUTED, NOT_EXECUTED Error handling added • Update on 4.18 RetrieveServiceAccessPointIdForFilterIntervention Error handling added • Update on 4.19 RetrieveServiceAccessPointFilterInfo update on Response example Error handling added • Update on 4.20 RetrieveServiceAccessPointFilterToBeInstalled Update on Response example Error handling added • Update on 4.21 UpdateServiceAccessPointFilterInfo Update on Request example Error handling added Reference changed InterventionCompletionStatus • Update 4.22 IdentifyServiceAccessPointAddressId Error handling added • Update 4.23 CreateTroubleTicketForDamageReport
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Update on Request example:
DamageDateTime as new parameter

- Update 4.24
RetrieveTroubleTicketsForCableCompany

KM (KabelMaatschappij) cases
update on Request example
update on Response example
Error handling added

- Errors added to 7.3
WholesaleChannelService

ERRWHS_0050
ERRWHS_0051
ERRWHS_0052
ERRWHS_0053
ERRWHS_0054
ERRWHS_0055
ERRWHS_0056
ERRWHS_0057
ERRWHS_0058
ERRWHS_0059
ERRWHS_0060
ERRWHS_0061
ERRWHS_0062
ERRWHS_0063
ERRWHS_0064
ERRWHS_0065
ERRWHS_0066
ERRWHS_0067
ERRWHS_0068
ERRWHS_0069
ERRWHS_0070
ERRWHS_0071
ERRWHS_0072
ERRWHS_0073
ERRWHS_0074
ERRWHS_0075
ERRWHS_0076
ERRWHS_0077
ERRWHS_0078

			ERRWHS_0079
Version 2.2	25/02/2019	Steve Van Acker	<ul style="list-style-type: none"> • Added new error messages which were missing : • ERRWHS_0053 • ERRWHS_0062 • ERRWHS_0068 • ERRWHS_0080
Version 2.3	01/03/2019	Naveen Kumar Dasari	<ul style="list-style-type: none"> • Added new operation <ul style="list-style-type: none"> ○ 4.25 LookupStreets ○ 4.26 LookupAddressess ○ 4.27 MapAddressIdToTokenId • Added error messages for operations in 7.3 WholesaleChannelService <ul style="list-style-type: none"> ○ ERRWHS_0084 ○ ERRWHS_0085 ○ ERRWHS_0086 ○ ERRWHS_0087 ○ ERRWHS_0088 ○ ERRWHS_0089 • Removed error message in 7.3 WholesaleChannelService <ul style="list-style-type: none"> ○ ERRWHS_0062 • Added new operations in section 2.2
Version 2.4	05/03/2019	Naveen Kumar Dasari	<ul style="list-style-type: none"> • 4.18 RetrieveServiceAccessPointIdForFilterIntervention Changed text on function of the operation. • 4.19 RetrieveServiceAccessPointFilterInfo

			<p>Removed text about no filter present and no sapid. Added examples for no filters and multiple filters present on location.</p> <ul style="list-style-type: none"> 4.20 RetrieveServiceAccessPointFilterToBeInstalled <p>Additional info on filtervalue list in the response is added. Added example for multiple filters present on location and also one filter having multiple filter values.</p> <ul style="list-style-type: none"> 4.21 UpdateServiceAccessPointFilterInfo <p>Examples are added for different use cases.</p>
Version 2.5	14/03/2019	Naveen Kumar Dasari	<ul style="list-style-type: none"> Added the repair intervention scenario in the section 4.9 , 4.18, 4.20,4.21 Added error messages for repair intervention scenario in section 7.3 ERRWHS_0090 ERRWHS_0091 ERRWHS_0092 ERRWHS_0093
Version 2.6	26/3/2019	Yoghine Shete	<ul style="list-style-type: none"> We removed some errors which were not feasible after analysis: ERRWHS_0050 ERRWHS_0055 ERRWHS_0062 ERRWHS_0063 ERRWHS_0070 One error is added: ERRWHS_0056

Version 2.7	27/3/2019	Naveen Kumar Dasari	<ul style="list-style-type: none">• Common structures for new Single Installer operations are added: WholesaleServiceAccessPointModificationForInstalledDropCable ServiceAccessPointFilterInfo WholesaleServiceAccessPointFilterModification WholesaleServiceAccessPointAddressIdentification WholesaleTroubleTicketForDamageReportInput TroubleTicketInfo
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1 Introduction

1.1 Purpose

This document describes the technical interactions and details between the “Authorised Operator” (AO) and Telenet which conform to the Wholesale reference offer.

This document should be used as a directive by AO on how to use the interfaces from Telenet in order to perform proper intakes and activations of new wholesale products and manage product portfolios and operations.

1.2 Scope

The scope of this document is limited to the interfaces (API) exposed by Telenet towards AO, and that allow registration of new orders, tickets, etc.

1.3 Out of Scope

This document does not serve the purpose to document the business processes in detail, nor will it describe the interactions between Telenet and AO on an engineering level (backbone configurations, interconnects, streaming, ...)

1.4 Assumptions

#	Table
1	Reader is familiar with Wholesale business scenarios (not documented in this deliverable)

2 Technical Overview

2.1 Integration Architecture

Telenet will expose its functionality for AO on a standard web service endpoint. Access is over HTTPS with client certificate authentication.

All the services are synchronous, although some of the processes triggered by these services run asynchronously. In this case a technical ACK is returned, while the process itself is run in the background. It's the responsibility of the calling party to poll at regular intervals to check the status of the provisioned products.

2.2 Technical Details

Telenet uses SOAP 1.1. The services are defined in 2 WSDL's:

WholeSalePipelineService_v001	
	FeasibilityCheck
	PortfolioChange
	CancelOrder
	RetrieveOrder
	RetrieveProductInstance
WholeSaleChannelService_v001	
	createInstallAppointmentTicket
	createDropCableConnectionAppointmentTicket
	createRepairAppointmentTicket
	createAdminTicket
	updateTicket
	retrieveTicket
	retrieveAddressIdentifier
	activateCpeForCustomerOrder
	checkMajorOutageOnAddress
	logoffPassiveCpes

WholesalePipelineService_v002	
	FeasibilityCheck
	PortfolioChange
	CancelOrder
	RetrieveOrder
	RetrieveProductInstance

WholesaleChannelService_v002	
	createInstallAppointmentTicket
	createDropCableConnectionAppointmentTicket
	createRepairAppointmentTicket

createAdminTicket
updateTicket
retrieveTicket
retrieveAddressIdentifier
activateCpeForCustomerOrder
checkMajorOutageOnAddress
logoffPassiveCpes
retrieveServiceAccessPointIdForAddress
updateServiceAccessPointForInstalledDropCable
retrieveServiceAccessPointForFilterIntervention
retrieveServiceAccessPointFilterInfo
retrieveServiceAccessPointFilterToBeInstalled
updateServiceAccessPointFilterInfo
identifyServiceAccessPointAddressId
createTroubleTicketForDamageReport
retrieveTroubleTicketsFromInspection
lookupStreets
lookupAddresses
mapAddressIdToAddressToken

2.3 Security – access to WS Endpoint

The calling party has the responsibility to request a client certificate with a recognized Certificate Authority. After having received the certificate it needs to be sent to Telenet who can then register it to enable access. The calling party has the responsibility to check the validity of Telenet's server certificate associated with the web service endpoint. Details of the security/endpoint setup will be detailed in a separate document.

3 Product model

This section describes the product catalogue available to AO. The XML examples are fragments of what the product (or customer order item) will resemble within the complete XML input on calling an interface function.

3.1 TV products

2 TV products are available:

- 1) ATV: which is the ATV only product

To order ATV, the **“ATV”** offer Name needs to be provided in the portfolioChangeRequest:

```
<v001:customerOrderItem>
  <v001:offerName>ATV</v001:offerName>
</v001:customerOrderItem>
```

The ATV product cannot be combined with any other available product.

- 2) ATV+DTV: which provides the customer with ATV and DTV access

For a ATV+DTV product instance, up to four STB's can be registered to enable digital tv services.

Specifications regarding the STB(s) can be a part of the XML input when ordering the ATV+DTV product.

To order ATV+DTV the **“ATV_DTV”** offer name needs to be provided in the portfolioChangeRequest:

```
<v001:customerOrderItem>
  <v001:offerName>ATV_DTV</v001:offerName>
  <v001:components>
    <v001:component>
      <v001:name>STB</v001:name>
      <v001:characteristics>
        <v001:characteristic>
          <v001:name>STB_SEQUENCE_NUMBER</v001:name>
          <v001:value>1</v001:value>
        </v001:characteristic>
      </v001:characteristics>
    </v001:component>
  </v001:components>
</v001:customerOrderItem>
```

As mentioned earlier up to 4 STB(s) can be registered in this request, per STB the request should contain a STB component and a STB sequence number. The numbers are restricted to: 1, 2, 3 or 4 and cannot be used for more than 1 STB per location.

3.2 Internet

Several internet products can be made available resembling different tiers: Broadband 1, Broadband 2, etc. An internet product can be ordered as standalone or in combination with an ATV+DTV product. As a result, the order intake XML of an internet product (*customerOrderItem*) can be with or without input for the ATV+DTV product (another *customerOrderItem*). The offer name in the XML input determines the tier of the internet product.

E.g.: For Broadband 1 the “**BB_1**” offer name needs to be provided:

```
<v001:customerOrderItem>  
  <v001:offerName>BB_1</v001:offerName>  
</v001:customerOrderItem>
```

3.3 Product offering overview

In this section a general overview of the available products and the offer names to be used are provided.

Product name	Description	Offername/ID to be used in request	Remarks
ATV	ATV only	ATV	Can only be ordered standalone
ATV + DTV	DTV	ATV_DTV	4 STB's can be registered (components), When registering STB(s) the sequence number needs to be provided.
Broadband 1	Low tier RMD	BB_1	Can be ordered as standalone or in combination with the ATV+DTV product.
Broadband 2	Mid tier RMD	BB_2	
Broadband 3	High tier RMD	BB_3	
Broadband 6	Mid tier RMD	BB_6	

4 Online interactions

4.1 retrieveAddressIdentifier

The function *retrieveAddressIdentifier* allows the user to fetch the LocationID of a particular address. The locationID is required as a parameter in most function calls to identify the physical location where a product is requested. The return value is either one location ID, or a message indicating why no LocationID was returned.

Please note that the municipality in the request became an optional field (see §5.10). Fields Municipality, FloorNumber and ApartmentNumber are no longer used.

Request example:

```
<v001:RetrieveAddressIdentifierRequest>
  <v0011:GeographicAddressInfo>
    <v0012:PostalCode>2800</v0012:PostalCode>
    <v0012:Street>Liersesteenweg</v0012:Street>
    <v0012:HouseNumber>4</v0012:HouseNumber>
    <v0012:Country>België</v0012:Country>
  </v0011:GeographicAddressInfo>
</v001:RetrieveAddressIdentifierRequest>
```

Response example:

```
<v001:RetrieveAddressIdentifierResponse>
  <v0011:AddressId>6cc7ov007q-9yijdv05j1</v0011:AddressId>
</v001:RetrieveAddressIdentifierResponse>
```

Error messages:

See [Error Handling](#) section

4.2 FeasibilityCheck

The function *FeasibilityCheck* allows the user to determine the eligibility and feasibility of an order request, without actually creating the order. The return value indicates the result of the feasibility check and informs the user if an order can be created and what it would take to fulfill that order.

An order that is eligible (correct order request) can return three response values: *'feasible'*, *'feasible with intervention required'* and *'not feasible'*.

Functional status response	Technical response
Feasible	OK
Feasible with intervention required	INTERVENTION
Not feasible	NOK

When the *'feasible'* status is returned this means the order is valid and an immediate inhome installation (without KA and/or Street intervention) can take place.

When *'feasible with intervention required'* is returned, this means the order is valid but an intervention is required for a filter replacement and/or a NIU installation.

In this case an additional attribute will be returned. This attribute will be a list containing one or both of the following depending on what intervention/s are required

- Mount NIU – A NIU needs to be placed
- Change Filter – A filter needs to be changed or removed

When *'not feasible'* is returned this means the order cannot take place; a reason will be provided, which can be one of the following:

- Drop cable doesn't exist for location [Location ID]
- LocationID [Location ID] does not exist
- No Telenet network available
- Dropcable activation needs to be paid
- Service is not available on location
- DOCSIS3 Service is not available on location
- ATV Service is not available on Node
- ATV Service is available on Node only from [Service Start Date]
- DTV Service is not available on Node
- DTV Service is available on Node only from [Service Start Date]
- DOCSIS3 Service is not available on Node
- DOCSIS3 Service is available on Node only from [Service Start Date]
- Product Capacity on Node is less than required Product Capacity for specified Internet Profile
- Address data for this location is incomplete. Please create "address data completion" ticket
- Feasibility check failed because the installation address is linked to a fiber Node
- ATV Service is not available on location

If the reason is empty it is not feasible due to a more complex scenario that does not fit into one of the above. If required more details can be requested via admin ticket.

CableNetworkOperatorId :

The dropcable connection process depends on the company that is handling the operations on the network.

Unique identifier for cable network operator

Possible values :

CableNetworkOperatorId	CableNetworkOperatorName
TLN	Telenet
FVS	Fluvius
ITG	Integan

If CableNetworkOperatorId sent in response is 'TLN' then AO can execute the dropcable connection appointment .

If CableNetworkOperatorId sent in response is 'ITG' then dropcable connection appointment will be performed by Integan technician.

If CableNetworkOperatorId sent in response is 'FVS' then dropcable connection appointment will be performed by Fluvius technician.

Request example:

```
<v001:FeasibilityCheckRequest>
  <v001:locationId>6cc7yy007q-9yf8zq0ooz</v001:locationId>
  <v001:customerOrder>
    <v001:customerOrderItem>
      <v001:offerName>ATV_DTV</v001:offerName>
      <v001:action>NEW</v001:action>
      <v001:components>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>1</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>2</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
      </v001:components>
    </v001:customerOrderItem>
    <v001:customerOrderItem>
      <v001:offerName>BB_1</v001:offerName>
      <v001:action>NEW</v001:action>
    </v001:customerOrderItem>
  </v001:customerOrder>
</v001:FeasibilityCheckRequest>
```

Response example when feasibility is OK (no intervention)

```
<v001:FeasibilityCheckResponse>
  <v001:feasibilityCheckResult>
    <v001:result>OK</v001:result>
    <v001:regionID>5</v001:regionID>
    <v001:CableNetworkOperatorId>TLN</v001:CableNetworkOperatorId>
  </v001:feasibilityCheckResult>
  <v001:customerOrder>
    <v001:customerOrderItem>
      <v001:offerName>ATV_DTV</v001:offerName>
      <v001:action>NEW</v001:action>
      <v001:components>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>1</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>2</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
      </v001:components>
    </v001:customerOrderItem>
    <v001:customerOrderItem>
      <v001:offerName>BB_1</v001:offerName>
      <v001:action>NEW</v001:action>
    </v001:customerOrderItem>
  </v001:customerOrder>
</v001:FeasibilityCheckResponse>
```

Response example when feasibility is OK but INTERVENTION (NIU + Filter) is needed:

```
<ao:FeasibilityCheckResponse xmlns:ao="http://xmlns.telenet.be/whs/ao/ao">
  <ao:correlationId>2718281828</ao:correlationId>
  <ao:feasibilityCheckResult>
    <ao:result>INTERVENTION</ao:result>
    <ao:regionId>1</ao:regionId>
    <ao:CableNetworkOperatorId>TLN</ao:CableNetworkOperatorId>
    <ao:ReasonForInterventionList>
      <ao:ReasonForIntervention>Mount NIU</ao:ReasonForIntervention>
      <ao:ReasonForIntervention>Change Filter</ao:ReasonForIntervention>
    </ao:ReasonForInterventionList>
  </ao:feasibilityCheckResult>
  <ao:customerOrder>
    <ao:customerOrderItem>
      <ao:offerName>ATV_DTV</ao:offerName>
      <ao:action>NEW</ao:action>
      <ao:characteristics>
        <ao:characteristic>
          <ao:name>INTERACTIVITY</ao:name>
          <ao:value>NO</ao:value>
        </ao:characteristic>
      </ao:characteristics>
      <ao:components>
        <ao:component>
          <ao:name>STB</ao:name>
          <ao:action>NEW</ao:action>
        </ao:component>
      </ao:components>
    </ao:customerOrderItem>
  </ao:customerOrder>
</ao:FeasibilityCheckResponse>
```

```

        <ao:characteristics>
          <ao:characteristic>
            <ao:name>STB_SEQUENCE_NUMBER</ao:name>
            <ao:value>1</ao:value>
          </ao:characteristic>
        </ao:characteristics>
      </ao:component>
    </ao:components>
  </ao:customerOrderItem>
  <ao:customerOrderItem>
    <ao:offerName>BB_1</ao:offerName>
    <ao:action>NEW</ao:action>
  </ao:customerOrderItem>
</ao:customerOrder>
</ao:FeasibilityCheckResponse>

```

Response example when feasibility is OK but INTERVENTION (only NIU) is needed:

```

<ao:FeasibilityCheckResponse xmlns:ao="http://xmlns.telenet.be/whs/ao/ao">
  <ao:correlationId>2718281828</ao:correlationId>
  <ao:feasibilityCheckResult>
    <ao:result>INTERVENTION</ao:result>
    <ao:regionId>1</ao:regionId>
    <ao:CableNetworkOperatorId>TLN</ao:CableNetworkOperatorId>
    <ao:ReasonForInterventionList>
      <ao:ReasonForIntervention>Mount NIU</ao:ReasonForIntervention>
    </ao:ReasonForInterventionList>
  </ao:feasibilityCheckResult>
  <ao:customerOrder>
    <ao:customerOrderItem>
      <ao:offerName>ATV_DTV</ao:offerName>
      <ao:action>NEW</ao:action>
      <ao:characteristics>
        <ao:characteristic>
          <ao:name>INTERACTIVITY</ao:name>
          <ao:value>NO</ao:value>
        </ao:characteristic>
      </ao:characteristics>
      <ao:components>
        <ao:component>
          <ao:name>STB</ao:name>
          <ao:action>NEW</ao:action>
          <ao:characteristics>
            <ao:characteristic>
              <ao:name>STB_SEQUENCE_NUMBER</ao:name>
              <ao:value>1</ao:value>
            </ao:characteristic>
          </ao:characteristics>
        </ao:component>
      </ao:components>
    </ao:customerOrderItem>
    <ao:customerOrderItem>
      <ao:offerName>BB_1</ao:offerName>
      <ao:action>NEW</ao:action>
    </ao:customerOrderItem>
  </ao:customerOrder>
</ao:FeasibilityCheckResponse>

```

Response example when feasibility is NOK:

```

<v001:FeasibilityCheckResponse>
  <v001:feasibilityCheckResult>
    <v001:result>NOK</v001:result>
    <v001:reasonWhyNotFeasible>Drop cable doesn't exist for location 6cc7yy007q-
9yf8zq0ooz</v001:reasonWhyNotFeasible>
    <v001:regionID>5</v001:regionID>
    <v001:CableNetworkOperatorId>TLN</v001:CableNetworkOperatorId>
  </v001:feasibilityCheckResult>
  <v001:customerOrder>

```

```
<v001:customerOrderItem>
  <v001:offerName>ATV_DTV</v001:offerName>
  <v001:action>NEW</v001:action>
  <v001:components>
    <v001:component>
      <v001:name>STB</v001:name>
      <v001:action>NEW</v001:action>
      <v001:characteristics>
        <v001:characteristic>
          <v001:name>STB_SEQUENCE_NUMBER</v001:name>
          <v001:value>1</v001:value>
        </v001:characteristic>
      </v001:characteristics>
    </v001:component>
  </v001:components>
</v001:customerOrderItem>
<v001:customerOrderItem>
  <v001:offerName>BB_1</v001:offerName>
  <v001:action>NEW</v001:action>
</v001:customerOrderItem>
</v001:customerOrder>
</v001:FeasibilityCheckResponse>
```

Error messages:

See [Error Handling](#) section

4.3 PortfolioChange

The function *PortfolioChange* allows the user to manage product instances at a specific LocationID. It can contain a combination of 'NEW', 'MODIFY' and 'DISCONNECT' action items. *PortfolioChange* requests that are eligible and feasible will be translated into an order in TN systems, and the response message will contain an OrderID of the newly generated order.

In a *PortfolioChange* request (order) an optional field 'niuRequired' can be set. This field can be used to force that an NIU install is required for the order. If the value of this field is set to "YES" in the request, order execution will wait until the installation was performed by AO (logoffPassiveCpes API).

When 'feasible with intervention required' is returned, this means the order is valid but an intervention is required for a filter replacement and/or a NIU installation .

In this case an additional attribute will be returned. This attribute will be a list containing one or both of the following depending on what intervention/s are required

- Mount NIU – A NIU needs to be placed
- Change Filter – A filter needs to be changed or removed

		PortfolioChange feasibility response	
		FeasibilityResult "INTERVENTION"	FeasibilityResult "OK"
AO Request	niuRequired = YES	Order created. Telenet adds NIU install task to the order and awaits confirmation from AO that the NIU is installed (logoffPassiveCpes API)	Order created. Telenet adds NIU install task to the order and awaits confirmation from AO that the NIU is installed (logoffPassiveCpes API)
	niuRequired = NO (or not provided)	Order Created Telenet adds NIU install task to the order and awaits confirmation from AO that the NIU is installed (logoffPassiveCpes API)	Order created, no appointment required

As mentioned before different "ACTION" combinations can be used within a PortfolioChangeRequest, following rules apply:

- Disconnect & new order of the **same product** has to be done in 2 separate requests
 - o Remark: Disconnect ATV and order ATV+DTV (as both products have the same TV component in the Telenet backend, the products are considered as "the same product" consequently a disconnect of ATV and order of ATV+DTV has to be done in 2 separate requests).
- Disconnect & new order of a **different product** can be done in one request
 - o E.g. Disconnect Broadband 1 and order Broadband 2
 - o Exception: Disconnect ATV and order ATV+DTV (2 requests are needed; see above)
- Component changes "DISCONNECT" and "NEW" for **different STB sequence numbers** are possible in a single request
 - o Component changes "DISCONNECT" and "NEW" for changing STBs (different STB sequence numbers) are possible within one "MODIFY" "ATV+DTV" order

- Component changes “DISCONNECT” and “NEW” for **identical STB sequence numbers** should be sent in 2 separate requests
- In order to add/disconnect a STB it is not necessary to disconnect the ATV+DTV product, this action is a modification of the ATV+DTV product.
- A swap modem is always a modification of the active BB product, the swap modem action in this case is “NEW”
- Swap modems cannot be combined with other actions:
 - o In case of a ‘pure’ modem swap, the correct request sequence:
 - Request 1: modem swap for the active BB product
 - Request 2: activate the new modem
 - o In case of an modem swap with an additional upgrade/downgrade of the BB product **(option A)**
 - Request 1: modem swap for the current BB product
 - Request 2: activate the new modem
 - Request 3: disconnect the active BB product and register the new BB product (in a single request)
 - o In case of an modem swap with an additional upgrade/downgrade of the BB product **(option B)**
 - Request 1: disconnect the active BB product and register the new BB product (in a single request)
 - Request 2: modem swap for the new active BB product
 - Request 3: activate the new modem

Error messages:

See [Error Handling](#) section

Request example (new ATV_DTV, 1 STB and Broadband (profile 1; low tier RMD))

```

<v001:PortfolioChangeRequest>
  <v001:locationId>6cc7yy007q-9yf8zq0ooz</v001:locationId>
  <v001:customerOrder>
    <v001:niuRequired>YES</v001:niuRequired>
    <v001:customerOrderItem>
      <v001:offerName>ATV_DTV</v001:offerName>
      <v001:action>NEW</v001:action>
      <v001:components>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>1</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>2</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
      </v001:components>
    </v001:customerOrderItem>
  </v001:customerOrderItem>

```



```
        <v001:offerName>BB_1</v001:offerName>
        <v001:action>NEW</v001:action>
    </v001:customerOrderItem>
</v001:customerOrder>
</v001:PortfolioChangeRequest>
```

Response example (OK without intervention; new ATV_DTV, 1 STB and Broadband (profile 1; low tier RMD))

```
<v001:PortfolioChangeResponse>
  <v001:customerOrderId>9135412619613933026</v001:customerOrderId>
  <v001:feasibilityCheckResult>
    <v001:result>OK</v001:result>
    <v001:regionId>5</v001:regionId>
  </v001:feasibilityCheckResult>
  <v001:customerOrder>
    <v001:customerOrderItem>
      <v001:offerName>ATV_DTV</v001:offerName>
      <v001:action>NEW</v001:action>
      <v001:components>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>1</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>2</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
      </v001:components>
    </v001:customerOrderItem>
    <v001:customerOrderItem>
      <v001:offerName>BB_1</v001:offerName>
      <v001:action>NEW</v001:action>
    </v001:customerOrderItem>
  </v001:customerOrder>
</v001:PortfolioChangeResponse>
```

4.4 RetrieveOrder

The *RetrieveOrder* allows the user to fetch order information, based on the OrderID and locationId returned by *PortfolioChange*.

An order can be in any of the following states:

State	Order Description
Ready For Processing	Order is created. Order is waiting for an event to start its processing.
Process Started	The execution flow for the order has been started.
Process Completed	The execution flow for the order has been completed.
Process Cancelling	The order processing is being cancelled.
Processing Cancelled	The order processing has been cancelled.
Process Partially Cancelled	The order processing has been partially cancelled.

For each order, up to 3 dates can be returned:

- **creationDate** (mandatory); the date that the order was created.
- **TelenetCompletionDate** (mandatory); the date when Telenet's work for the order has been completed. As long as this date is empty, Telenet's work has not been completed.
- **completionDate** (optional); the date that the order was completed.

Error messages:

- See [Error Handling](#) section

Request example:

```
<v001:RetrieveOrderRequest>
  <v001:locationId>6cc7ov007q-9xg4tr08d7</v001:locationId>
  <v001:customerOrderId>9135716481713427670</v001:customerOrderId>
</v001:RetrieveOrderRequest>
```

Response example:

```
<v001:RetrieveOrderResponse>
  <v001:customerOrderId>9135716481713427670</v001:customerOrderId>
  <v001:creationDate>2013-07-19</v001:creationDate>
  <v001:status>Process Completed</v001:status>
  <v001:completionDate>2013-07-19</v001:completionDate>
  <v001:TelenetCompletionDate>2013-07-19</v001:TelenetCompletionDate>
  <v001:customerOrder>
    <v001:customerOrderItem>
      <v001:offerName>ATV_DTV</v001:offerName>
      <v001:action>NEW</v001:action>
      <v001:productInstanceId>9135716481713427671</v001:productInstanceId>
      <v001:characteristics>
        <v001:characteristic>
          <v001:name>INTERACTIVITY</v001:name>
          <v001:value>NO</v001:value>
        </v001:characteristic>
      </v001:characteristics>
      <v001:components>
        <v001:component>
          <v001:name>STB</v001:name>
          <v001:action>NEW</v001:action>
          <v001:characteristics>
            <v001:characteristic>
              <v001:name>STB_SEQUENCE_NUMBER</v001:name>
              <v001:value>1</v001:value>
            </v001:characteristic>
          </v001:characteristics>
        </v001:component>
      </v001:components>
    </v001:customerOrderItem>
  </v001:customerOrder>
</v001:RetrieveOrderResponse>
```

```
</v001:customerOrderItem>
<v001:customerOrderItem>
  <v001:offerName>BB_1</v001:offerName>
  <v001:action>NEW</v001:action>
  <v001:productInstanceId>9135645481613649404</v001:productInstanceId>
</v001:customerOrderItem>
</v001:customerOrder>
</v001:RetrieveOrderResponse>
```

4.5 CancelOrder

The *CancelOrder* function allows the user to cancel an already registered order. Depending on the current progress of the 'to be cancelled' order, it will either get completely canceled or partially cancelled. The response will be a technical acknowledgement confirming that the cancel order was valid.

In case the progress of the 'to be cancelled' order is beyond a point of no return, the cancel request will return a failure.

The status of the 'to be cancelled' order can always be retrieved via the *RetrieveOrder* function.

The status of the "to be cancelled" products can always be retrieved via the *RetrieveProductInstance* function.

Error messages:

See [Error Handling](#) section

Request example:

```
<v001:CancelOrderRequest>
  <v001:locationId>6cc7yy007q-9yf8zq0ooz</v001:locationId>
  <v001:customerOrderId>9135412549513930804</v001:customerOrderId>
</v001:CancelOrderRequest>
```

Response example:

```
<v001:CancelOrderResponse>
</v001:CancelOrderResponse>
```

4.6 RetrieveProductInstance

The *RetrieveProductInstance* function allows the user to fetch information about a product instance that is registered at a location, based on LocationID and optionally a ProductInstanceID.

- When the request only contains the LocationID, then all product instances registered at that location are returned.
- When a ProductInstanceID is specified, then only that product instance registered at that location is returned.

A ProductInstance can be in any of the following states:

State	Order Description
Planned	<ul style="list-style-type: none">• Customer Product/Service is being provisioned with New/Modify Order• Status is valid till New/Modify Order is completed
Active	<ul style="list-style-type: none">• Customer Product/Service is successfully provisioned by New/Modify Order and active• Status is valid until any Suspend or Disconnect Order is completed for the Customer Product/Service
Suspended	<ul style="list-style-type: none">• Customer Product/Service is successfully suspended by Suspend Order• Status is valid until Resume Order is completed for the Customer Product/Service <p><i>This is a possible status in the TN systems but should not be used and returned via the service. In case this status is returned in the response contact TN for investigation.</i></p>
Disconnected	<ul style="list-style-type: none">• Customer Product/Service is successfully disconnected by Disconnect or Cancel Order• Status is final for the Customer Service. After it Product/Service Instance could be only removed from the system if it is allowed for specific user role.

Error messages:

See [Error Handling](#) section

Request example:

```
<v001:RetrieveProductInstanceRequest>
  <v001:locationId>6cc7yy007q-9yf8zq0ooz</v001:locationId>
</v001:RetrieveProductInstanceRequest>
```

Response example:

```
<v001:RetrieveProductInstanceResponse>
  <v001:products>
    <v001:product>
      <v001:instanceId>9135645481613649404</v001:instanceId>
      <v001:status>Planned</v001:status>
      <v001:offerName>BB_1</v001:offerName>
      <v001:creationDate>2013-07-11</v001:creationDate>
    </v001:product>
    <v001:product>
      <v001:instanceId>9135412619613933027</v001:instanceId>
      <v001:status>Active</v001:status>
      <v001:offerName>ATV_DTV</v001:offerName>
      <v001:creationDate>2013-06-14</v001:creationDate>
      <v001:characteristics>
        <v001:characteristic>
```

```
        <v001:name>INTERACTIVITY</v001:name>
        <v001:value>NO</v001:value>
      </v001:characteristic>
    </v001:characteristics>
  </v001:components>
  <v001:component>
    <v001:name>STB</v001:name>
    <v001:status>Active</v001:status>
    <v001:characteristics>
      <v001:characteristic>
        <v001:name>STB_SEQUENCE_NUMBER</v001:name>
        <v001:value>1</v001:value>
      </v001:characteristic>
    </v001:characteristics>
  </v001:component>
</v001:components>
</v001:product>
</v001:products>
</v001:RetrieveProductInstanceResponse>
```

4.7 createDropCableConnectionAppointmentTicket

The createDropCableConnectionAppointmentTicket function is used to request the connection of a drop cable, done by Telenet, in the event of the feasibility request returning a result of 'not feasible' and the reason being one of the following:

- Drop cable doesn't exist for location [Location ID]
- Dropcable activation needs to be paid

The response indicates whether or not the request has been accepted. If it has been accepted then the response will include the ID of the ticket used to track the request. Note that the appointment has not been booked at this stage; all that has happened is the creation of a ticket. The appointment creation process for these appointments is manual.

Request example:

```
<v001:CreateDropCableConnectionAppointmentTicketRequest>
  <LocationId>6cc8d3007q-9vt6fx00a7</LocationId>
  <EarliestDropCableConnectionStartDate>2014-07-
02</EarliestDropCableConnectionStartDate>
  <v0011:ContactInfoInput>
    <v0012:Epithet>MR</v0012:Epithet>
    <v0012:FirstName>Manu</v0012:FirstName>
    <v0012:LastName>John</v0012:LastName>
    <v0013:NotificationInfoInput>
      <v0013:NotificationContactInfoInput>
        <v0014:NotificationType>SMS</v0014:NotificationType>
        <v0014:NotificationLanguage>NL</v0014:NotificationLanguage>
        <v0013:ContactInfoInput>
          <v0015:MobilePhoneNumber>+32466890768</v0015:MobilePhoneNumber>
        </v0013:ContactInfoInput>
      </v0013:NotificationContactInfoInput>
    </v0013:NotificationInfoInput>
  </v0011:ContactInfoInput>
  <v0016:DropCableConnectionTypeCode>383</v0016:DropCableConnectionTypeCode>
  <!--Optional:-->
  <AppointmentRemarks>remarks</AppointmentRemarks>
  <!--Optional:-->
  <v0017:Note>
    <v0017:NoteContent>drop cable notes</v0017:NoteContent>
  </v0017:Note>
  <!--Optional:-->
  <v0017:TenantTicketReferenceId>982323232</v0017:TenantTicketReferenceId>
</v001:CreateDropCableConnectionAppointmentTicketRequest>
```

The EarliestDropCableConnectionStartDate is the earliest date when we can book the drop cable connection appointment it is the date when the customer will have completed all the preparation work. It is a mandatory field.

DropCableConnectionTypeCode - You have been provided with a questionnaire to go through with your customers in order to determine the drop cable connection type you need to request. This is similar to the questionnaire Telenet uses with its own customers. The valid types are described in the table below please note that you need to send the product code and not the description:

Description	Product ID
Graafwerken openbare weg (minder dan 1,5m)	383
Graafwerken openbare weg (meer dan 1,5m)	384
Onderboring	385
Gevelnet standaard	386
Gevelnet complex	387

Kabel via groepsaansluiting	638
Kabelaansluiting (Synergie)	953
Kabelaansluiting (Activatie)	954

For details of the other elements in the XML please refer to section 5

Response example:

```
<v001:CreateDropCableConnectionAppointmentTicketResponse>  
  <TroubleTicketId>C140627_9054972</TroubleTicketId>  
</v001:CreateDropCableConnectionAppointmentTicketResponse>
```


4.8 createInstallAppointmentTicket

The *createInstallAppointmentTicket* function is used to request the creation of an install appointment ticket, done by Telenet. The response indicates whether or not the request has been accepted. If it has been accepted then the response will include the ID of the ticket used to track the request. Note that the appointment has not been booked at this stage; all that has happened is the creation of a ticket.

Request example:

```
<v001:CreateInstallAppointmentTicketRequest>
  <v0011:CustomerOrderId>9136242485813362513</v0011:CustomerOrderId>
  <LocationId>6cc7ov007q-9x6tuq0gyz</LocationId>
  <AppointmentRequestedDate>
    <v0012:RequestedDate>2013-09-23</v0012:RequestedDate>
    <v0012:RequestedDate>2013-09-24</v0012:RequestedDate>
    <v0012:RequestedDate>2013-09-25</v0012:RequestedDate>
  </AppointmentRequestedDate>
  <v0013:ContactInfo>
    <v0014:Epithet>MR</v0014:Epithet>
    <v0014:FirstName>WHOLESALE</v0014:FirstName>
    <v0014:LastName>CUSTOMER</v0014:LastName>
    <v0015:NotificationInfo>
      <v0015:NotificationContactInfo>
        <v0015:NotificationType>VOICE</v0015:NotificationType>
        <v0015:NotificationLanguage>NL</v0015:NotificationLanguage>
        <v0015:ContactInfo>
          <v0016:FixedPhoneNumber>+32476214136</v0016:FixedPhoneNumber>
        </v0015:ContactInfo>
      </v0015:NotificationContactInfo>
    </v0015:NotificationInfo>
  </v0013:ContactInfo>
  <AppointmentRemarks>Notes for the technician</AppointmentRemarks>
  <v0017:Note>
    <v0017:NoteContent>Some additional information </v0017:NoteContent>
  </v0017:Note>
  <v0017:ProblemCode>WS Install</v0017:ProblemCode>
  <v0017:TenantTicketReferenceId>AO Ticket Reference</v0017:TenantTicketReferenceId>
</v001:CreateInstallAppointmentTicketRequest>
```

The ProblemCode is used to control the way the ticket is handled in the Telenet trouble ticketing system, the only value accepted is WS Install for createInstallAppointmentTicket requests.

The Note Content field should contain any notes relating to the ticket, these are not stored against the appointment. They are visible to the Wholesale Agent but not the field technician

The Appointment Remarks are messages which are intended for field technicians and are visible to technicians carrying out appointments. It has a maximum character length of 255 characters

For details of the other elements in the XML please refer to section 5

Response example:

```
<v001:CreateInstallAppointmentTicketResponse>
  <TroubleTicketId>C130925_8541573</TroubleTicketId>
</v001:CreateInstallAppointmentTicketResponse>
```

Error messages:

See [Error Handling](#) section

4.9 createRepairAppointmentTicket

The *createRepairAppointmentTicket* function is used to request the creation of a repair appointment. The response indicates whether or not the request has been accepted. If it has been accepted then the response will include the ID of the ticket used to track the request. Note that the appointment has not been booked at this stage; all that has happened is the creation of a ticket.

Request example:

```
<v001:CreateRepairAppointmentTicketRequest>
  <LocationId>6cc7ov007q-9x6tuq0gyz</LocationId>
  <AppointmentRequestedDate>
    <v0011:RequestedDate>2013-09-19</v0011:RequestedDate>
    <v0011:RequestedDate>2013-09-20</v0011:RequestedDate>
  </AppointmentRequestedDate>
  <v0012:ContactInfo>
    <v0013:Epithet>MR</v0013:Epithet>
    <v0013:FirstName>TEST</v0013:FirstName>
    <v0013:LastName>CUSTOMER</v0013:LastName>
    <v0014:NotificationInfo>
      <v0014:NotificationContactInfo>
        <v0014:NotificationType>VOICE</v0014:NotificationType>
        <v0014:NotificationLanguage>NL</v0014:NotificationLanguage>
        <v0014:ContactInfo>
          <v0015:FixedPhoneNumber>+3236531234</v0015:FixedPhoneNumber>
        </v0014:ContactInfo>
      </v0014:NotificationContactInfo>
    </v0014:NotificationInfo>
  </v0012:ContactInfo>
  <v0017:Note>
    <v0017:NoteContent>Findings from analysis of problem </v0017:NoteContent>
  </v0017:Note>
  <v0016:ProblemCode>Service degradatie</v0016:ProblemCode>
  <v0016:TenantTicketReferenceId>Your reference</v0016:TenantTicketReferenceId>
  <ProblemRecordedDate>2013-07-10T11:00:00</ProblemRecordedDate>
</v001:CreateRepairAppointmentTicketRequest>
```

The problem type is used to control the way the ticket is handled in the Telenet trouble ticketing system, the only values accepted are:

- Geen service TV
- Geen service BB
- Geen service TV & BB
- Service degradatie
- Installatie signaallevels - To be used when AO technician is doing an onsite installations, but notices that the signal levels are not OK. In this case a Telenet network technician needs to go on site to fix the signal levels.
- Gezamenlijke analyze - To be used if a joint analysis or a joint customer visit is needed by AO and Telenet. For example after detection of 'lekstroom' or 'ingress'.
- Heraansluiten dropkabel - This should be used in the following case: a repair case is sent and Telenet sees that the drop cable needs to be replaced. At that moment Telenet will connect the customer using a temporary drop cable and will ask the customer to replace the drop cable as Telenet cannot dig on private property. This repair case will be closed since the services for the customer are fixed at that time. The customer then needs to call AO after they have replaced the drop cable and then AO needs to create a new repair case with the problem code "Heraansluiten dropkabel" to connect the new drop cable to the Telenet network and remove the temporary drop cable.
- [Kleine Infrastructuurwerken](#)

This problem code to be used only for the KIW cases like Damage Tap or No Free Tap.

- **Repair Intervention**

This problem code is to be used if AO will execute repair appointment by themselves and needs to inform Telenet about the repair intervention. The ticket id generated to be used in repair intervention.

The Note Content field should contain any notes relating to the ticket, these are not stored against the appointment. They are visible to the Wholesale Agent but not the field technician

The Appointment Remarks are messages which are intended for field technicians and are visible to technicians carrying out appointments. It has a maximum character length of 255 characters

For details of the other elements in the XML please refer to section 5

Response example:

```
<v001:CreateRepairAppointmentTicketResponse>  
  <TroubleTicketId> C130925_8541573</TroubleTicketId>  
</v001:CreateRepairAppointmentTicketResponse>
```

Error messages:

See [Error Handling](#) section

4.10 createAdminTicket

The *createAdminTicket* function is used to log a request for Telenet to perform an administrative action.

The ProblemCode is used route the ticket to appropriate person in the back office, the only values accepted are:

- Order Support
- Adres Controle
- Andere

The response is ID of the ticket used to track the request.

Request example:

```
<v001:CreateAdminTicketRequest>
  <v0011:TenantTicketReferenceId>Your reference</v0011:TenantTicketReferenceId>
  <v0011:ProblemCode>Adres Controle</v0011:ProblemCode>
  <v0011:Note>
    <v0011:NoteContent>
      Unable to find address ID for Dorpstraat 66, 1234 MijnStad
    </v0011:NoteContent>
  </v0011:Note>
</v001:CreateAdminTicketRequest>
```

Response example:

```
<v001:CreateAdminTicketResponse>
  <TroubleTicketId> C130925_8541573</TroubleTicketId>
</v001: CreateAdminTicketResponse >
```

Error messages:

See [Error Handling](#) section

4.11 RetrieveTicket

The retrieveTicket function is used to retrieve the current status of a trouble ticket. The same operation is used for install, repair, admin and dropcable connection tickets.

Request example:

```
<v001:RetrieveTicketRequest>
  <v0011:TroubleTicketId> C130918_8541480</v0011:TroubleTicketId>
</v001:RetrieveTicketRequest>
```

Response example:

```
<v001:RetrieveTicketResponse
  <v0011:TroubleTicketId >C140124_8861153</v0011:TroubleTicketId>
  <v0011:Status >Closed</v0011:Status>
  <v0011:TroubleTicketTitle>AO/9137349271613134690/WS Install/Ticket Firstname/Ticket
  Lastname</v0011:TroubleTicketTitle>
  <TicketCreationDate>2014-06-20T15:33:02.000+01:00</TicketCreationDate>
  <v0011:Notes>
  <v0011:Note>
  <v0011:NoteContent>De afspraak is succesvol uitgevoerd.</v0011:NoteContent>
  </v0011:Note>
  <v0011:Note>
  <v0011:NoteContent>De afspraak is geboekt op 2014-06-24 tussen 08:00 en
  18:00u.</v0011:NoteContent>
  </v0011:Note>
  <v0011:ModificationTimestamp>2014-06-20T16:41:08.000+02:00</v0011:ModificationTimestamp>
  <v0011:Note>
  <v0011:NoteContent>De afspraak op 2014-06-26 werd op uw verzoek
  geannuleerd.</v0011:NoteContent>
  </v0011:Note>
  <v0011:ModificationTimestamp>2014-06-22T11:41:08.000+02:00</v0011:ModificationTimestamp>
  <v0011:Note>
  <v0011:NoteContent>klant wil alsnog de afspraak verplaatsen:mogelijke datums zijn 24 juni,
  25 juni, 26 juni </v0011:NoteContent>
  </v0011:Note>
  <v0011:ModificationTimestamp>2014-06-24T14:41:08.000+02:00</v0011:ModificationTimestamp>
  <v0011:Note>
  <v0011:NoteContent>De afspraak is geboekt op 2014-06-24 tussen 08:00 en
  18:00u.</v0011:NoteContent>
  </v0011:Note>
  <v0011:ModificationTimestamp>2014-06-22T16:41:08.000+02:00</v0011:ModificationTimestamp>
</v0011:Notes>
</v001:RetrieveTicketResponse>
```

Error messages:

See [Error Handling](#) section

The ticket statuses are described in the table below:

Status	Description
New	Ticket is created
Investigate	Validation of the ticket is ongoing
Planned	An appointment is booked
Proposed	An appointment is booked with a counter proposed date
Dispatch	The appointment has been executed, but further actions are required to complete the requirements
Update	The AO has provided new information in the ticket
Wait	Telenet is waiting for additional information to be provided by the AO before further action can be taken
Closed	The ticket is closed

4.12 updateTicket

The updateTicket function is used to update the notes held for a trouble ticket. The same operation is used for install, repair, admin and dropcable connection tickets

If the update is unsuccessful then the response will include an error message; if it is successful then the response will contain no data.

Request example:

```
<v001:UpdateTicketRequest>
  <v0011:TroubleTicketId>C130918_8541480</v0011:TroubleTicketId>
  <v0011:Note>
    <v0011:NoteContent>ticket updates can be added here</v0011:NoteContent>
  </v0011:Note>
</v001:UpdateTicketRequest>
```

Response example:

```
<v001:UpdateTicketResponse/>
```

Error messages:

See [Error Handling](#) section

4.13 activateCPEForCustomerOrder

The activateCPEForCustomerOrder function is used to activate devices which are being installed by the AO, and belonging to a certain order.

The devices that can be activated are a COAX modem or STB. This corresponds to sections BroadbandInfo and DtvInfo in the input request XML (DtvInfo is no longer relevant, if provided, the request will fail).

When sending a request on this api, there is a validation happening towards the upfront provided whitelist. This whitelist check will happen for modems, STB's and smartcards. If the provided ID is not found in the whitelist, or has an active or blacklisted state, then the active request will fail and an error will be returned.

This api does not check if the CPE is already active (e.g. in a move scenario; when CPE was not disconnected on old address).

Error messages:

See [Error Handling](#) section

Examples:

1 STB

Request:

```
<v001:ActivateCpeForCustomerOrderRequest>
<v0011:CustomerOrderId>9135655176213764586</v0011:CustomerOrderId>
  <v0012:ActivateCpeForCustomerOrderInputList>
    <v0012:ActivateCpeForCustomerOrderInput>
      <v0012:DtvInfo>
        <v0013:SetTopBoxNumber>162304914200</v0013:SetTopBoxNumber>
        <v0014:StbSequenceNumber>1</v0014:StbSequenceNumber>
        <v0013:SmartCardNumber>24200</v0013:SmartCardNumber>
      </v0012:DtvInfo>
    </v0012:ActivateCpeForCustomerOrderInput>
  </v0012:ActivateCpeForCustomerOrderInputList>
</v001:ActivateCpeForCustomerOrderRequest>
```

Response:

```
<v001:ActivateCPEForCustomerOrderResponse>
</v001:ActivateCPEForCustomerOrderResponse>
```

2 STB

Request:

```
<v001:ActivateCpeForCustomerOrderRequest>
<v0011:CustomerOrderId>9135655176213764586</v0011:CustomerOrderId>
  <v0012:ActivateCpeForCustomerOrderInputList>
    <v0012:ActivateCpeForCustomerOrderInput>
      <v0012:DtvInfo>
        <v0013:SetTopBoxNumber>162304914200</v0013:SetTopBoxNumber>
        <v0014:StbSequenceNumber>1</v0014:StbSequenceNumber>
        <v0013:SmartCardNumber>24200</v0013:SmartCardNumber>
      </v0012:DtvInfo>
    </v0012:ActivateCpeForCustomerOrderInput>
    <v0012:ActivateCpeForCustomerOrderInput>
      <v0012:DtvInfo>
        <v0013:SetTopBoxNumber>162304914201</v0013:SetTopBoxNumber>
        <v0014:StbSequenceNumber>2</v0014:StbSequenceNumber>
        <v0013:SmartCardNumber>24201</v0013:SmartCardNumber>
      </v0012:DtvInfo>
    </v0012:ActivateCpeForCustomerOrderInput>
  </v0012:ActivateCpeForCustomerOrderInputList>
```

</v001:ActivateCpeForCustomerOrderRequest>

Response:

<v001:ActivateCPEForCustomerOrderResponse>
</v001:ActivateCPEForCustomerOrderResponse>

COAX Modem

Request:

<v001:ActivateCpeForCustomerOrderRequest>
<v0011:CustomerId>9135655176213764586</v0011:CustomerId>
<v0012:ActivateCpeForCustomerOrderInputList>
<v0012:ActivateCpeForCustomerOrderInput>
<v0012:BroadBandInfo>
<v0013:ModemMacId>22:22:26:61:01:2D</v0013:ModemMacId>
</v0012:BroadBandInfo>
</v0012:ActivateCpeForCustomerOrderInput>
</v0012:ActivateCpeForCustomerOrderInputList>
</v001:ActivateCpeForCustomerOrderRequest>

Response:

<v001:ActivateCPEForCustomerOrderResponse>
</v001:ActivateCPEForCustomerOrderResponse>

STB & Modem

Request :

<v001:ActivateCpeForCustomerOrderRequest>
<v0011:CustomerId>9135655176213764586</v0011:CustomerId>
<v0012:ActivateCpeForCustomerOrderInputList>
<v0012:ActivateCpeForCustomerOrderInput>
<v0012:DtvInfo>
<v0013:SetTopBoxNumber>162304914200</v0013:SetTopBoxNumber>
<v0014:StbSequenceNumber>1</v0014:StbSequenceNumber>
<v0013:SmartCardNumber>24200</v0013:SmartCardNumber>
</v0012:DtvInfo>
</v0012:ActivateCpeForCustomerOrderInput>
<v0012:ActivateCpeForCustomerOrderInput>
<v0012:BroadBandInfo>
<v0013:ModemMacId>22:22:26:61:01:2D</v0013:ModemMacId>
</v0012:BroadBandInfo>
</v0012:ActivateCpeForCustomerOrderInput>
</v0012:ActivateCpeForCustomerOrderInputList>
</v001:ActivateCpeForCustomerOrderRequest>

Response:

<v001:ActivateCPEForCustomerOrderResponse>
</v001:ActivateCPEForCustomerOrderResponse>

4.14 checkMajorOutageOnAddress

The *checkMajorOutageOnAddress* function is used to check whether there is a major outage on the node a particular address is connected to. This check should be done prior to creating a repair appointment ticket. The input for this check is the address Id and the output is a simple true or false. True means that there is a major outage on the node and false means there is no major outage on the node.

Request example:

```
<v001:CheckMajorOutageOnAddressRequest>  
  <v0011:LocationId>6cc7ov007q-9y7xr60613</v0011:LocationId>  
</v001:CheckMajorOutageOnAddressRequest>
```

Response example:

```
<v001:CheckMajorOutageOnAddressResponse>  
  <IsMajorOutagePresent>true</IsMajorOutagePresent>  
</v001:CheckMajorOutageOnAddressResponse>
```

4.15 logoffPassiveCpes

The logoffPassiveCpes function is used to inform Telenet of a NIU installation and is also used to update Telenet inventory and logistics. AO is also able to inform Telenet of an NIU replacement or erroneous NIU.

The response only indicates that the message was successfully received.

The different NIU's which can be installed by AO. The material Identifiers must be used in the xml field LogisticSpecificationId (InstalledCPE and StockLevelTransaction structures).

Material ID	Description
260	Versterker - Tyco - Garage NIU
262	Versterker - Dinh - Wall Outlet NIU
263	Versterker - Dinh - Garage NIU
333	Versterker-TYCO 2 dataport NIU+lifeline

Table 1: Valid material identifiers

Please note that it's possible that multiple stockleveltransactions are needed for a single installation. Some use cases are depicted in the following table:

Nb	Use Case	CpeInstallScenario	InstalledCpe Id ¹	StockLevelTransaction	
				Id ²	Type ³
1	Standard installation	INSTALL	260	260	ACTIVATE
2	Installation of a NIU (2 NIU are to be logged of as one of the NIU's was Death on Arrival)	INSTALL	260	260	DOA
				260	ACTIVATE
3	Telenet has indicated that an NIU needs to be installed (in the feasibility check) and AO finds that no NIU needs to be placed (as there's already one present) NIU Type 263 was already installed on the customer premises.	INSTALL_NOT_REQUIRED	263	263	REUSE
4	Telenet did not indicate that an NIU needs to be installed and AO found that an NIU does need to be installed	REPLACE	333	333	ACTIVATE
5	AO placed a NIU as part of a repair appointment (e.g. NIU type 260 was replaced by NIU Type 263)	REPLACE	263	260	RETURN_NOK
				263	ACTIVATE
6	AO placed a NIU as part of a repair appointment (e.g. NIU type 262 was replaced by NIU type 333 for technical reasons; the old NIU was still working). One of the NIU's was Death on Arrival.	REPLACE	333	262	RETURN_OK
				333	DOA
				333	ACTIVATE

Request example (Use Case 1):

```
<v001:LogoffPassiveCpesRequest>
  <v0011:LogoffPassiveCpesInput>
    <v0012:LocationId>6cc7ov007q-9y7xr60613</v0012:LocationId>
```

¹ The field "Id" in this column indicates a InstalledCpe/LogisticSpecificationId in the XML

² The field "Id" in this column indicates a StockLevelTransaction/LogisticSpecificationId in the XML

³ The field "type" in this column indicates a StockLevelTransaction/StockLevelTransactionType in the XML

```

<v0013:ExternalAppointmentId>abcde</v0013:ExternalAppointmentId>
<!--Optional:-->
<v0014:CustomerOrderId>9135014148813330000</v0014:CustomerOrderId>
<v0015:CpeInstallScenario>INSTALL</v0015:CpeInstallScenario>
<v0011:InstalledCpe>
  <v0016:LogisticSpecificationId>260</v0016:LogisticSpecificationId>
</v0011:InstalledCpe>
<v0017:StockLevelTransactionList>
  <!--Zero or more repetitions:-->
  <v0017:StockLevelTransaction>
    <v0016:LogisticSpecificationId>260</v0016:LogisticSpecificationId>
    <v0017:StockLevelTransactionType>ACTIVATE</v0017:StockLevelTransactionType>
  </v0017:StockLevelTransaction>
  <v0017:StockLevelTransaction>
    <v0016:LogisticSpecificationId>260</v0016:LogisticSpecificationId>
    <v0017:StockLevelTransactionType>RETURN_NOK</v0017:StockLevelTransactionType>
  </v0017:StockLevelTransaction>
</v0017:StockLevelTransactionList>
</v0011:LogoffPassiveCpesInput>
</v001:LogoffPassiveCpesRequest>

```

Request example (Use Case 5):

```

<v001:LogoffPassiveCpesRequest>
  <v0011:LogoffPassiveCpesInput>
    <v0012:LocationId>6cc7ov007q-9y7xr60613</v0012:LocationId>
    <v0013:ExternalAppointmentId>abcde</v0013:ExternalAppointmentId>
    <!--Optional:-->
    <v0014:CustomerOrderId>9135014148813330000</v0014:CustomerOrderId>
    <v0015:CpeInstallScenario>REPLACE</v0015:CpeInstallScenario>
    <v0011:InstalledCpe>
      <v0016:LogisticSpecificationId>263</v0016:LogisticSpecificationId>
    </v0011:InstalledCpe>
    <v0017:StockLevelTransactionList>
      <!--Zero or more repetitions:-->
      <v0017:StockLevelTransaction>
        <v0016:LogisticSpecificationId>263</v0016:LogisticSpecificationId>
        <v0017:StockLevelTransactionType>ACTIVATE</v0017:StockLevelTransactionType>
      </v0017:StockLevelTransaction>
      <v0017:StockLevelTransaction>
        <v0016:LogisticSpecificationId>260</v0016:LogisticSpecificationId>
        <v0017:StockLevelTransactionType>RETURN_NOK</v0017:StockLevelTransactionType>
      </v0017:StockLevelTransaction>
    </v0017:StockLevelTransactionList>
  </v0011:LogoffPassiveCpesInput>
</v001:LogoffPassiveCpesRequest>

```

Response example:

```

<v001:LogoffPassiveCpesResponse>
</v001:LogoffPassiveCpesResponse>

```

4.16 RetrieveServiceAccessPointIdForAddress

The RetrieveServiceAccessPointIdForAddress function is used to retrieve service access point Id(sapId) on the basis of location Id .

AO can only use this operation to retrieve service access point Id (sapId) during drop cable appointment execution by AO technician.

Request example :

```

<v002:RetrieveServiceAccessPointIdForAddressRequest>
  <v001:LocationId>6cc7yy007q-9yf8zq0ooz</v001:LocationId>
</v002:RetrieveServiceAccessPointIdForAddressRequest>

```

Response example:

```

<v002:RetrieveServiceAccessPointIdForAddressResponse>
  <v001:ServiceAccessPointId>45069</v001:ServiceAccessPointId>
</v002:RetrieveServiceAccessPointIdForAddressRequest>

```

Error messages:

See [Error Handling](#) section

Please note that service accesspoint id will be returned in response only if drop cable connection is allowed on the provided location.

If the drop cable connection is not allowed on the location then error message “DropCableConnection is not allowed on the location”

If more than one service access point Ids(sapId) are linked to the location Id in the Telenet Inventory, error message will be returned.

4.17 UpdateServiceAccessPointForInstalledDropCable

UpdateServiceAccessPointForInstalledDropCable function is used by AO to send the intervention completion status after drop cable appointment is completed by AO technician.

Request example :

```
<v002:UpdateServiceAccessPointForInstalledDropCableRequest>
  <v0021:WholesaleServiceAccessPointModificationForInstalledDropCable>
    <v001:ServiceAccessPointId>45069</v001:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>EXECUTED</v0021:InterventionCompletionStatus>
  </v0021:WholesaleServiceAccessPointModificationForInstalledDropCable>
</v002:UpdateServiceAccessPointForInstalledDropCableRequest>
```

Response example :

```
<v001:UpdateServiceAccessPointForInstalledDropCableResponse>
</v001:UpdateServiceAccessPointForInstalledDropCableResponse>
```

Error messages:

See [Error Handling](#) section

InterventionCompletionStatus are described in the table below :

InterventionCompletionStatus	Description
EXECUTED	Drop cable installed.
NOT_EXECUTED	Technician was not able to finish the appointment.

4.18 RetrieveServiceAccessPointIdForFilterIntervention

RetrieveServiceAccessPointIdForFilterIntervention function is used to retrieve service access point Id during the execution of intervention by AO technician. This operation can be used for both Install and Repair scenarios.

Request example for Install scenario:

```
<v002:RetrieveServiceAccessPointIdForFilterInterventionRequest>
  <v001:LocationId>6cc7yy007q-9yf8zq0ooz</v001:LocationId>
  <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
  <v0011:CustomerOrderId>9135014148813331111</v0011:CustomerOrderId>
</v002:RetrieveServiceAccessPointIdForFilterInterventionRequest>
```

Request example for Repair scenario:

```
<v002:RetrieveServiceAccessPointIdForFilterInterventionRequest>
  <v001:LocationId>6cc7yy007q-9yf8zq0ooz</v001:LocationId>
  <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
  <v0012:TroubleTicketId>C030922_459008</v0012:TroubleTicketId>
</v002:RetrieveServiceAccessPointIdForFilterInterventionRequest>
```

There is choice between the TroubleTicketId and CustomerOrderId.

Response example :

```
<v002:RetrieveServiceAccessPointIdForFilterInterventionResponse>
  <v001:ServiceAccessPointId>45069</v001:ServiceAccessPointId>
</v002:RetrieveServiceAccessPointIdForFilterInterventionResponse>
```

Error messages:

See [Error Handling](#) section

4.19 RetrieveServiceAccessPointFilterInfo

RetrieveServiceAccessPointFilterInfo function is used to retrieve existing filter details(AS-IS) present on a serviceAccessPoint(sapId) during the execution of appointment for filter intervention by AO technician. Default language for the description is English('EN')

Request example:

```
<v002:RetrieveServiceAccessPointFilterInfoRequest>
  <v001:ServiceAccessPointId>45069</v001:ServiceAccessPointId>
</v002:RetrieveServiceAccessPointFilterInfoRequest>
```

Response of the operation in case only one filter already exists on the sapId.

Response example:

```
<v001:RetrieveServiceAccessPointFilterInfoResponse>
  <v001:ServiceAccessPointFilters>
    <!--Zero or more repetitions:-->
    <v0012:ServiceAccessPointFilterInfo>
      <v0011:ServiceAccessPointFilterSpecificationInfo>
        <v0013:ServiceAccessPointFilterSpecificationId>1</v0013:ServiceAccessPo
intFilterSpecificationId>
        <v0013:Description language="EN">TOF</v0013:Description>
      </v0011:ServiceAccessPointFilterSpecificationInfo>
      <v0011:FilterValue>
        <v0014:ServiceAccessPointFilterValueId>3</v0014:ServiceAccessPointFilt
erValueId>
        <v0014:Description language="EN">5-65</v0014:Description>
      </v0011:FilterValue>
    </v0012:ServiceAccessPointFilterInfo>
  </v001:ServiceAccessPointFilters>
</v001:RetrieveServiceAccessPointFilterInfoResponse>
```

Response of the operation in case multiple filters already exists on the sapId.

Response example:

```
<v001:RetrieveServiceAccessPointFilterInfoResponse>
  <v001:ServiceAccessPointFilters>
    <!--Zero or more repetitions:-->
    <v0012:ServiceAccessPointFilterInfo>
      <v0011:ServiceAccessPointFilterSpecificationInfo>
        <v0013:ServiceAccessPointFilterSpecificationId>1</v0013:ServiceAccessPo
intFilterSpecificationId>
        <v0013:Description language="EN">TOF</v0013:Description>
      </v0011:ServiceAccessPointFilterSpecificationInfo>
      <v0011:FilterValue>
        <v0014:ServiceAccessPointFilterValueId>3</v0014:ServiceAccessPointFilt
erValueId>
        <v0014:Description language="EN">5-65</v0014:Description>
    </v0012:ServiceAccessPointFilterInfo>
  </v001:ServiceAccessPointFilters>
</v001:RetrieveServiceAccessPointFilterInfoResponse>
```

```

        </v0011:FilterValue>
    </v0012:ServiceAccessPointFilterInfo>
</v0012:ServiceAccessPointFilterInfo>
    <v0011:ServiceAccessPointFilterSpecificationInfo>
        <v0013:ServiceAccessPointFilterSpecificationId>5</v0013:ServiceAccessPo
intFilterSpecificationId>
        <v0013:Description language="EN">RPA</v0013:Description>
    </v0011:ServiceAccessPointFilterSpecificationInfo>
    <v0012:FilterValue>
        <v0014:ServiceAccessPointFilterValueId>6</v0014:ServiceAccessPointF
ilterValueId>
        <v0014:Description language="EN">FLT RPA 6 db (5-25 or 5-
65)</v0014:Description>
    </v0012:FilterValue>
</v0012:ServiceAccessPointFilterInfo>
</v001:ServiceAccessPointFilters>
</v001:RetrieveServiceAccessPointFilterInfoResponse>

```

Response of the operation in case filters does not exists on the sapld.

Response example:

```

<v001:RetrieveServiceAccessPointFilterInfoResponse>
    <v001:ServiceAccessPointFilters/>
</v001:RetrieveServiceAccessPointFilterInfoResponse>

```

Error messages:

See [Error Handling](#) section

ServiceAccessPointFilterSpecificationInfo :

Gives information about the type of the filter currently present on the location.

- ServiceAccessPointFilterSpecificationId : Unique Identifier of the filter type present at the location
- Description : Description of the filter type present at the location and it should be always 'EN'.

Please find below mapping list of filter specifications :

ServiceAccessPointFilterSpecificationId	Description
1	TOF
2	HPF
3	ANTI-DIEF
4	LIPIS
5	RPA

FilterValue :

- ServiceAccessPointFilterValueId : Unique identifier of the filter value present at the location
- Description : Description of the filter present at the location and it should be always 'EN'.

Mapping between the specification and value :

FILTER_VALUE_ID	FILTER_VALUE	FILTER_TYPE_ID	FILTER_NAME
3	5-25	1	TOF
4	5-65	1	TOF
11	5-117	1	TOF
5	88	2	HPF

6	47	2	HPF
8	ANTI-DIEF	3	ANTI-DIEF
10	LOF	4	LIPIS
0	FLT RPA 0 db	5	RPA
3	FLT RPA 3 db (5-25 or 5-65)	5	RPA
6	FLT RPA 6 db (5-25 or 5-65)	5	RPA
9	FLT RPA 9 db (5-25 or 5-65)	5	RPA
12	FLT RPA 12 db (5-25 or 5-65)	5	RPA
15	FLT RPA 15 db (5-25 or 5-65)	5	RPA
18	FLT RPA 18 db (5-25 or 5-65)	5	RPA
21	FLT RPA 21 db (5-25 or 5-65)	5	RPA
24	FLT RPA 24 db (5-25 or 5-65)	5	RPA

4.20 RetrieveServiceAccessPointFilterToBeInstalled

RetrieveServiceAccessPointFilterToBeInstalled function is used to retrieve 'to-be' filter details will be applied to complete filter intervention .

AO technician will use these filter details during the execution of filter intervention appointment to close the filter intervention.

In the response all possible filtervalues of a filterspecificationid will be present. Please refer to 'Mapping between specification and value'-table in 4.19.

Request example for Install scenario:

```
<v002:RetrieveServiceAccessPointFilterToBeInstalledRequest>
  <v001:LocationId>6cc7yy007q-9yf8zq0ooz</v001:LocationId>
  <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
  <v0011:CustomerOrderId>9135014148813331111</v0011:CustomerOrderId>
</v002:RetrieveServiceAccessPointFilterToBeInstalledRequest>
```

Request example for Repair scenario:

```
<v002:RetrieveServiceAccessPointFilterToBeInstalledRequest>
  <v001:LocationId>6cc7yy007q-9yf8zq0ooz</v001:LocationId>
  <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
  <v0012:TroubleTicketId>C030922_459008</v0012:TroubleTicketId>
</v002:RetrieveServiceAccessPointFilterToBeInstalledRequest>
```

Response example for HPF:

Response example:

```
<v001:RetrieveServiceAccessPointFilterToBeInstalledResponse>
<v001:RetrieveServiceAccessPointFilterInfoResponse>
  <v001:ServiceAccessPointFilters>
    <!--Zero or more repetitions:-->
    <v0012:ServiceAccessPointFilterInfo>
      <v0011:ServiceAccessPointFilterSpecificationInfo>
        <v0013:ServiceAccessPointFilterSpecificationId>2</v0013:ServiceAccessPo
intFilterSpecificationId>
        <v0013:Description language="EN">HPF</v0013:Description>
      </v0011:ServiceAccessPointFilterSpecificationInfo>
      <v0011:FilterValues>
        <!--one or more repetitions:-->
        <v0012:FilterValue>
          <v0014:ServiceAccessPointFilterValueId>5</v0014:ServiceAccessPointF
ilterValueId>
          <v0014:Description language="EN">88</v0014:Description>
```

```

        </v0012:FilterValue>
        <v0012:FilterValue>
            <v0014:ServiceAccessPointFilterValueId>6</v0014:ServiceAccessPointF
            ilterValueId>
            <v0014:Description language="EN">47</v0014:Description>
        </v0012:FilterValue>
    </v0011:FilterValues>
</v0012:ServiceAccessPointFilterInfo>
</v001:ServiceAccessPointFilters>
</v001:RetrieveServiceAccessPointFilterInfoResponse>
</v001:RetrieveServiceAccessPointFilterToBeInstalledResponse>

```

Response example for TOF:

Response example:

```

    <v001:RetrieveServiceAccessPointFilterToBeInstalledResponse>
<v001:RetrieveServiceAccessPointFilterInfoResponse>
    <v001:ServiceAccessPointFilters>
        <!--Zero or more repetitions:-->
        <v0012:ServiceAccessPointFilterInfo>
            <v0011:ServiceAccessPointFilterSpecificationInfo>
                <v0013:ServiceAccessPointFilterSpecificationId>2</v0013:ServiceAccessPo
                intFilterSpecificationId>
                <v0013:Description language="EN">TOF</v0013:Description>
            </v0011:ServiceAccessPointFilterSpecificationInfo>
            <v0011:FilterValues>
                <!--one or more repetitions:-->
                <v0012:FilterValue>
                    <v0014:ServiceAccessPointFilterValueId>3</v0014:ServiceAccessPointF
                    ilterValueId>
                    <v0014:Description language="EN">5-25</v0014:Description>
                </v0012:FilterValue>
                <v0012:FilterValue>
                    <v0014:ServiceAccessPointFilterValueId>4</v0014:ServiceAccessPointF
                    ilterValueId>
                    <v0014:Description language="EN">5-65</v0014:Description>
                </v0012:FilterValue>
                <v0012:FilterValue>
                    <v0014:ServiceAccessPointFilterValueId>11</v0014:ServiceAccessPoint
                    FilterValueId>
                    <v0014:Description language="EN">5-117</v0014:Description>
                </v0012:FilterValue>
            </v0011:FilterValues>
        </v0012:ServiceAccessPointFilterInfo>
    </v001:ServiceAccessPointFilters>
</v001:RetrieveServiceAccessPointFilterInfoResponse>
</v001:RetrieveServiceAccessPointFilterToBeInstalledResponse>

```

Response example for HPF and RPA.

Response example:

```

    <v001:RetrieveServiceAccessPointFilterToBeInstalledResponse>
<v001:RetrieveServiceAccessPointFilterInfoResponse>
    <v001:ServiceAccessPointFilters>
        <!--Zero or more repetitions:-->
        <v0012:ServiceAccessPointFilterInfo>
            <v0011:ServiceAccessPointFilterSpecificationInfo>
                <v0013:ServiceAccessPointFilterSpecificationId>2</v0013:ServiceAccessPo
                intFilterSpecificationId>
                <v0013:Description language="EN">HPF</v0013:Description>
            </v0011:ServiceAccessPointFilterSpecificationInfo>
            <v0011:FilterValues>
                <!--one or more repetitions:-->
                <v0012:FilterValue>
                    <v0014:ServiceAccessPointFilterValueId>5</v0014:ServiceAccessPointF
                    ilterValueId>
                    <v0014:Description language="EN">88</v0014:Description>
                </v0012:FilterValue>
            </v0011:FilterValues>
        </v0012:ServiceAccessPointFilterInfo>
    </v001:ServiceAccessPointFilters>
</v001:RetrieveServiceAccessPointFilterInfoResponse>
</v001:RetrieveServiceAccessPointFilterToBeInstalledResponse>

```



```

        <v0012:FilterValue>
            <v0014:ServiceAccessPointFilterValueId>6</v0014:ServiceAccessPointF
            ilterValueId>
            <v0014:Description language="EN">47</v0014:Description>
        </v0012:FilterValue>
    </v0011:FilterValues>
</v0012:ServiceAccessPointFilterInfo>
<v0012:ServiceAccessPointFilterInfo>
    <v0011:ServiceAccessPointFilterSpecificationInfo>
        <v0013:ServiceAccessPointFilterSpecificationId>5</v0013:ServiceAccessPo
        intFilterSpecificationId>
        <v0013:Description language="EN">RPA</v0013:Description>
    </v0011:ServiceAccessPointFilterSpecificationInfo>
    <v0011:FilterValues>
    <!--one or more repetitions:-->
        <v0012:FilterValue>
            <v0014:ServiceAccessPointFilterValueId>6</v0014:ServiceAccessPointF
            ilterValueId>
            <v0014:Description language="EN">FLT RPA 6 db (5-25 or 5-
            65)</v0014:Description>
        </v0012:FilterValue>
    </v0011:FilterValues>
    </v0012:ServiceAccessPointFilterInfo>
</v001:ServiceAccessPointFilters>
</v001:RetrieveServiceAccessPointFilterInfoResponse>
</v001:RetrieveServiceAccessPointFilterToBeInstalledResponse>

```

Error messages:

See [Error Handling](#) section

4.21 UpdateServiceAccessPointFilterInfo

UpdateServiceAccessPointFilterInfo function is used to update final filter details in the Telenet Inventory during filter intervention execution by AO.

Technician executed the filter intervention successfully while placing a filter (request should consists of all filters present on location):

Request example for Install scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
    <v0021:WholesaleServiceAccessPointFilterModification>
        <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
        <v001:CustomerOrderId>9135014148813331234</v001:CustomerOrderId>
        <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
        <v0021:InterventionCompletionStatus>EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>
        <!--Zero or more repetitions:-->
        <v0021:ServiceAccessPointFilterInfo>
            <v0012:ServiceAccessPointFilterSpecificationId>1</v0012:ServiceAccessPointFilterSpecificationI
            d>
            <v0012:ServiceAccessPointFilterValueId>11</v0012:ServiceAccessPointFilterValueId>
            <v0021:ServiceAccessPointFilterInfo>
                <v0021:ServiceAccessPointFilters>
                    <v0021:WholesaleServiceAccessPointFilterModification>

```

Request example for Repair scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
    <v0021:WholesaleServiceAccessPointFilterModification>
        <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->

```

```

    <v0011:TroubleTicketId>C030922_459008</v0011:TroubleTicketId>
    <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>
      <!--Zero or more repetitions:-->
      <v0021:ServiceAccessPointFilterInfo>

<v0012:ServiceAccessPointFilterSpecificationId>1</v0012:ServiceAccessPointFilterSpecificationId>
    <v0012:ServiceAccessPointFilterValueId>11</v0012:ServiceAccessPointFilterValueId>
    </v0021:ServiceAccessPointFilterInfo>
    </v0021:ServiceAccessPointFilters>
    </v0021:WholesaleServiceAccessPointFilterModification>
</v002:UpdateServiceAccessPointFilterInfoRequest>

```

Response example:

```

<v001:UpdateServiceAccessPointFilterInfoResponse>
</v001:UpdateServiceAccessPointFilterInfoResponse>

```

Technician executed the filter intervention successfully without changing the existing filter then technician needs to send all filters which are present on the location :

Request example for Install scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
  <v0021:WholesaleServiceAccessPointFilterModification>
    <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
    <v001:CustomerOrderId>9135014148813331234</v001:CustomerOrderId>
    <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>
      <!--Zero or more repetitions:-->
      <v0021:ServiceAccessPointFilterInfo>

        <v0012:ServiceAccessPointFilterSpecificationId>2</v0012:ServiceAccessPointFilterSpecificationId>

        <v0012:ServiceAccessPointFilterValueId>5</v0012:ServiceAccessPointFilterValueId>
      </v0021:ServiceAccessPointFilterInfo>
    </v0021:ServiceAccessPointFilterInfo>

    <v0012:ServiceAccessPointFilterSpecificationId>5</v0012:ServiceAccessPointFilterSpecificationId>
    <v0012:ServiceAccessPointFilterValueId>6</v0012:ServiceAccessPointFilterValueId>
  </v0021:ServiceAccessPointFilterInfo>

</v0021:ServiceAccessPointFilters>
</v0021:WholesaleServiceAccessPointFilterModification>
</v002:UpdateServiceAccessPointFilterInfoRequest>

```

Request sample for Repair scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
  <v0021:WholesaleServiceAccessPointFilterModification>
    <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
    <v0011:TroubleTicketId>C030922_459008</v0011:TroubleTicketId>
    <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>
      <!--Zero or more repetitions:-->
      <v0021:ServiceAccessPointFilterInfo>

        <v0012:ServiceAccessPointFilterSpecificationId>2</v0012:ServiceAccessPointFilterSpecificationId>

```

```

        <v0012:ServiceAccessPointFilterValueId>5</v0012:ServiceAccessPointFilterValueId>
    </v0021:ServiceAccessPointFilterInfo>
</v0021:ServiceAccessPointFilterInfo>

        <v0012:ServiceAccessPointFilterSpecificationId>5</v0012:ServiceAccessPointFilterSpecificationId>
        <v0012:ServiceAccessPointFilterValueId>6</v0012:ServiceAccessPointFilterValueId>
    </v0021:ServiceAccessPointFilterInfo>

</v0021:ServiceAccessPointFilters>
</v0021:WholesaleServiceAccessPointFilterModification>
</v002:UpdateServiceAccessPointFilterInfoRequest>

```

Response example:

```

<v001:UpdateServiceAccessPointFilterInfoResponse>
</v001:UpdateServiceAccessPointFilterInfoResponse>

```

Technician executed the filter intervention successfully and removed all the filters from the location:

Request example for Install scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
  <v0021:WholesaleServiceAccessPointFilterModification>
    <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
    <v001:CustomerOrderId>9135014148813331234</v001:CustomerOrderId>
    <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>
      <!--Zero or more repetitions:-->
      <v0021:ServiceAccessPointFilterInfo/>
    </v0021:WholesaleServiceAccessPointFilterModification>
  </v002:UpdateServiceAccessPointFilterInfoRequest>

```

Request example for Repair scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
  <v0021:WholesaleServiceAccessPointFilterModification>
    <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
    <v0011:TroubleTicketId>C030922_459008</v0011:TroubleTicketId>
    <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>
      <!--Zero or more repetitions:-->
      <v0021:ServiceAccessPointFilterInfo/>
    </v0021:WholesaleServiceAccessPointFilterModification>
  </v002:UpdateServiceAccessPointFilterInfoRequest>

```

Response example:

```

<v001:UpdateServiceAccessPointFilterInfoResponse>
</v001:UpdateServiceAccessPointFilterInfoResponse>

```

Technician did not execute the filter intervention successfully:

Request example for Install scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
  <v0021:WholesaleServiceAccessPointFilterModification>
    <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
    <v001:CustomerOrderId>9135014148813331234</v001:CustomerOrderId>
    <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>NOT_EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>

```

```

    <!--Zero or more repetitions:-->
    <v0021:ServiceAccessPointFilterInfo/>
  </v0021:WholesaleServiceAccessPointFilterModification>
</v002:UpdateServiceAccessPointFilterInfoRequest>

```

Request example for Repair scenario :

```

<v002:UpdateServiceAccessPointFilterInfoRequest>
  <v0021:WholesaleServiceAccessPointFilterModification>
    <!--You have a CHOICE of the CustomerOrderId and TroubleTicketId at this level-->
    <v0011:TroubleTicketId>C030922_459008</v0011:TroubleTicketId>
    <v0012:ServiceAccessPointId>45070</v0012:ServiceAccessPointId>
    <v0021:InterventionCompletionStatus>NOT_EXECUTED</v0021:InterventionCompletionStatus>
    <v0021:ServiceAccessPointFilters>
      <!--Zero or more repetitions:-->
      <v0021:ServiceAccessPointFilterInfo/>
    </v0021:WholesaleServiceAccessPointFilterModification>
  </v002:UpdateServiceAccessPointFilterInfoRequest>

```

Response example:

```

<v001:UpdateServiceAccessPointFilterInfoResponse>
</v001:UpdateServiceAccessPointFilterInfoResponse>

```

Error messages:

See [Error Handling](#) section

Refer the section 4.17 `UpdateServiceAccessPointForInstalledDropCable` for the `InterventionCompletionStatus`.

In case the AO technician not successfully executed the filter invention then `ServiceAccessPointFilters` can be empty.

In case the AO technician successfully executed the filter invention then `ServiceAccessPointFilters` is mandatory and must provide the filters existing on customer premise.

Note: We need to know the final filters present on the location irrespective whether technician placed filters or not. In case of empty list of `ServiceAccessPointFilters` and technician successfully executed intervention , all existing filters will be removed in Telenet inventory.

4.22 IdentifyServiceAccessPointAddressId

`IdentifyServiceAccessPointAddressId` function is used to get correct location Id .

In case during drop cable appointment execution, AO technician finds that location Id is not correct , this operation can be used to retrieve correct location Id on the basis of the last three digits of sap id and retrieved location Id and house number.

Request example :

```

<v002:IdentifyServiceAccessPointAddressIdRequest>
  <v0021:WholesaleServiceAccessPointAddressIdentification>
    <v0021:ServiceAccessPointIdSuffix>248</v0021:ServiceAccessPointIdSuffix>
    <v001:LocationId>6cc7yy007q-9yf8zq0ooz</v001:LocationId>
    <v001:HouseNumber>5</v001:HouseNumber>
  </v0021:WholesaleServiceAccessPointAddressIdentification>
</v002:IdentifyServiceAccessPointAddressIdRequest>

```

Response example:

```

<v002:IdentifyServiceAccessPointAddressIdResponse>
  <v0021:AddressId>6cc7yy007q-9yf8zq0ooz</v0021:AddressId>
</v002:IdentifyServiceAccessPointAddressIdResponse>

```

Error messages:

See [Error Handling](#) section

4.23 CreateTroubleTicketForDamageReport

CreateTroubleTicketForDamageReport function is used to provide damage report.

In case during appointment execution, AO technician causes an issue on the network with possible impact towards multiple customers, this operation can be used to create trouble ticket by providing damage report.

Request example:

```
<v002:CreateTroubleTicketForDamageReportRequest>
  <v0021:WholesaleTroubleTicketForDamageReportInput>
    <v001:LocationId>6cc7yy007q-9yf8zq0ooz</v001:LocationId>
    <v0021:NotifyingPersonInput>
      <v0011:FirstName>Sam</v0011:FirstName>
      <v0011:LastName>Jackson</v0011:LastName>
      <!--Optional:-->
      <v0012:FixedPhoneNumber>+3215335577</v0012:FixedPhoneNumber>
      <!--Optional:-->
      <v0012:MobilePhoneNumber>+32466890768</v0012:MobilePhoneNumber>
    </v0021:NotifyingPersonInput>
    <!--Optional:-->
    <v0021:DamagingPersonInput>
      <v0011:FirstName>Dino</v0011:FirstName>
      <v0011:LastName>Rao</v0011:LastName>
      <!--Optional:-->
      <v0021:CompanyName>PBC</v0021:CompanyName>
      <!--Optional:-->
      <v0012:FixedPhoneNumber>+3215335577</v0012:FixedPhoneNumber>
      <!--Optional:-->
      <v0012:MobilePhoneNumber>+32421890766</v0012:MobilePhoneNumber>
      <!--Optional:-->
      <v0012:EmailAddress>Dino.rao@gmail.com</v0012:EmailAddress>
      <v0021:Address>Electriciteitsstraat 5, 2800 Mechelen</v0021:Address>
      <!--Optional:-->
      <v0021:VehicleLicensePlate>1-ABC-265</v0021:VehicleLicensePlate>
      <!--Optional:-->
      <v0021:PoliceReportNumber>420</v0021:PoliceReportNumber>
      <!--Optional:-->
      <v0021:PoliceReportDate>2019-01-25</v0021:PoliceReportDate>
    </v0021:DamagingPersonInput>
    <v0021:IsDamageCausingProblem>True</v0021:IsDamageCausingProblem>
    <v0021:IsDiggingOnGoing>True</v0021:IsDiggingOnGoing>
    <v0021:NetType>airnet - pole to pole</v0021:NetType>
    <v0021:DamageDescription>short description of the damage and factors led to the
damage</v0021:DamageDescription>
    <v0021:DamageDateTime>2014-06-20T15:33:02.000+01:00</v0021:DamageDateTime>
    <v0021:IsCustomerImpacted>True</v0021:IsCustomerImpacted>
    <v0021:IsNeighbourImpacted>False</v0021:IsNeighbourImpacted>
    <v0021:TechnicianNextAction>Description on the next actions which the technician
will be taking on the damage</v0021:TechnicianNextAction>
    <v0021:DamageConsequences>Description of the possible consequences due to the
damage</v0021:DamageConsequences>
  </v0021:WholesaleTroubleTicketForDamageReportInput>
</v002:CreateTroubleTicketForDamageReportRequest>
```

Response example:

```
<v002:CreateTroubleTicketForDamageReportResponse>
  <v0021:TroubleTicketId>C130925_8541573</v0021:TroubleTicketId>
</v002:CreateTroubleTicketForDamageReportResponse>
```

Error messages:

See [Error Handling](#) section

4.24 Retrieve Trouble Tickets For Cable Company

RetrieveTroubleTickets function is used by AO to retrieve all open KM (KabelMaatschappij) cases from the system in a structured way.

KM case is created when Telenet observed deviation of agreed installation standard.

Request example :

```
<v002:RetrieveTroubleTicketsForCableCompanyRequest>
</v002: RetrieveTroubleTicketsForCableCompanyRequest/>
```

Response example:

```
<v002: RetrieveTroubleTicketsForCableCompanyResponse>
  <v0021:WholesaleTroubleTicketsForCableCompany>
    <!--Zero or more repetitions:-->
    <v0021:TroubleTicketInfo>
      <v0021:TroubleTicketId>C130925_8541573</v0021:TroubleTicketId>
      <v0021:TroubleTicketTitle>High level description of
incident</v0021:TroubleTicketTitle>
      <v0021:Status>Open</v0021:Status>
      <v0021:CreationTimeStamp>2014-06-
20T15:33:02.000+01:00</v0021:CreationTimeStamp>
      <v0021:TroubleTicketInfo>
    </v0021:WholesaleTroubleTicketsForCableCompany>
  </v002: RetrieveTroubleTicketsForCableCompanyResponse>
```

Error messages:

See [Error Handling](#) section

4.25 Lookup Streets

This operation fetches streetIds and street names in different languages based on PostalCode and three or more consecutive characters of the street name. Maximum 20 streetIds will be shared with AO.

Request example:

```
<n2:LookupStreetsRequest>
  <n21:WholesaleStreetLookupInput>
    <n21:StreetNamePattern> Albert</n21:StreetNamePattern>
    <n1:PostalCode>1000</n1:PostalCode>
  </n21:WholesaleStreetLookupInput>
</n2:LookupStreetsRequest>
```

Response example:

```
<n29:WholesaleStreetLookupResult>
  <n29:AddressSearchToken>5fe7937a0b084fc4b51710119180b89c</n29:AddressSearchToken>
  <n29:Streets>
    <!--Zero or more repetitions:-->
    <n29:StreetInfo>
      <n2:StreetId>3s1044007h-n62w9e05xh</n2:StreetId>
      <!--Zero or more repetitions:-->
      <n2:Street language="NL">Albert Brachetlaan</n2:Street>
      <n2:Street language="FR">Avenue Albert Brachet</n2:Street>
    </n29:StreetInfo>
    <n29:StreetInfo>
      <n2:StreetId>3s1044007h-n6552004pm</n2:StreetId>
      <!--Zero or more repetitions:-->
      <n2:Street language="NL">Albertinaplein</n2:Street>
      <n2:Street language="FR">Place de l'Albertine</n2:Street>
    </n29:StreetInfo>
    <n29:StreetInfo>
      <n2:StreetId>3s1044007h-n62w5h05xk</n2:StreetId>
      <!--Zero or more repetitions:-->
      <n2:Street language="NL">Albert De Meyerstraat</n2:Street>
```

```

    <n2:Street language="FR">Rue Albert De Meyer</n2:Street>
  </n29:StreetInfo>
</n29:Streets>
<n29:HasMore>>false</n29:HasMore>
</n29:WholesaleStreetLookupResult>

```

HasMore element represents whether the provided response consists of complete list of result or not. False means that the result list is complete.

True means that there are more records not shared in the response.

AddressSearchToken element is a unique identifier generated for address retrieval. This token is to be used as referenceid in the case towards Telenet so that Telenet support team can identify the search criteria used in all the steps of the address retrieval. This ID is to be used for subsequent operations to search particular address.

New ID will be generated for every street search. Max length allowed for the Id is 40 characters.

In case no streets found, then empty list of Streets will be provided in the response.

Response example:

```

<n29:WholesaleStreetLookupResult>
  <n29:AddressSearchToken>5fe7937a0b084fc4b51710119180b89c</n29:AddressSearchToken>
  <n29:Streets/>
  <n29:HasMore>>false</n29:HasMore>
</n29:WholesaleStreetLookupResult>

```

Error messages:

See [Error Handling](#) section

4.26 LookupAddressess

This operation fetches the validated geographical addresses based on the house number & StreetId.

Request example:

```

<n21:WholesaleAddressLookupInput>
  <n22:AddressSearchToken>5fe7937a0b084fc4b51710119180b89c</n22:AddressSearchToken>
  <n1:HouseNumber>5</n1:HouseNumber>
  <n1:StreetId>3s1044007h-n4jscv081x</n1:StreetId>
</n21:WholesaleAddressLookupInput>
</n2:LookupAddressesRequest>

```

Here, AddressSearchToken element should be the same as provided in the lookupStreets operation.

There is no validation performed on this Token at Telenet side.

Response example:

```

<n31:WholesaleAddressLookupResult>
  <n31:GeographicalAddresses>
    <!--Zero or more repetitions!-->
    <n31:GeographicalAddress>
      <n31:AddressToken>6V0d8H8TCgLnQAWWhMiPDVZiGmXelmp1VyIh0PgaxNz0=</n31:AddressToken>
      <n2:HouseNumber>5</n2:HouseNumber>
      <n2:HouseSubNumber>B</n2:HouseSubNumber>
      <n2:BoxNumber>5</n2:BoxNumber>
      <n2:PostalCode>2800</n2:PostalCode>
    </n31:GeographicalAddress>
  </n31:GeographicalAddresses>
</n31:WholesaleAddressLookupResult>

```

AddressToken is unique identifier generated per geographical address shared in response. This token is to be used in the mapAddressIDToTokenId operation to fetch the locationid. This ID can not be used for tickets towards Telenet. This AddressToken will be available for the next operations.

In case there are multiple address for provided input:

```
<n31:WholesaleAddressLookupResult>
  <n31:GeographicalAddresses>
    <!--Zero or more repetitions!-->
    <n31:GeographicalAddress>
      <n31:AddressToken>6V0d8H8TCgLnQAWhMiPDVZIGMXe1mPlVyIh0PgaxNz0=</n31:AddressToken>
      <n2:HouseNumber>5</n2:HouseNumber>
      <n2:HouseSubNumber>B</n2:HouseSubNumber>
      <n2:BoxNumber>5</n2:BoxNumber>
      <n2:PostalCode>2800</n2:PostalCode>
    </n31:GeographicalAddress>
    <n31:GeographicalAddress>
      <n31:AddressToken>6V0d8H8TCgLnQAWhMiPDVZIGMXe1mPlVyIh0Pgaxnjh=</n31:AddressToken>
      <n2:HouseNumber>5</n2:HouseNumber>
      <n2:HouseSubNumber>A</n2:HouseSubNumber>
      <n2:PostalCode>2800</n2:PostalCode>
    </n31:GeographicalAddress>
    <n31:GeographicalAddress>
      <n31:AddressToken>6V0d8H8TCgLnQAWhMiPDVZIGMXe1mPlVyIh0Pgaxasd=</n31:AddressToken>
      <n2:HouseNumber>5</n2:HouseNumber>
      <n2:PostalCode>2800</n2:PostalCode>
    </n31:GeographicalAddress>
    <n31:GeographicalAddress>
      <n31:AddressToken>6V0d8H8TCgLnQAWhMiPDVZIGMXe1mPlVyIh0Pgaxmnb=</n31:AddressToken>
      <n2:HouseNumber>5</n2:HouseNumber>
      <n2:BoxNumber>8</n2:BoxNumber>
      <n2:PostalCode>2800</n2:PostalCode>
    </n31:GeographicalAddress>
  </n31:GeographicalAddresses>
</n31:WholesaleAddressLookupResult>
```

In case there is no address found for provided input, empty list will be provided in the response.

```
<n31:WholesaleAddressLookupResult>
  <n31:GeographicalAddresses/>
</n31:WholesaleAddressLookupResult>
```

Error messages:

See [Error Handling](#) section

4.27 MapAddressTokenToAddressId

This operation fetches the location id based on the AddressToken.

Request example:

```
<n2:MapAddressTokenToAddressIdRequest>
  <n21:AddressSearchToken>5fe7937a0b084fc4b51710119180b89c </n21:AddressSearchToken>
  <n22:AddressToken>6V0d8H8TCgLnQAWhMiPDVZIGMXe1mPlVyIh0PgaxNz0=</n22:AddressToken>
</n2:MapAddressTokenToAddressIdRequest>
```

Here, AddressSearchToken element should be the same as provided in the lookupStreets operation. AddressToken element should be same for selected address as provided in lookupAddresses operation.

Response example:

```
<n:MapAddressTokenToAddressIdResponse>
  <n2:LocationId>6cc82c007q-9wm26h08az</n2:LocationId>
</n:MapAddressTokenToAddressIdResponse>
```

Error messages:

See [Error Handling](#) section

5 Common structures

5.1 FeasibilityCheckResultType

Element	Type	M/O	Specification	Example	Comment
result	String	M	Possible values: OK, NOK, INTERVENTION	OK	OK – feasible NOK – not feasible INTERVENTION – intervention required
reasonWhyNotFeasible	String	O	Possible values: <ul style="list-style-type: none"> - Drop cable doesn't exist for location [Location ID] - LocationID [Location ID] does not exist - No Telenet network available - Dropcable activation needs to be paid - Service is not available on location - ATV Service is not available on Node - ATV Service is available on Node only from [Service Start Date] - DTV Service is not available on Node - DTV Service is available on Node only from [Service Start Date] - DOCSIS3 Service is not available on Node - DOCSIS3 Service is available on Node only from [Service Start Date] - Product Capacity on Node is less than required Product Capacity for specified Internet Profile - Address data for this location is incomplete. Please create "address data completion" ticket 		Reason why is not feasible
ReasonForInterventionList		O			List of reasons why intervention is required

ReasonForInterventionList/ReasonForIntervention		M	Possible values: - Mount NIU - Change Filter		Intervention reason
---	--	---	--	--	---------------------

5.2 CustomerOrderItemType

Represents a product offer as part of a customer order.

Element	Type	M/O	Specification	Example	Comment
offerName	String	M		BB_1	Offering name
action	String	M	Possible values: NEW, MODIFY, DISCONNECT	NEW	Mandatory for Portfolio Change and Feasibility Check requests.
productInstanceid	Number	O		9135 6459 4041 3669 08	Product Instance Identifier. Mandatory for Portfolio Change request with action MODIFY and DISCONNECT.
components		O			Multiple container for offer components
components/component		O			Single item container
component/name	String	M		STB	Component name; possible values, see table below.
component/action	String	M	Possible values: NEW, MODIFY, DISCONNECT	NEW	Component action. Mandatory for STB component in Feasibility Check and Portfolio Change requests.
component/characteristics		O			Multiple container
component/characteristics/characteristic		O			Single item container
component/characteristics/characteristic/name	String	M		STB_SEQ UEN CE_N UMBER	
component/characteristics/characteristic/value	String	M		1	

An offer is identified by its name, as listed below.

Offer name	Description	Available Characteristics	Possible components
ATV	ATV only		
ATV_DTV	DTV	INTERACTIVITY (NO)	STB[0..4]
BB_1	Low tier RMD		SWAP_MODEM
BB_2	Mid tier RMD		SWAP_MODEM
BB_3	High tier RMD		SWAP_MODEM
BB_4	TBD		SWAP_MODEM
BB_5	TBD		SWAP_MODEM
BB_6	Mid tier		SWAP_MODEM
BB_7	TBD		SWAP_MODEM

The ATV_DTV offer includes a boolean characteristic INTERACTIVITY that's by default is set to NO. Because this is the only applicable value, specifying this characteristic is optional. The ATV and ATV_DTV offers also have optional STB components (max. 4) representing the set-top boxes that can be registered with the offer. All products requiring a modem connecting with the Telenet network also have the SWAP_MODEM component to initiate a swap modem operation.

Component Name	Description	Available Characteristics
STB	STB configuration	STB_SEQUENCE_NUMBER
SWAP_MODEM	Swap modem required if this component is presented	

5.3 DtvInfoType

Element	Type	M/O	Specification	Example	Comment
SetTopBoxNumber	String	M		1234567 89632	The STB ID
StbSequenceNumber	String	M	Possible values: 1, 2, 3, 4	1	The sequence number of the STB (this is needed to identify the actual STB (i.e. in disconnect scenarios)
SmartCardNumber	String	M		2255447 78896	The id of the smartcard

5.4 BroadBandInfoType

Element	Type	M/O	Specification	Example	Comment
ModemMacId	String	M		00:22:11 :33:66:5 5	The mac address of the cable modem

5.5 NoteType

Element	Type	M/O	Specification	Example	Comment
NoteContent	String				

5.6 ContactInfoType

Element	Type	M/O	Specification	Example	Comment	Validation
Epithet	String	M		Mr	The title of the person i.e. Mr/Mrs etc	
FirstName	String	M		Jan	First name of the AO customer	
LastName	String	M		Janssens	Last name of the AO customer	
NotificationInfo	NotificationInfoType	M			See NotificationInfoType	<p>Must be SMS or VOICE</p> <p>If it is SMS the ContactInfo/MobilePhoneNumber must be populated</p> <p>If it is Voice the ContactInfo/FixedPhoneNumber must be populated</p>

5.7 NotificationInfoType

Element	Type	M/O	Specification	Example	Comment
NotificationContactInfo	NotificationContactInfoType	M			See NotificationContactInfoType

5.8 NotificationContactInfoType

Element	Type	M/O	Specification	Example	Comment	Validation
NotificationType	String	M		SMS	How the customer will be notified of their appointment	<p>This must be either SMS or VOICE.</p> <p>If it is SMS the ContactInfo/MobileP</p>

						honeNumber must be sent If it is set to VOICE then the ContactInfo/FixedPhoneNumber must be sent
NotificationTypeDescription	String	M		Landline Number is passed for VOICE	Contain the description of the type i.e. Description of VOICE , SMS etc. along with language type (NL,FR et) to specify in which language this description is passed. It is only stored against the ticket it is not stored against the appointment so it is not visible to the technician	This is optional
NotificationLanguage	String	M		NL	The language the customer will be contacted in	NL = Dutch FR = French EN = English DE' and 'Unknown' are also valid values however these should not be used as in this case the customer will be contacted in Dutch as German is not supported and Dutch is the default language
ContactInfo		M			Contact info to be provided depending on how the AO customer wants to be notified	Multi item container
ContactInfo/FixedPhoneNumber	String	M		+32 15223344	Fixed phone number of the AO customer	This must be provided in the E164 standard format. It will be validated to check that it is a valid phone number

						<p>if the phone number is invalid the request will be rejected</p> <p>International numbers are NOT accepted</p>
ContactInfo/ MobilePhone Number	String	M		+3249911 2244	Mobile number of the AO customer	<p>This must be provided in the E164 standard format.</p> <p>It will be validated to check that it is a valid phone number if the phone number is invalid the request will be rejected</p> <p>International numbers are accepted</p>

5.9 RequestedDateListType

Element	Type	M/O	Specificat ion	Example	Comment	Validation
RequestedD ate	String	M			<p>The list of possible dates that are feasible and negotiated between AO and customer for a TN technician to be booked (should be 1..5)</p> <p>The format should be yyyy-mm-dd</p>	<p>For an install appointment the date must be:</p> <p>> System date + 2 working days < System date + 6 weeks</p> <p>For a repair appointment the date must be:</p> <p>> System date + 1 working days < System date + 6 weeks</p> <p>If any of the dates are invalid the request will be rejected</p>

5.10 GeographicAddressInfoType

Element	Type	M/O	Specification	Example	Comment
PostalCode	string	M		2800	
Municipality	string	O		Mechelen	Case insensitive
Street	string	M		Kerkstraat	Case insensitive
HouseNumber	int	M		1	
HouseSubNumber	string	O		1	
FloorNumber	String	O		A	
AppartmentNumber	String	O		1	
BoxNumber	String	O		B	
Country	string	M		Belgie	Case insensitive

5.11 LogoffPassiveCpesInputType

Element	Type	M/O	Specification	Example	Comment
LocationId	string	M		6cc7ov007 q- 9yijdv05j1	The location/address identifier (== AddressId)
ExternalAppointmentId	string	M		123abc	This is the unique Id of the appointment on AO side. It is used to link an ERP stock update to a AO appointment.
CustomerOrderId	int	O		913624248 581336251 3	-
CpeInstallScenario	string	M	Possible values: INSTALL REPLACE INSTALL_NO T_REQUIRED	INSTALL	Installation Scenario See Table 2 for details
InstalledCpe		M			Material Id of the installed NIU Type
InstalledCpe /LogisticSpecificationId	string	M		262	Installed NIU type In case of Install Scenario "INSTALL_NOT_REQUIRED", this is the reference of the <u>already/currently installed NIU</u> See Table 1 for details
StockLevelTransactionList		M			NIU stock movements
StockLevelTransaction		O			
StockLevelTransaction/ LogisticSpecificationId	string	M		262	Material Id of the NIU Type See Table 1 for details

StockLevelTransaction/ StockLevelTransactionType	string	M	Possible Values: DOA ACTIVATION RETURN NOK RETURN OK REUSE	ACTIVATIO N	Transaction type impacting the ERP stock See Table 3for details
---	--------	---	---	----------------	--

Multiple scenarios are possible for a Logoff:

Scenario (XML Field "CpeInstallScenario")	Scenario Description	Compatible Transaction Types
INSTALL	When Telenet has indicated that an NIU needs to be installed (in the feasibility check) and AO has installed this.	ACTIVATE DOA RETURN OK RETURN NOK
INSTALL_NOT_REQUIRED	When Telenet has indicated that an NIU needs to be installed (in the feasibility check) and AO finds that no NIU needs to be placed (as there is already one present)	REUSE
REPLACE	When Telenet did not indicate that an NIU needs to be installed and AO found that an NIU does need to be installed or when an NIU was placed as part of a repair appointment	ACTIVATE DOA RETURN OK RETURN NOK

Table 2: Install Scenario's

These transaction types are available for a movement in the Telenet ERP system:

Transaction Type (XML Field "StockLevelTransactionType")	Transaction Description	Compatible scenario's
DOA	A new NIU that is taken from the techs stock & is mounted but turns out to be faulty (Death On Arrival)	INSTALL REPLACE
ACTIVATE	A new NIU that is taken from the techs stock & is mounted	INSTALL REPLACE
RETURN_NOK	An existing, already installed NIU that is no longer working or a working NIU of a type no longer used & requiring replacement, where Telenet has flagged the NIU type as 'returnable'	INSTALL REPLACE
RETURN_OK	An existing, already installed NIU that is still working of type that is still in use & that has no visible damage, paint marks etc. which is replaced by another type for technical reasons	INSTALL REPLACE

REUSE	An existing, already present NIU that is still working of type that is still in use that does not require replacement	INSTALL_NOT_REQUIRED
-------	---	----------------------

Table 3: Transaction Description

5.12 WholesaleServiceAccessPointModificationForInstalledDropCable

Element	Type	M/O	Specification	Example	Comment
ServiceAccessPointId	string	M		45069	No limitation on number of characters.
InterventionCompletionStatus	string	M	Possible values : EXECUTED, NOT_EXECUTED	EXECUTED	

5.13 ServiceAccessPointFilterInfo

Element	Type	M/O	Specification	Example	Comment
ServiceAccessPointFilterSpecificationInfo / ServiceAccessPointFilterSpecificationId	String	M	Possible values: 1, 2, 3, 4, 5	1	Unique Identifier for filter type present at the location. Remark : in future filters can be introduced resulting in new values.
ServiceAccessPointFilterSpecificationInfo / Description	String	M	Possible values : TOF, HPF, ANTI-DIEF, LIPIS, RPA	TOF	Description of filter type present at the location and it should be always 'EN'.
FilterValue / ServiceAccessPointFilterValueId	String	M	Possible values: 3, 4, 11, 5, 6, 8, 10, 0, 3, 6, 9, 12, 15, 18, 21, 24	3	Unique identifier for filter value present at the location. Remark : in future filters can be introduced resulting in new values.
FilterValue / Description	String	M	Possible values: 5-25 5-65 5-117 88 47 ANTI-DIEF LOF FLT RPA 0 db FLT RPA 3 db (5-25 or 5-65) FLT RPA 6 db (5-25 or 5-65)	5-25	Description of filter present at the location and it should be always 'EN'.

			FLT RPA 9 db (5-25 or 5-65) FLT RPA 12 db (5-25 or 5-65) FLT RPA 15 db (5-25 or 5-65) FLT RPA 18 db (5-25 or 5-65) FLT RPA 21 db (5-25 or 5-65) FLT RPA 24 db (5-25 or 5-65)		
Language	String	O	Possible values : EN, FR, NL	EN	Language of descriptions. Default "EN".

5.14 WholesaleServiceAccessPointFilterModification

Element	Type	M/O	Specification	Example	Comment
CustomerOrderId	Integer	M		9135014148813331234	You have a mandatory CHOICE of the CustomerOrderTroubleTicketId level
TroubleTicketId	String	M		C030922_459008	You have a mandatory CHOICE of CustomerOrderTroubleTicketId level
ServiceAccessPoint	String	M		45070	Max number of characters is 9, can increase in future
InterventionCompletionStatus	String	M	Possible values : EXECUTED, NOT_EXECUTED	EXECUTED	
ServiceAccessPointFilters	List	0..n			Filters existing at location to be searched in this list if test executed intervention successfully.
ServiceAccessPointFilters / ServiceAccessPointFilterInfo / ServiceAccessPointFilterSpecificationId	String	M	Possible values: 1, 2, 3, 4, 5		Remark : in future filters can be introduced with new values.
ServiceAccessPointFilters / ServiceAccessPointFilterInfo / ServiceAccessPointFilterValueId	String	M	Possible values: 3, 4, 11, 5, 6, 8, 10, 0, 3, 6, 9, 12, 15, 18, 21, 24		Remark : in future filters can be introduced with new values.

5.15 WholesaleServiceAccessPointAddressIdentification

Element	Type	M/O	Specification	Example	Comment
ServiceAccessPointIdSuffix	String	M		248	These are the three last digits of the ServiceAccessPointId.
LocationId	String	M		6cc7yy007q-9yf8zq0ooz	The location/identifier (== AddressId).
HouseNumber	String	M		5	The house number of the location.

5.16 WholesaleTroubleTicketForDamageReportInput

Element	Type	M/O	Specification	Example	Comment
LocationId	String	M		6cc7yy007q-9yf8zq0ooz	The location/identifier (== AddressId).
NotifyingPersonInput / FirstName	String	M		Sam	
NotifyingPersonInput / LastName	String	M		Jackson	
NotifyingPersonInput / FixedPhoneNumber	String	O		+3215335577	This should be the telephonenumber of a fixed line. The CHOICE of fixed and mobile phonenumbers.
NotifyingPersonInput / MobilePhoneNumber	String	O		+32476214136	This should be the telephonenumber of a mobile line. The CHOICE of fixed and mobile phonenumbers.
DamagingPersonInput / FirstName	String	O		Dino	
DamagingPersonInput / LastName	String	O		Roa	
DamagingPersonInput / CompanyName	String	O		PBC	
DamagingPersonInput / FixedPhoneNumber	String	O		+3215335577	This should be the telephonenumber of a fixed line. The CHOICE of fixed and mobile phonenumbers.
DamagingPersonInput / MobilePhoneNumber	String	O		+32421890766	This should be the telephonenumber of a mobile line. The CHOICE of fixed and mobile phonenumbers.
DamagingPersonInput / EmailAddress	String	O		Dino.rao@gmail.com	
DamagingPersonInput / Address	String	M		Electriciteitsstraat 5, 2800 Mechelen	
DamagingPersonInput / VehicleLicensePlate	String	O		1-ABC-265	
DamagingPersonInput / PoliceReportNumber	String	O		420	
DamagingPersonInput / PoliceReportDate	Date	O		2019-01-25	Date when damage was reported.

IsDamageCausingProblem	Boolean	M	Possible values : True, False	True	
IsDiggingOngoing	Boolean	M	Possible values : True, False	True	
NetType	String	M	Possible values : airnet - pole to pole across the street, airnet - pole to façade, airnet - pole to facade across the street, airnet - facade to façade, groundnet – mushroom, groundnet – cabinet, groundnet - cable	airnet - pole to pole	This value defines the type of network location.
DamageDescription	String	M			Short description of the damage and factors led to damage.
DamageDateTime	Date Time	M		2014-06-20T15:33:02.000+01:00	Exact time when damage is caused.
IsCustomerImpacted	Boolean	M	Possible values : True, False	True	
IsNeighbourImpacted	Boolean	M	Possible values : True, False	True	
TechnicianNextAction	String	M			Description of next actions which technician will be taking on the day of the incident.
DamageConsequences	String	M			Description of possible consequences due to the damage.

5.16 TroubleTicketInfo

Element	Type	M/O	Specification	Example	Comment
TroubleTicketId	String	M		C130925_8541573	Unique number of TroubleTicket.
TroubleTicketTitle	String	M			High level description of incident.
Status	String	M		Open	Only TroubleTicket with 'Open' status is returned.
Creationtimestamp	DateTime	M		2014-06-20T15:33:02.000+01:00	Exact timestamp when ticket was created.

6 Whitelist upload

Important Notes:

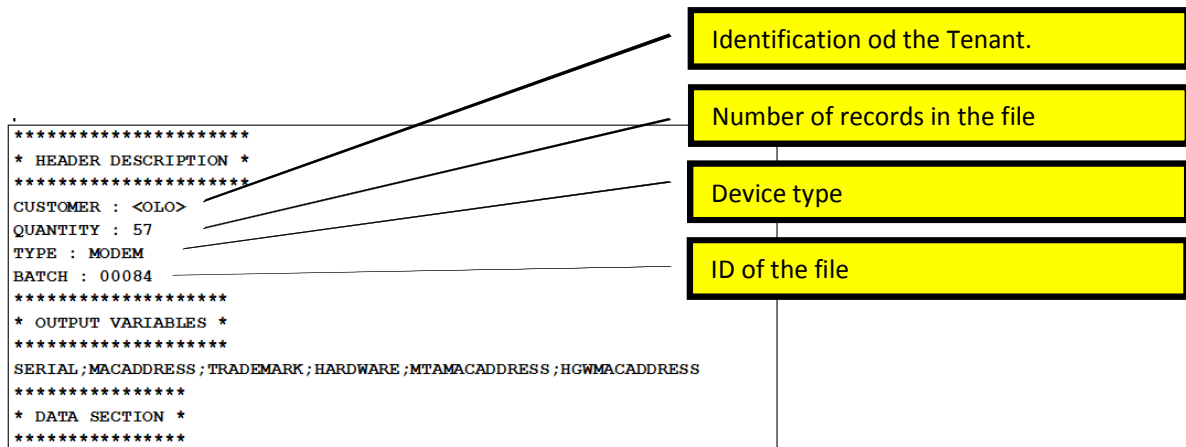
1. The whitelist file format description uses a generic “<AO>” indicator. This value will need to be replaced with a specific AO-id that will be agreed upon as part of the initial AO setup.
2. For every device type, a separate whitelist upload file should be created. This means there are three whitelist files that can be uploaded. Files for STB, MODEM or SMARTCARD. Whenever a whitelist file gets uploaded, all old devices become blacklisted. So to blacklist a device, you can create a new whitelist file without the parameters of the device that needs to be blacklisted. **This also means that if a device that was previously whitelisted needs to stay whitelisted, it should also be present in the new whitelist upload file.**

6.1 File format

6.1.1 Header - Modem

```
*****
* HEADER DESCRIPTION *
*****
CUSTOMER : <AO>
QUANTITY : 57
TYPE : MODEM
BATCH : 00084
*****
* OUTPUT VARIABLES *
*****
SERIAL;MACADDRESS;TRADEMARK;HARDWARE;MTAMACADDRESS;HGWMACADDRESS
*****
* DATA SECTION *
*****
```

Above is a sample of the header of the whitelist.



The parameters in the header have the following format:

Parameter-name[space]:[space]parameter-value

The header has the next parameters:

- CUSTOMER : this parameter identifies the Tenant. The value should be one of the entries in the table TENANT_TB.

- QUANTITY : this parameter indicates the number of data records in the file.
- Type : this parameter identifies the type of devices in the file. The value should be STB or MODEM or SMARTCARD.
- BATCH : this parameter uniquely identifies the whitelist file. Every subsequent file which is provided by a Tenant for a given device type should have unique and subsequent number. E.g. Tenant AO will provide :
 - o File number 1 for STB on 2013-11-01
 - o File number 2 for STB on 2013-11-15
 - o File number 1 for MODEM on 2013-11-16
 - o File number 3 for STB on 2013-11-17
 - o File number 2 for MODEM on 2013-11-18

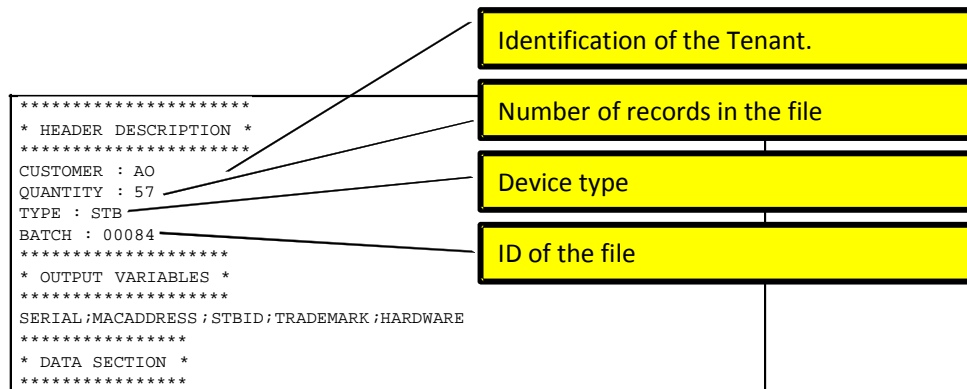
6.1.2 Header - STB & Modem

```

*****
* HEADER DESCRIPTION *
*****
CUSTOMER : <AO>
QUANTITY : 57
TYPE : STB
BATCH : 00084
*****
* OUTPUT VARIABLES *
*****
SERIAL;MACADDRESS;STBID;TRADEMARK;HARDWARE
*****
* DATA SECTION *
*****

```

Above is a sample of the header of the whitelist.



The parameters in the header have the following format:

Parameter-name[space]:[space]parameter-value

The header has the next parameters:

- CUSTOMER : this parameter identifies the Tenant. The value should be one of the entries in the table TENANT_TB.
- QUANTITY : this parameter indicates the number of data records in the file.
- Type : this parameter identifies the type of devices in the file. The value should be STB or MODEM or SMARTCARD.
- BATCH : this parameter uniquely identifies the whitelist file. Every subsequent file which is provided by a Tenant for a given device type should have unique and subsequent number. E.g. Tenant AO will provide :

- File number 1 for STB on 2013-11-01
- File number 2 for STB on 2013-11-15
- File number 1 for MODEM on 2013-11-16
- File number 3 for STB on 2013-11-17
- File number 2 for MODEM on 2013-11-18

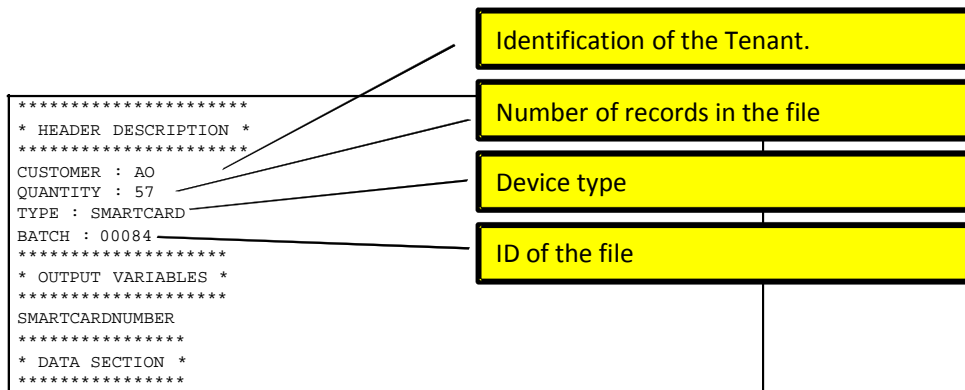
6.1.3 Header - Smartcard

```

*****
* HEADER DESCRIPTION *
*****
CUSTOMER : <AO>
QUANTITY : 57
TYPE : SMARTCARD
BATCH : 00082
*****
* OUTPUT VARIABLES *
*****
SMARTCARDNUMBER
*****
* DATA SECTION *
*****

```

Above is a sample of the header of the whitelist.



The parameters in the header have the following format:

Parameter-name[space]:[space]parameter-value

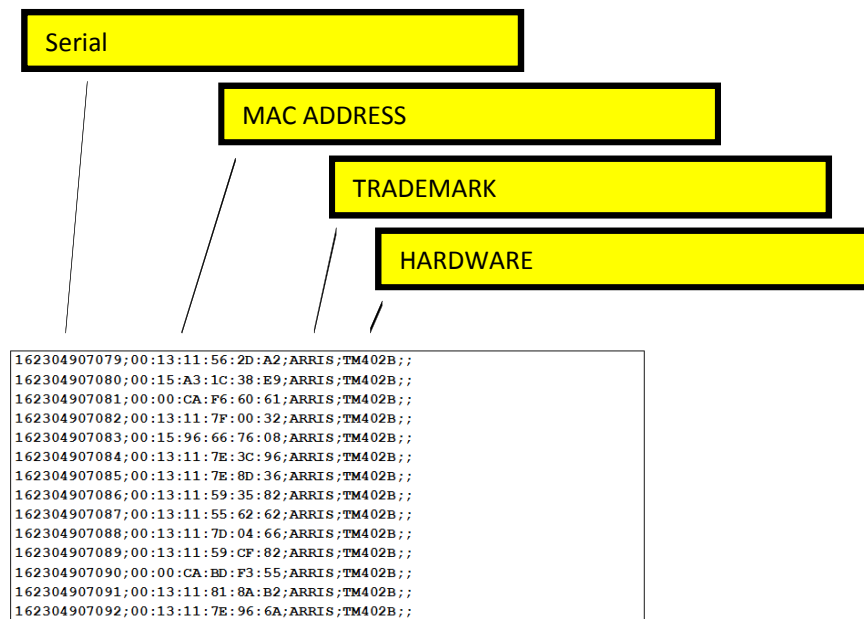
The header has the next parameters:

- **CUSTOMER** : this parameter identifies the Tenant. The value should be one of the entries in the table TENANT_TB.
- **QUANTITY** : this parameter indicates the number of data records in the file.
- **Type** : this parameter identifies the type of devices in the file. The value should be STB or MODEM or SMARTCARD. If the value is "STB" or "MODEM", the file should be handled as described for whitelisting
- **BATCH** : this parameter uniquely identifies the smartcard file. Every subsequent file which is provided by a Tenant for a given device type should have unique and subsequent number.

6.1.4 Data - Modem

```
162304907079;00:13:11:56:2D:A2;;ARRIS;TM402B;;  
162304907080;00:15:A3:1C:38:E9;;ARRIS;TM402B;;  
162304907081;00:00:CA:F6:60:61;;ARRIS;TM402B;;  
162304907082;00:13:11:7F:00:32;;ARRIS;TM402B;;  
162304907083;00:15:96:66:76:08;;ARRIS;TM402B;;  
162304907084;00:13:11:7E:3C:96;;ARRIS;TM402B;;  
162304907085;00:13:11:7E:8D:36;;ARRIS;TM402B;;  
162304907086;00:13:11:59:35:82;;ARRIS;TM402B;;  
162304907087;00:13:11:55:62:62;;ARRIS;TM402B;;  
162304907088;00:13:11:7D:04:66;;ARRIS;TM402B;;  
162304907089;00:13:11:59:CF:82;;ARRIS;TM402B;;  
162304907090;00:00:CA:BD:F3:55;;ARRIS;TM402B;;  
162304907091;00:13:11:81:8A:B2;;ARRIS;TM402B;;  
162304907092;00:13:11:7E:96:6A;;ARRIS;TM402B;;
```

Above is a sample of the data section of the whitelist for Modems



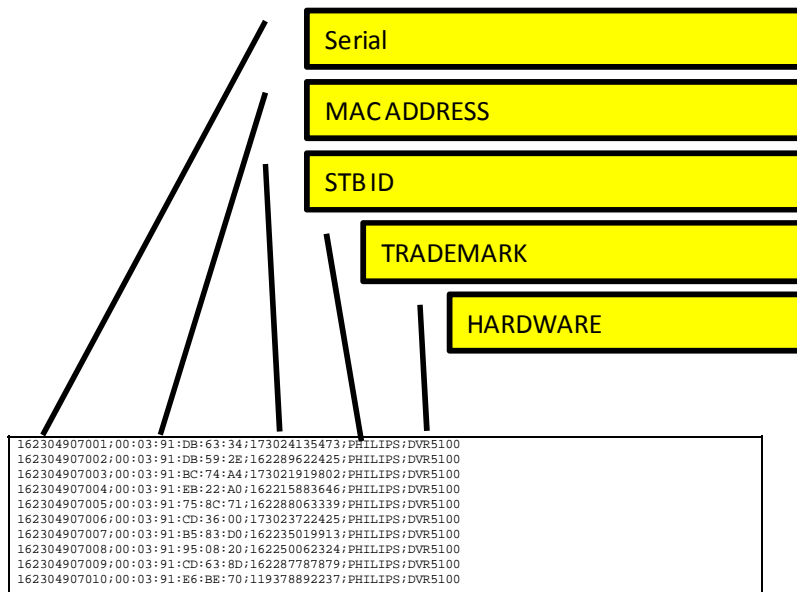
The data section will contain the next fields:

- SERIAL : Serial number of the modem. For modems, we will only use the MAC address. It's allowed to use the MAC address as the serial number of the modem. A serial should be unique for a Tenant across all devices (STB & MODEM).
- MACADDRESS : Mac address of the modem.
- TRADEMARK : This field is not used in the upload and is added for information only.
- HARDWARE : Unique description of the hardware. Any of the used values should be agreed upon with Telenet whenever a new device is introduced. Values currently supported:
 - o For Modem: CH6643E, TCG300
- Data - Smartcard

6.1.5 Data - STB

```
162304907001;00:03:91:DB:63:34;173024135473;PHILIPS;DVR5100
162304907002;00:03:91:DB:59:2E;162289622425;PHILIPS;DVR5100
162304907003;00:03:91:BC:74:A4;173021919802;PHILIPS;DVR5100
162304907004;00:03:91:EB:22:A0;162215883646;PHILIPS;DVR5100
162304907005;00:03:91:75:8C:71;162288063339;PHILIPS;DVR5100
162304907006;00:03:91:CD:36:00;173023722425;PHILIPS;DVR5100
162304907007;00:03:91:B5:83:D0;162235019913;PHILIPS;DVR5100
162304907008;00:03:91:95:08:20;162250062324;PHILIPS;DVR5100
162304907009;00:03:91:CD:63:8D;162287787879;PHILIPS;DVR5100
162304907010;00:03:91:E6:BE:70;119378892237;PHILIPS;DVR5100
162304907011;00:03:91:CD:57:B0;162317753745;PHILIPS;DVR5100
162304907012;00:03:91:DF:D4:62;162307513453;PHILIPS;DVR5100
162304907013;00:03:91:DF:6F:35;162246930414;PHILIPS;DVR5100
162304907014;00:03:91:95:0C:3F;173021456973;PHILIPS;DVR5100
162304907015;00:03:91:A1:A6:D6;162277917881;PHILIPS;DVR5100
162304907016;00:03:91:DF:F5:3E;119360104365;PHILIPS;DVR5100
```

Above is a sample of the data section of the whitelist for STBs



The data section will contain the next fields:

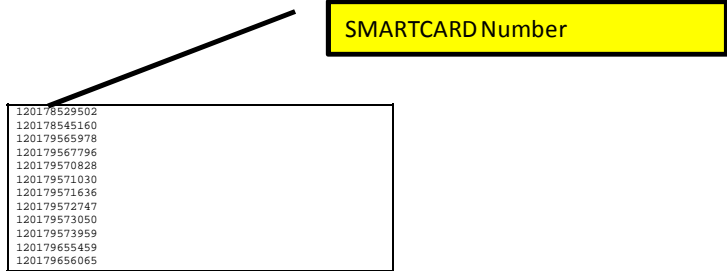
- SERIAL : Serial number of the STB. A serial should be unique for a Tenant across all devices (STB & MODEM).
- MACADDRESS : Mac address of the STB.
- STB ID : The STB ID (CAS ID) of the STB.
Note: this field should always be numeric. For STB whitelist it is ok to provide the serial number in this field (as the STBID for AO is alphanumeric)
- TRADEMARK : This field is not used in the upload and is added for information only.
- HARDWARE : Unique description of the hardware. Any of the used values should be agreed upon with Telenet whenever a new device is introduced. Values currently supported:
 - o For STB: SGS-7233, SGS7233MB

6.1.6 Data - Smartcard

```
120178529502
120178545160
120179565978
```

```
120179567796
120179570828
120179571030
120179571636
120179572747
120179573050
120179573959
120179655459
120179656065
```

Above is a sample of the data section of the smartcard file.



The data section will contain the next fields:

- SMARTCARDNUMBER : unique number identifying the smartcard.

6.2 File name

File name will have the next format:

WL_<Tenant Name>_<DeviceType>_<UniqueID>.IN

E.g.1: WL_AO_STB_00001.IN

E.g.2: WL_AO_MODEM_00002.IN

E.g.3: WL_AO_SMARTCARD_00001.IN

6.3 Example

```
*****
* HEADER DESCRIPTION *
*****
CUSTOMER : <AO>
QUANTITY : 14
TYPE : MODEM
BATCH : 00084
*****
* OUTPUT VARIABLES *
*****
SERIAL;MACADDRESS;TRADEMARK;HARDWARE;MTAMACADDRESS;HGWMACADDRESS
*****
* DATA SECTION *
*****
162304907079;00:13:11:56:2D:A2;;ARRIS;TM402B;;
162304907080;00:15:A3:1C:38:E9;;ARRIS;TM402B;;
162304907081;00:00:CA:F6:60:61;;ARRIS;TM402B;;
162304907082;00:13:11:7F:00:32;;ARRIS;TM402B;;
162304907083;00:15:96:66:76:08;;ARRIS;TM402B;;
162304907084;00:13:11:7E:3C:96;;ARRIS;TM402B;;
162304907085;00:13:11:7E:8D:36;;ARRIS;TM402B;;
162304907086;00:13:11:59:35:82;;ARRIS;TM402B;;
162304907087;00:13:11:55:62:62;;ARRIS;TM402B;;
162304907088;00:13:11:7D:04:66;;ARRIS;TM402B;;
162304907089;00:13:11:59:CF:82;;ARRIS;TM402B;;
162304907090;00:00:CA:BD:F3:55;;ARRIS;TM402B;;
162304907091;00:13:11:81:8A:B2;;ARRIS;TM402B;;
162304907092;00:13:11:7E:96:6A;;ARRIS;TM402B;;
```

A full example of the file format for a whitelist file containing Modems is displayed above.

```
*****
* HEADER DESCRIPTION *
*****
CUSTOMER : AO
QUANTITY : 10
TYPE : STB
BATCH : 00084
*****
* OUTPUT VARIABLES *
*****
SERIAL;MACADDRESS;STBID;TRADEMARK;HARDWARE
*****
* DATA SECTION *
*****
162304907001;00:03:91:DB:63:34;173024135473;PHILIPS;DVR5100
162304907002;00:03:91:DB:59:2E;162289622425;PHILIPS;DVR5100
162304907003;00:03:91:BC:74:A4;173021919802;PHILIPS;DVR5100
162304907004;00:03:91:EB:22:A0;162215883646;PHILIPS;DVR5100
162304907005;00:03:91:75:8C:71;162288063339;PHILIPS;DVR5100
162304907006;00:03:91:CD:36:00;173023722425;PHILIPS;DVR5100
162304907007;00:03:91:B5:83:D0;162235019913;PHILIPS;DVR5100
162304907008;00:03:91:95:08:20;162250062324;PHILIPS;DVR5100
162304907009;00:03:91:CD:63:8D;162287787879;PHILIPS;DVR5100
162304907010;00:03:91:E6:BE:70;119378892237;PHILIPS;DVR5100
```

A full example of the file format for a whitelist file containing STBs is displayed above.

7 Error Handling

Telenet expects a valid XML otherwise you will receive a SOAP error.

7.1 Error return object

Sample error response:

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Header/>
  <env:Body>
    <env:Fault xmlns:ns0="http://netcracker.com/solutions/telenet">
      <faultcode>B-INV-005</faultcode>
      <faultstring>Offer not found by ID="BB_FIBER"</faultstring>
      <detail>
        <ns3:BusinessError xmlns:ns3="http://xmlns.telenet.be/whs/ao/v001">
          <ns3:correlationId>2af31b82-ef33-4ad6-8dcd-242ec7fd0c1a</ns3:correlationId>
          <ns3:code>B-INV-005</ns3:code>
          <ns3:description>Offer not found by ID="BB_FIBER"</ns3:description>
        </ns3:BusinessError>
      </detail>
    </env:Fault>
  </env:Body>
</env:Envelope>
```

7.2 HTTP Errors

When too much requests in total (all requests) have been performed per minute or when too much request of the sales feasibility check have been performed per day, following http error will be returned:

HTTP error: 509 Bandwidth Limit Exceeded.

7.3 WholesaleChannelService

List of error codes and messages that can be returned on the pipeline service:

Scenarios	faultcode	faultstring	Condition
activateCpeForCustomerOrder	B-INV-001	Invalid XML Message Format	Message doesn't comply with required schema
activateCpeForCustomerOrder	B-INV-002	Mandatory parameters missing	Message received has valid format but mandatory parameters are missed.
activateCpeForCustomerOrder	B-INV-004	Object not found	Object (order, instance, etc.) referred in message is not found.
activateCpeForCustomerOrder	B-INV-005	Inconsistent data	Data provided is well formatted but operation could not

			be performed due to data inconsistency.
activateCpeForCustomerOrder	B-STATE-001	Internal state error	Operation could not be performed because target object is not in state allowing the requested action.
activateCpeForCustomerOrder	T-INT-001	Internal error	General internal error is occurred.
activateCpeForCustomerOrder	B-PERM-003	Unauthorized request	Receiving request send by an unauthorized system.
activateCpeForCustomerOrder	ERRCPE_0018	Modem Does Not Belong To The AO	Modem Does Not Belong to The tenant passed in The request
activateCpeForCustomerOrder	ERRCPE_0019	Modem doesn't exists	Modem does not exist
activateCpeForCustomerOrder	ERRCPE_0025	Internal error	Internal error, error in retrieve modem
activateCpeForCustomerOrder	SomChannel	Internal error	Internal error
activateCpeForCustomerOrder	ERRCPE_0040	Input MacId Is Not Of Modem	MacID passed does not belong to the modem
activateCpeForCustomerOrder	ERRCPE_0020	Invalid Serial Number	Invalid serial number passed in the request
activateCpeForCustomerOrder	ERRCPE_0110	Settopbox does not belong to the AO	Settopbox does not belong to the AO sending the request
activateCpeForCustomerOrder	ERRCPE_0027	Internal error	Internal error, error in retrieve Settopbox
activateCpeForCustomerOrder	SomChannel	Internal error	Internal error
activateCpeForCustomerOrder	ERRCPE_0006	SmartCard Number Does Not Exist	Smartcard number passed in the request does not exist
activateCpeForCustomerOrder	ERRCPE_0007	SmartCard number does not belong to the AO	Smartcard number passed in the request does not belong to the AO
activateCpeForCustomerOrder	ERRCPE_0111	Internal error	Internal error, error in retrieve Smartcard
activateCpeForCustomerOrder	SomChannel	Internal error	Internal error
activateCpeForCustomerOrder	ERRWHS_00001	STB IS BLACKLISTED	Settopbox is in a blacklisted status
activateCpeForCustomerOrder	ERRWHS_00002	MODEM IS BLACKLISTED	Modem is in a blacklisted status
activateCpeForCustomerOrder	ERRWHS_00003	SMARTCARD IS BLACKLISTED	Smartcard is in a blacklisted status
activateCpeForCustomerOrder	ERRWHS_00004	Internal error	Internal error

activateCpeForCustomerOrder	ERRCOM_0005	Internal error	Internal error
activateCpeForCustomerOrder	ERRWHS_0101	SMARTCARD REQUIRED BUT NOT PROVIDED IN REQUEST	The smartcard is a required field but it is not provided in the request
activateCpeForCustomerOrder	ERRCOM_0007	Sequence number not found	When you activate a STB you need to provide the STB Id plus the correct sequence number
createInstallAppointmentTicket,	ERRWHS_0100	No SAP found for LocationId :<location Id>	No SAP found for given locationID
createRepairAppointmentTicket	ERRWHS_0200	No SAP found for LocationId :<location Id>	No SAP found for given locationID
createInstallAppointmentTicket, createRepairAppointmentTicket createDropCableConnectionAppointmentTicket	ERR_0001	Internal error	Internal error
retrieveAddressIdentifier, createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket, createAdminTicket, updateTicket, retrieveTicket	WholesaleChannel	Internal error	Internal error
retrieveAddressIdentifier	ERRADD_00001	Multiple Address Ids found for the input provided	Multiple Address Ids found for the input provided
retrieveAddressIdentifier	ERRADDID_0002	No Address Id found matching the input parameter provided	No address ID found in that matches the provided address details
retrieveAddressIdentifier	ERRADDID_0003	Error in retrieving AddressId	An error occurred when trying to retrieve the address Id
updateTicket, createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket,	IGW040	Internal error	Internal error, error to log note in ticket

createAdminTicket			
createInstallAppointmentTicket, createRepairAppointmentTicket, createAdminTicket, createDropCableConnectionAppointmentTicket, updateTicket, retrieveTicket	IGW000	Internal error	Internal error
retrieveTicket	IGW048	Failed to retrieve ticket	Ticket not found based on provided ticket ID
updateTicket	IGW029	Failed to update ticket	Ticket not found based on provided ticket ID or ticket is already in a closed status
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket, createAdminTicket	IGW002	Failed to create ticket	Ticket could not be created
createInstallAppointmentTicket, createRepairAppointmentTicket, createAdminTicket, createDropCableConnectionAppointmentTicket	IGW022	Failed to retrieve site	Invalid site value passed in request
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket, createAdminTicket	IGW050	Internal error	Internal error
Any operation	IEWHS_0001	Internal error	Internal error
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket	ERRWHS_0003	The notification type is VOICE but the fixed phone number is missing	The NotificationType is "VOICE" and there is no FixedPhoneNumber element in the ContactInfo block
createInstallAppointmentTicket,	ERRWHS_0004	The notification type is SMS but the mobile	The NotificationType is "SMS" and there is

createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket		phone number is missing	no MobilePhoneNumber element in the ContactInfo block
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket	ERRWHS_0005	The fixed phone number provided as the notification contact is invalid	The FixedPhoneNumber element in the in the NotificationContactInfo tag does not contain a number
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket	ERRWHS_0006	The fixed phone number provided as the notification contact is invalid	The FixedPhoneNumber element in the NotificationContactInfo tag is invalid i.e. it does not conform to the E164 standard
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket	ERRWHS_0007	The fixed phone number provided as the notification contact is not a Belgium phone number and international fixed numbers are not accepted	The FixedPhoneNumber element in the NotificationContactInfo tag is not a Belgium number i.e. it does not start with 32
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket	ERRWHS_0008	The mobile phone number provided as the notification contact is invalid	The MobilePhoneNumber element in the NotificationContactInfo tag does not contain a number
createInstallAppointmentTicket, createRepairAppointmentTicket, createDropCableConnectionAppointmentTicket	ERRWHS_0009	The mobile phone number provided as the notification contact is invalid	The MobilePhoneNumber element in the NotificationContactInfo tag is invalid i.e. it does not conform to the E164 standard
createInstallAppointmentTicket, createRepairAppointmentTicket	ERRWHS_0012	Date input contains at least one invalid date : <Invalid Date>	The proposed appointment dates cannot be on a weekend or public holiday. If the date is for an install appointment the date must be: >= System date + 2 working days <=System date + 6 weeks

			<p>If the date is for a repair appointment the date must be:</p> <p>>= System date + 1 working days <= System date + 6 weeks</p>
createInstallAppointmentTicket	ERRWHS_0020	No ongoing order found for the location and customer order combination provided	<p>The combination (location, customer order) must be valid. The order linked to the combination must be ongoing. The order is for the tenant who created the request.</p>
createRepairAppointmentTicket	ERRWHS_0021	No active or planned product instance found for the location Id provided	<p>An active/planned product instance for the location provided by the AO is found. The product instance is for the tenant who created the request</p>
createDropCableConnectionAppointmentTicket	ERRWHS_0300	No SAP found for LocationId :<location Id>	No SAP found for given locationID
checkMajorOutageOnAddress	ERRWHS_0015	No active service found on location Id provided	No active service is found on the address Id provided. You can only do a major outage check on an address Id where you have an active service
checkMajorOutageOnAddress	ERRWHS_0400	No SAP found for LocationId :<location Id>	In order to do the major outage check we need to find the SAP for the address in order to identify the node. If no SAP can be found you will receive this error message
logoffPassiveCpes	ERRWHS_0016	The Customer Order Id is mandatory for an installation scenario	<p>For scenarios INSTALL and INSTALL_NOT_REQUIRED: The CustomerOrderId must be present</p>
logoffPassiveCpes	ERRWHS_0017	No ongoing order found for the location and customer order combination provided	<p>For scenarios INSTALL and INSTALL_NOT_REQUIRED:</p>

			The combination (location, customer order) must be valid. The order linked to the combination must be ongoing. The order is for the tenant who created the request.
logoffPassiveCpes	ERRWHS_0018	The transaction type can only be REUSE for the "INSTALL_NOT_REQUIRED" scenario	For scenario INSTALL_NOT_REQUIRED: The only valid StockLevelTransactionType for this scenario is REUSE.
logoffPassiveCpes	ERRWHS_0019	No active or planned product instance found for the location Id provided	An active/planned product instance for the location provided by the AO is found. The product instance is for the tenant who created the request
logoffPassiveCpes	ERRWHS_0022	Invalid Material Id passed in Request	The material id's provided in the request must be valid. Please refer to Table 1 for details.
retrieveServiceAccessPointIdForAddresses	ERRWHS_0050	Invalid location Id	Location Id provided in the request does not exist in DB.
OretrieveServiceAccessPointIdForAddress	ERRWHS_0051	DropCableConnection is not allowed on the location	Service access point (SAP) status for the sap Id provided in the request is not expecting the drop cable connection.
retrieveServiceAccessPointIdForAddresses	ERRWHS_0052	Multiple service access points linked with the location Id	More than one sap Ids are linked to the location Id provided in request
retrieveServiceAccessPointIdForAddresses, RetrieveServiceAccessPointIdForFilterIntervention	ERRWHS_0053	ServiceAccessPointId does not exist on provided location	ServiceAccessPoint is not known in Telenet Inventory
IdentifyServiceAccessPointAddressId	ERRWHS_0054	ServiceAccessPointIdSuffix length should be exact 3 digits	SapIdSuffix length provided in the request is not equal to 3 digits
IdentifyServiceAccessPointAddressId	ERRWHS_0055	Invalid location Id	Location Id provided in the request does not exist in DB
IdentifyServiceAccessPointAddressId	ERRWHS_0056	Combination of the location id and house number does not exist in Telenet Inventory	Combination of the location id and house number does

			not exists in Telenet Inventory
IdentifyServiceAccessPointAddressId	ERRWHS_0057	No location Id found for search criteria provided in the request	No location Id found for search criteria provided in the request
IdentifyServiceAccessPointAddressId	ERRWHS_0058	Multiple location Ids identified for the search criteria provided in the request	Multiple location Ids returned for given search criteria in the request
UpdateServiceAccessPointForInstalledDropCable	ERRWHS_0059	Invalid ServiceAccessPointId	Service Access point Id provided in the request does not exist in DB
UpdateServiceAccessPointForInstalledDropCable	ERRWHS_0060	DropCableConnection is not allowed on the location	Service access point (SAP) status for the sap Id provided in the request is not expecting the drop cable connection.
UpdateServiceAccessPointForInstalledDropCable	ERRWHS_0061	Processing error occurred during update	Error while updating drop cable details in Telenet system
UpdateServiceAccessPointForInstalledDropCable	ERRWHS_0062	Input customer order Id is not linked with location Id	Customer order Id provided in the request does not exist on the given locationid
RetrieveServiceAccessPointIdForFilterIntervention	ERRWHS_0063	Invalid location Id	Location Id provided in the request does not exist in DB
RetrieveServiceAccessPointIdForFilterIntervention	ERRWHS_0064	Invalid order Id	Customer order Id provided in the request does not exist in system
RetrieveServiceAccessPointIdForFilterIntervention	ERRWHS_0065	Input customer order Id is not linked with Input location Id	Customer order Id provided in the request is not linked with location Id provided in the request
RetrieveServiceAccessPointIdForFilterIntervention	ERRWHS_0066	The input order id is not in open state.	Customer order status is other than 'Started'
RetrieveServiceAccessPointIdForFilterIntervention	ERRWHS_0067	Multiple service access points linked with input location Id.	More than one sap Ids are linked to the location Id provided in request
RetrieveServiceAccessPointIdForFilterIntervention	ERRWHS_0068	ServiceAccessPointId does not exist on provided location	ServiceAccessPoint is not known in Telenet Inventory
RetrieveServiceAccessPointFilterInfo	ERRWHS_0069	Invalid ServiceAccessPointId	Sap Id provided in the request does not exist in DB

RetrieveServiceAccessPointFilterToBeIn stalled	ERRWHS_0070	Invalid location Id	Location Id provided in the request does not exist
RetrieveServiceAccessPointFilterToBeIn stalled	ERRWHS_0071	Invalid order Id	Customer order Id provided in the request does not exist
RetrieveServiceAccessPointFilterToBeIn stalled	ERRWHS_0072	Input customer order Id is not linked with Input location Id	Customer order Id provided in the request is not linked with location Id provided in the request
RetrieveServiceAccessPointFilterToBeIn stalled	ERRWHS_0073	The input order id is not in open state.	Customer order satus is other than 'Started'
UpdateServiceAccessPointFilterInfo	ERRWHS_0074	Invalid ServiceAccessPointId	Sap Id provided in the request does not exist
UpdateServiceAccessPointFilterInfo	ERRWHS_0075	Invalid order Id	Customer order Id provided in the request does not exist
UpdateServiceAccessPointFilterInfo	ERRWHS_0076	The input order id is not in open state.	Customer order satus is other than 'Started'
UpdateServiceAccessPointFilterInfo	ERRWHS_0077	Invalid filter specification Id	Filter specification Id provided does not exists in DB.
UpdateServiceAccessPointFilterInfo	ERRWHS_0078	Invalid filter value Id	Filter value Id provided does not exists in DB.
UpdateServiceAccessPointFilterInfo	ERRWHS_0079	Filter value Id does not match with filter specification Id	Filter value Id provided in the request is not linked with filter value Id provided in request
UpdateServiceAccessPointFilterInfo	ERRWHS_0080	Input customer order Id is not linked with location Id	Customer order Id provided in the request does not exist on the given locationid
CreateTroubleTicketForDamageReport	ERRWHS_0081	Invalid location Id	Location Id provided in the request does not exist
CreateTroubleTicketForDamageReport	ERRWHS_0082	Processing error occurred while creating case	Error occurred while creating case in Telenet system
retrieveTroubleTicketsForCableCompany	ERRWHS_0083	No open KM cases found	No open KM cases found
lookupStreets, lookupAddresses, MapAddressTokenToAddressId, retrieveServiceAccessPointIdForAddresses, retrieveServiceAccessPointIdForFilterIntervention, retrieveServiceAccessPointFilterInfo,	ERRWHS_0084	Unexpected System Error	Error occurred while processing request.

retrieveServiceAccessPointFilterToBeInstalled, identifyServiceAccessPointAddressId, updateServiceAccessPointFilterInfo, retrieveTroubleTicketsForCableCompany			
lookupStreets	ERRWHS_0085	Invalid Postal Code	Postal code does not exist in database
MapAddressTokenToAddressId	ERRWHS_0086	Location Id does not exist for the provided token	No location Id found with the AddressToken. This scenario will happen only when AddressToken shared with Orange and address was deleted in database at same moment. This is rare scenario.
MapAddressTokenToAddressId	ERRWHS_0087	Wrong token provided in the input.	Invalid addressToken provided in the input
MapAddressTokenToAddressId	ERRWHS_0088	No serviceaccesspoint present for the address	In case of no saplds found for the address
MapAddressTokenToAddressId	ERRWHS_0089	Multiple serviceaccesspoint found	In case of multiple saplds found for the address
RetrieveServiceAccessPointIdForFilterIntervention, RetrieveServiceAccessPointFilterToBeInstalled, UpdateServiceAccessPointFilterInfo	ERRWHS_0090	Invalid Trouble Ticket Id	Trouble ticket Id provided in the request does not exist in Telenet Inventory
RetrieveServiceAccessPointIdForFilterIntervention, RetrieveServiceAccessPointFilterToBeInstalled, UpdateServiceAccessPointFilterInfo	ERRWHS_0091	Input Trouble Ticket Id is not linked with input location Id	Trouble ticket provided in request is not linked with location Id provided in the request
RetrieveServiceAccessPointIdForFilterIntervention, RetrieveServiceAccessPointFilterToBeInstalled, UpdateServiceAccessPointFilterInfo	ERRWHS_0092	Input Trouble ticket Id is not for repair Intervention	Problem code Present in Telenet inventory for the input Trouble ticket Id is other than 'Repair Intervention'
RetrieveServiceAccessPointIdForFilterIntervention, RetrieveServiceAccessPointFilterToBeInstalled, UpdateServiceAccessPointFilterInfo	ERRWHS_0093	Invalid Trouble Ticket status	Provided trouble ticket id is not in correct status

7.4 WholesalePipelineService

List of error codes and messages that can be returned on the pipeline service:

Scenarios	faultcode	faultstring	Condition
Feasibility Check, Portfolio Change	B-INV-002-OFFER	Offer name is missing for in request	Offer name is missed for OrderItem specified in the request.
Feasibility Check, Portfolio Change	B-INV-002-PIID	Product Instance ID is missing in request	No Product Instance ID specified in the request (within OrderItem in case of FC of Portfolio Change MODIFY/DISCONNECT or as payload for Retrieve Product Instance operation).
Feasibility Check, Portfolio Change	B-INV-002-OFFERACT	Action parameter is missing in request	No action parameter specified for Order Item in the request.
Feasibility Check, Portfolio Change	B-INV-002-COMPACT	Action parameter is missing in request	Action parameter missed for the component in the request.
All Operations	T-INV-001	Incoming request doesn't comply with the service schema.	Incoming request doesn't comply with the service schema.
Cancel Order Retrieve Order	B-INV-005-CO	Order not found by ID=ORDER_ID, location=LOCATION	Non-existing order referenced, or order belongs to another AO.
Feasibility Check, Portfolio Change, Retrieve Product Instance	B-INV-005-PI	Instance not found by ID=INSTANCE_ID, location=LOCATION	Non-existing product instance referenced, or instance belongs to another AO.
Feasibility Check, Portfolio Change	B-INV-005-OFFER	Offer not found by ID=OFFER_ID	Offer ID in the request is not found in the database.
Feasibility Check, Portfolio Change	B-INV-005-CHARVAL	Value specified for characteristic in the request is invalid	Value specified for characteristic in the request is invalid (not exists for the given characteristic)
All Operations	B-INV-005-AO	AO ID in request is not found in the database. This is considered a System error, not Business, because AO ID is not received from AO, but is injected by OSB layer.	AO ID in request is not found in the database.

Feasibility Check, Portfolio Change	B-INV-005- RULE	<i>Business rule specific message.</i>	A business error occurred, the faultstring will provide the businessrule that failed.
Feasibility Check, Portfolio Change	B-INV-005- CHAR	Value specified for characteristic in the request is invalid	Characteristic specified in the request is not found for the Order Item.
Feasibility Check, Portfolio Change	B-INV-005- COMP	Component not found by ID="OFFER_ID	Offering Component ID in request is not found in the database.
Feasibility Check, Portfolio Change	B-STATE- 001-NOCHG	Services have not been changed since last provisioning	Modify request changing nothing.
Feasibility Check, Portfolio Change	B-STATE- 001-NPDISC	Disconnect of the product that was never provisioned on this subscription.	Disconnection request on the never activated or disconnected item.
Feasibility Check, Portfolio Change	B-STATE- 001- ALRDYACT	Service SERVICE_NAME is already activated on the subscription.	New request on the Activated item.
Feasibility Check, Portfolio Change	B-STATE- 001-NPMOD	Modification of the product that was never provisioned on this subscription.	Modification request on the never activated or disconnected item.
Feasibility Check, Portfolio Change	B-STATE- 001- DISCMOD	Modification components of the product that was disconnected.	Modification of the component whose parent offer is disconnected in the current request.
Cancel Order	T-STATE- 001-CANCEL	Customer Order is in incorrect state for cancelling.	Canceling order is already in the final state or cancellation process is already running
Feasibility Check	T-REMOTE- ERROR	Internal error	Internal error
Feasibility Check	T-COMM- 001..005	Internal error	Internal error
All Operations	T- UNEXPECTE D	Internal error	Internal error

Portfolio change	B-STATE-001-INFLMOD	Invalid request. Previous order is processing	Modification order was triggered but previous order is not yet in a state that modification can happen
Portfolio change	B-INV-005-FC	Portfolio can't be changed due to failed Feasibility check	Portfoliochange was requested while FeasibilityCheck returned an error.
Any operation	IEWHS_0001	Internal error	Internal error; default error message, returned when internal problem was encountered.