

Tandvårdsstöd
Care Provider Interfaces
Submit Claim v4

Versions

Version	Date	Description	Name
RevA	2016-02-29	New version, SubmitClaim.v4, changes from version v3: <ul style="list-style-type: none"> • Possibility to select which ATB to claim, the oldest or the newest. • Supports multiple information messages for each “item-id” in the response message. • The element alternate-treatment is removed. • Attribute “vendor-name” is changed to mandatory • Attribute “vendor-name” should be forwarded from SHS to CRM in SubmitClaim.v4 requests. • Updated comment for reimbursement-comment in push-response, this field is not used in push-responses. • Length of “vendor-name” is changed to char (30). • Length of “product-name” is changed to char (30). • Added “Complex Type” in tables for grouped elements, i.e. yellow lines, since this is the type used in the xml-schema. • Updated text for element “atb-usage-count” in detail and comment columns, Table 2. • Changed name for element “atb-usage-count” to “atb-number”. • New error message 528. • Updated xml samples. • Updated statistics. • Removed information messages 561 and 599 due to changed requirement in R4. • More xml samples added for responses with multiple comments. • Corrected xml samples for push-response with version v3. • Signed-off by Mohamed Osman 	Lars Dalenius
RevB	2016-06-15	Corrected valid values for element atb-number in Table 2. Changed to: 1=oldest ATB, 2= newest ATB, 3= both ATB	Lars Dalenius
RevC	2016-08-09	Corrected some details for SHS translation to SAP-CRM in Table 2: <ul style="list-style-type: none"> • Removed CRM-tag IStbUsage (ComlexType) from stb-usage • Added CRM-tag item (ComlexType) for treatment. 	Lars Dalenius
RevD	2017-04-21	<ul style="list-style-type: none"> • Added chapter 2.1 that describes message handling in SHS. • Added error message 553. • Updated description to include accident for the element temporarily-disregard-subscription in Table 2. • Added information that the error response can contain multiple error messages in Table 7. • Added a chapter with STB codes for STB qualifying diseases. 	Lars Dalenius

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Version	Date	Description	Name
RevE	2018-05-08	Updated for TVS 2018-06-21: <ul style="list-style-type: none"> New information messages, Table 6 Updated reference list for Confluence Elements that are part of a Complex Type are now marked with marked with bright yellow (described in Table 1 Overview over color codes used in the message parameter and translation tables. <ul style="list-style-type: none">) Added item level for Complex Types Reviewed and approved by Alexander Karczewski	Lars Dalenius
RevF	2018-05-30	Added new information message 516 in Table 6	Lars Dalenius
RevG	2018-06-04	Minor correction: Updated text for information message 576 in Table 6	Lars Dalenius

Attachment- and reference list

Number	Title, document ID, search path
1	Confluence: 002_02_01_I-122_SubmitClaimV4_FS http://confluence.sfa.se/x/NJkkAg
2	Confluence: 002_02_01_I-122_SubmitClaimV3 - PushInterface_FS http://confluence.sfa.se/x/JJkkAg
3	Git: XML-schema http://stash.sfa.se/projects/FORS/repos/tandvardsstod/browse/shsschema?at=refs%2Fheads%2Fdevelop
4	Grupprum Tandvårdsstöd förvaltning, typ=Systemdokument: Teknisk arkitektur Tandvårdsstöd

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1 Introduction

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Release	TVS 2018-06-21

The main information in this document is the tables which contain all parameters and their translation between XML and SAP parameters. There is some color codes used in the tables:

Color	Description
	Cells are changed or added in this version of the document.
	Parameters that are removed in this version of the document.
	Parameter is not translated between XML and SAP.
	Complex Type which does not contain a single value, but several parameters.
	Parameters that are part of a Complex Type.

Table 1 Overview over color codes used in the message parameter and translation tables.

2 Integrations

The Care Provider Interface "Submit Claim" makes use of two interfaces for the internal FK communication with SAP:

No	Description
1	An integration used to allow the dental system to send a SubmitClaim request to SAP-CRM which would be evaluated.
2	SAP-CRM pushes an evaluated response back to the dental system via SHS. (SHS = FK:s Spridning och HämtningsSystem)

The message request will be sent via the SHS internal queue service as a WS request from SHS to SAP-CRM. The anticipated message flow is depicted in the following diagram:

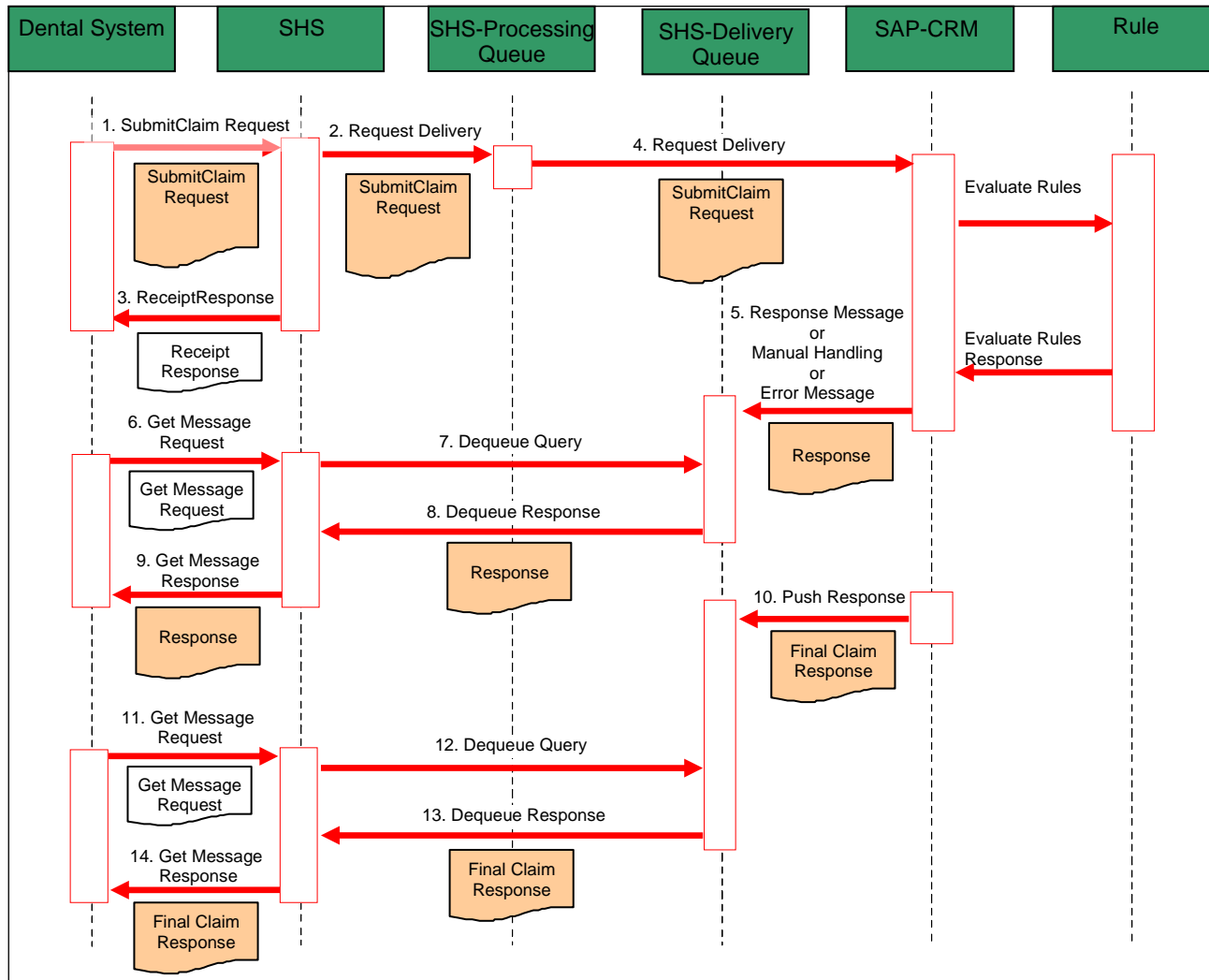


Figure 1 Sequence diagram for the SubmitClaim interface.

Architecturally, the messages will flow in the following manner:

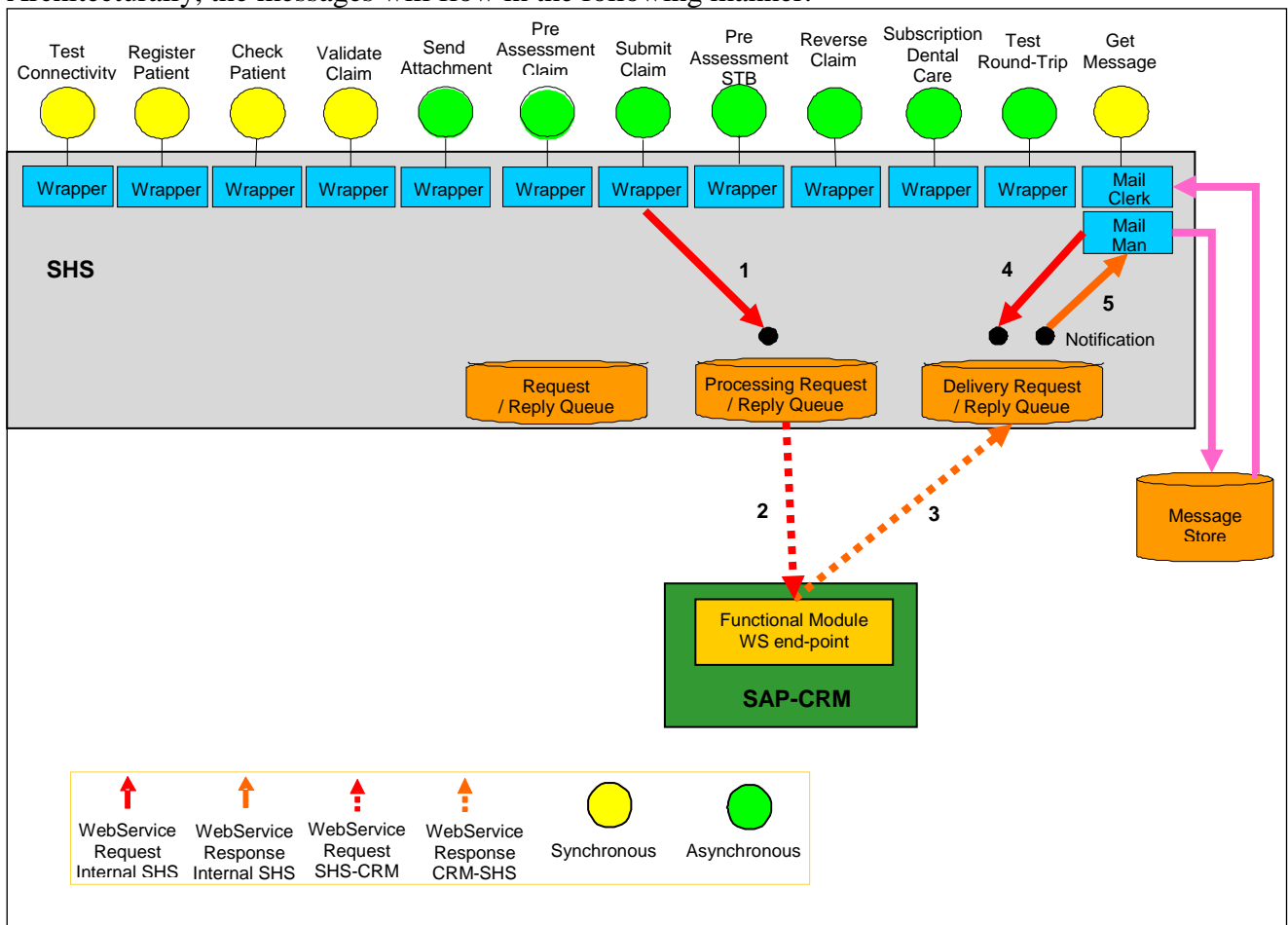


Figure 2 Architectural overview for the SubmitClaim interface.

In the case of an error, the SHS system should place the inbound message back into the processing queue to retry later.

2.1 Message handling in SHS

For a detailed description of error-codes, see **Fel! Hittar inte referenskölla.**

1. If SHS fails to deliver the inbound message to SAP-CRM (**Fel! Hittar inte referenskölla.** step 4), SHS should place the inbound message back into the processing queue for later retry. An error response with error-code 004 is placed into the reply queue to be retrieved asynchronously by the dental system (**Fel! Hittar inte referenskölla.** GetMessage response in step 9).
2. If SHS receives an error message from SAP-CRM (**Fel! Hittar inte referenskölla.** step 5) with EStatus=E and EErrorNumber=803, the inbound message is placed back into the processing queue for retry. If SHS after 10 minutes and a number of retries still receives EStatus=E and EErrorNumber=803, an error response with error-code 803 is placed into the reply queue to be retrieved asynchronously by the dental system (**Fel! Hittar inte referenskölla.** GetMessage response in step 9).
3. If the transaction is automatically approved, SAP-CRM delivers two response messages to SHS. First response (**Fel! Hittar inte referenskölla.** step 5) contains rfr-status/EClaimStatus=A directly followed by a push-response (**Fel! Hittar inte referenskölla.** step 10) containing the same response message. In these cases, SHS will only deliver the push-response, i.e. place the push-response into the reply queue to be retrieved asynchronously by the dental system (**Fel! Hittar inte referenskölla.** GetMessage response in step 14).

3 Integration 1

The interface is invoked by the dental system which sends a request and receives a synchronous response back. The second integration which describes the asynchronous response sent back to the dental system mailbox is described in chapter Integration 2.

3.1 SubmitClaim request

The following section describes how to translate the incoming request parameters and attributes from the XML message (i.e. a SubmitClaim message) received at the SAP-CRM system through WS.

3.1.1 Message and translation

Any SAP-CRM parameters that are not mentioned in the table below are optional and will not need to be sent in.

XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
request-id	Attribute		char (36)	IRequestId	N/A	N/A	ID used to link the request with the response.	The request id is sent to SAP-CRM in order to be able to link the request with the asynchronous response.
shs-invoked-interface	Attribute	X	char (36)					This attribute may be ignored. It is not sent to SAP-CRM.

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XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
vendor-name	Attribute		char (30)	IVendorName				This attribute is mandatory, it is used for statistics. It is also sent to SAP-CRM and registered in the clinic's block for "Egenskaper".
product-name	Attribute	X	char (30)					This attribute may be ignored. It is not sent to SAP-CRM.
version-number	Attribute	X	char (15)					This attribute may be ignored. It is not sent to SAP-CRM.
organization-number	Attribute	X	int (10)	IOrgNum	N/A	N/A	The organizational number of the care provider.	This attribute is copied to the Response Message as the "organization-number". This XML attribute is always overwritten by SHS with the ID from the certificate. The certificate is issued with the care provider's organization number as ID.
user-id	Attribute		int (12)	IUserId	No	No	User sending the request.	Used for iLogging purposes
external-id	Element		char (40)	IExternalId	No	No	The id of the claim used in the journal systems	
clinic-id	Element		int (8)	IClinicId	No	No	The id that the clinic has been assigned by FK.	
claim-id	Element	X	int (10)	IClaimId	No	No	A Claim ID received from a pre-assessment claim.	

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XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
social-security-number	Element	(see comment)	int (12)	IPatientId	No	No	The social security number of the Patient.	The inbound XML Message will contain either the social-security-number or the foreign-identity number, but not both.
foreign-identity-number	Element	(see comment)	char (20)	IPatientId	No	The SHS integration will add an F in front of this value before sending it to CRM to distinguish it from a SSN.	The passport ID or other foreign ID of the patient.	The inbound XML Message will contain either the social-security-number or the foreign-identity number, but not both.
dentist-id	Element		int (12)	IDentistId	No	No	The social security number of the Dentist who has perform the treatment	
date	Element		date	IDate	No	No	The date in which the treatments was performed.	An error message is thrown if the visit has a visit date in the future.
late-sending-reason	Element	X	char (500)	ILateSendingReason	No	No	A free text field to allow the dentists to explain why the visit is sent too late	
atb-usage	Complex Type	X					These fields are only required if ATB is claimed.	

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XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
atb-usage/ atb-number	Element		int (1)	IAtbNumber	No	No	A unique identifier for the claimed ATB. Valid values: 1=oldest ATB 2= newest ATB 3= both ATB	Note: When claiming one ATB, values 1 and 2 claims the oldest/newest ATB exclusively. In previous contract version v3 when claiming one ATB, the oldest was default. If that was used, instead the newest was selected.
atb-usage/ teeth-count	Element		int (2)	ITeethCount	No	No	The number of teeth in the Patient's mouth.	Max allowed teeth-count=32. Error 003 (Invalid XML) if teeth-count > 32.
atb-usage/ untreated-teeth-count	Element		int (2)	IHealthyTeeth	No	No	The number of teeth in the Patient's mouth that are perfectly healthy (i.e. have never undergone a dental treatment).	Error 304 if untreated-teeth-count > teeth-count.
treatment	Complex Type			ISubmitItem\item				
treatment/ item-id	Attribute		int (10)	ISubmitItem\item\ IItemId	No	No	A unique identifier for the line item in the submitted collection	This may be any value, but each value must be unique within the collection. The response items will be organized using the same Item IDs.
treatment/ diagnosis	Element		int (4)	ISubmitItem\item\ IDiagnosis	No	No	The code from the Reference Price List corresponding to the Patient Diagnosis	

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XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
treatment/ treatment	Element	(see comment)	int (3)	ISubmitItem\item\ ITreatment	No	No	The code from the Reference Price List corresponding to the proposed treatment	
treatment/ tooth	Element		char (2)	ISubmitItem\item\ IToothNumber	No	No	Two numeric characters, indicating the quadrant and position of the tooth that was treated. OR 2 characters, indicating a whole jaw: ÖK = Upper Jaw UK = Lower Jaw NA = Not Applicable	
treatment/ position	Element		char (2)	ISubmitItem\item\ IToothPosition	No	No	The position of the tooth in the mouth. Two numeric characters, indicating the quadrant and position of the tooth that was treated. OR 2 characters, indicating a whole jaw: ÖK = Upper Jaw UK = Lower Jaw NA = Not Applicable	This field is used to determine the position of the tooth in the mouth, which could differ from the information indicated in the Tooth field if a tooth is missing.
treatment/ price	Element		int (13)	ISubmitItem\item\ IPrice	No	No	The price of the treatment that the Dentist has charged or will charge the Patient.	
treatment/ referral	Element	X	boolean	ISubmitItem\item\ IRemiss	No	true/false to X/(blank)	This field captures if the dentist wants to claim the specialist price of the treatment	The value of this field is mapped to confirmation relevant field for Remiss in the Service Order at the item level

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XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
high-cost-reset	Element		boolean	IHighCostResetFlag	No	true/false to X/(blank)	A Boolean value used to indicate if the High-Cost Protection Period should be reset before processing the claim.	Will be set to X when true, empty when false.
stb-usage	Complex Type	X					These fields are only required if STB is claimed.	
stb-usage/ stb-cause	Element		char (4)	IStbReason	No	No	STB reason code, 4 digits. The STB reason codes can be found in Table 3.	In SAP-CRM the STB reason text and code is available in table ZTV_STB_REASON.
stb-usage/ stb-amount-claimed	Element		char (21)	IStbAmount	No	No	This field is the value of the STB amount being claimed by the patient. The value must be > 0.	This value is mapped to the condition type 'STB amount to use' in the order. It is the manual condition type and this value would be posted in the document.
temporarily-disregard-subscription	Element	X	boolean	ITmpDsrgdSubscription	No	true/false to X/(blank)	This field represents if the treatment is being claimed because of work injury or an accident. In these cases the effect of the contract determination is nullified.	

Table 2 Overview over parameters and their translation for the SubmitClaim request

3.1.2 STB codes and diseases

STB code	STB qualifying diseases
1100	Muntorrhet pga. läkemedelsbehandling
1300	Muntorrhet pga. strålbehandling
1500	Sjögrens syndrom
1700	KOL och syrgas eller näringsdryck
1900	Cystisk fibros
2100	Ulcerös kolit
2300	Crohns sjukdom
2500	Tarmsvikt
2700	Erosioner pga. ätstörningar el. reflux
2900	Svårinställd diabetes
3100	Genomgår dialysbehandling
3300	Immunosuppression pga. läkemedelsbehandling
3500	Genomgången organtransplantation

Table 3 STB codes and diseases

3.1.3 Sample XML

SubmitClaim for a visit sent within 14 days after the treatment date. It contains two treatments claiming two ATB and STB. The second treatment claims the specialist price.

```
<FK.TV.SubmitClaimRequest.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Submit Claim v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2329291234"
  user-id="197512141502">
  <external-id>898799342GS243</external-id>
  <clinic-id>33312345</clinic-id>
  <social-security-number>198505311234</social-security-number>
  <dentist-id>195006011234</dentist-id>
  <date>2016-05-20</date>
  <treatment item-id="1">
    <diagnosis>1001</diagnosis>
    <treatment>101</treatment>
    <tooth>NA</tooth>
    <position>NA</position>
    <price>800</price>
  </treatment>
  <treatment item-id="2">
    <diagnosis>5031</diagnosis>
    <treatment>925</treatment>
    <tooth>44</tooth>
    <position>44</position>
    <price>3500</price>
    <referral>true</referral>
  </treatment>
  <atb-usage>
    <atb-number>3</atb-number>
    <teeth-count>28</teeth-count>
    <untreated-teeth-count>20</untreated-teeth-count>
  </atb-usage>
  <high-cost-reset>false</high-cost-reset>
  <stb-usage>
    <stb-cause>1100</stb-cause>
    <stb-amount-claimed>350</stb-amount-claimed>
  </stb-usage>
  <temporarily-disregard-subscription>false</temporarily-disregard-subscription>
</FK.TV.SubmitClaimRequest.v4>
```

Figure 3 Sample XML for a SubmitClaim request claiming two ATB and STB

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SubmitClaim for a visit sent later than 14 days after the treatment date which needs the element late-sending-reason.

```
<FK.TV.SubmitClaimRequest.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Submit Claim v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2329291234"
  user-id="197512141502">
  <external-id>891234567GS242</external-id>
  <clinic-id>33312345</clinic-id>
  <social-security-number>198003141234</social-security-number>
  <dentist-id>195006011234</dentist-id>
  <date>2016-03-22</date>
  <late-sending-reason>Driftstörning hos Försäkringskassan</late-sending-reason>
  <treatment item-id="1">
    <diagnosis>1001</diagnosis>
    <treatment>101</treatment>
    <tooth>NA</tooth>
    <position>NA</position>
    <price>800</price>
  </treatment>
  <high-cost-reset>false</high-cost-reset>
  <temporarily-disregard-subscription>false</temporarily-disregard-subscription>
</FK.TV.SubmitClaimRequest.v4>
```

Figure 4 Sample XML for a SubmitClaim request sent in too late

SubmitClaim for a Pre-Assessment visit (PA-visit) which needs the element claim-id.

```

<FK.TV.SubmitClaimRequest.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Submit Claim v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2929291234"
  user-id="197512141502">
  <external-id>866225342GS242</external-id>
  <clinic-id>33390012</clinic-id>
  <claim-id>8123498765</claim-id>
  <social-security-number>198003141234</social-security-number>
  <dentist-id>195006011234</dentist-id>
  <date>2016-05-20</date>
  <treatment item-id="1">
    <diagnosis>4882</diagnosis>
    <treatment>801</treatment>
    <tooth>16</tooth>
    <position>16</position>
    <price>6000</price>
  </treatment>
  <high-cost-reset>true</high-cost-reset>
  <temporarily-disregard-subscription>false</temporarily-disregard-subscription>
</FK.TV.SubmitClaimRequest.v4>
    
```

Figure 5 Sample XML for a SubmitClaim request for a PA-visit

3.2 SubmitClaim Receipt

A receipt is sent back to the user when the request has been received correctly by SHS. The receipt does not contain any specific parameters, just the request id and organization number in order to match the response with the request.

3.2.1 Message and translation

The parameters and translation are shown in the table below:

SAP	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
	request-id	Attribute		char (36)			ID used to link the response with the request.	This value must be copied from the "request-id" message on the inbound request XML message.
	organization-number	Attribute		int (10)			The care provider's organization number.	This value must be copied from the "organization-number" message from the inbound request XML message.

Table 4 Overview over the parameters and their translation for a SubmitClaim receipt



3.2.2 Sample XML

The following sample demonstrates a possible receipt returned synchronously.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <FK.TV.ReceiptResponse request-id="a4924e42-4214-ba93-af22-98739237ab08"
      organization-number="2021005521" xmlns="http://fk.se/SHS/xsd/tanden"/>
  </soapenv:Body>
</soapenv:Envelope>
```

Figure 6 Sample XML for a SubmitClaim receipt

3.3 SubmitClaim Response

SAP-CRM will always return a synchronous response. This response will indicate if the SubmitClaim was approved automatically or sent to manual handling.

These responses are sent synchronously from SAP-CRM to SHS but asynchronously from the dental journal systems point of view.

3.3.1 Message and translation

The parameters and translation are shown in the table below:

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IRequestId	request-id	Attribute		char (36)	N/A	N/A	ID used to link the response with the request.	This value must be copied from the "request-id" message of the inbound request XML message.
EStatus							Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid values: S=Success R=Rule error	If status=S or R, this xml structure is used. If status=E, the xml structure for error message is used, see ch. 3.4.
	organization-number						The care provider's organization number	This value must be copied from the "organization-number" parameter in the inbound request XML message.
	clinic-id						The id that the clinic has been assigned by FK.	This value must be copied from the "clinic-id" parameter in the inbound request XML message.
EClaimId	claim-id	Element		int (10)	No	No	The unique identifier of the Service Order that was created in the SAP-CRM System corresponding to the request.	This field corresponds to the Service Order ID created in SAP-CRM. This value will be set to 8999999999 by CRM in case of a Rule error since no order was created.
EClaimamount	claim-amount	Element	X	float (13,2)	No	No	The total amount of the claim to be reimbursed as calculated by Försäkringskassan.	This parameter is not sent when status is M (Manual Handling)

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
EClaimStatus	claim-status	Element		char (1)	No	No	Indicating the status of the claim. Valid values: A=Received M=Manual Handling D=Declined	claim-status=D when EStatus=R
EZcrmClaimRespl\item\	item-result	Complex Type						
EZcrmClaimRespl\item\ EItemId	item-result/ item-id	Attribute		int (10)	No	No	A unique identifier for the same line item-id that was sent in in the SubmitClaim request. The same identifier can be repeated multiple times if there are more than one reimbursement-comment.	This number will match the Item ID that was submitted in the Claim Message.
EZcrmClaimRespl\item\ EItemStatus	item-result/ status	Element		char (1)	No	No	Indicating the status of the line item. Valid values: A=Approved S=Subscription N=Not Assessed D=Declined	If claim-status=M, then N is used for item-result/status.
EZcrmClaimRespl\item\ EComment	item-result/ reimbursement-comment	Element	X	char (255)	No	No	States the reason why the validation failed for the line item.	Only required if item-result/status=D

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SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
EZclaimCommentary\item\	commentary	Complex Type	X				This is an information and warning field.	
EZclaimCommentary\item\ ECommentaryNumber	commentary/ id	Attribute		int(10)			A unique identifier for the line item in the submitted collection.	
EZclaimCommentary\item\ ECode	commentary/ code	Element		int(3)				
EZclaimCommentary\item\ ECommentary	commentary/ commentary	Element		char(255)				

Table 5 Overview over the parameters and their translation for a SubmitClaim response

3.3.2 Sample XML

The following sample demonstrates a possible response for an approved SubmitClaim request where item-id 1 was covered by a subscription.

```
<FK.TV.GetMessageResponse request-id="b4924e42-4214-ba93-af22-12345677ba23"
organization-number="8942132412" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubmitClaimResponse.v4 request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <claim-id>8000020324</claim-id>
    <claim-status>A</claim-status>
    <claim-amount>2307.50</claim-amount>
    <item-result item-id="1">
      <status>S</status>
    </item-result>
    <item-result item-id="2">
      <status>A</status>
    </item-result>
  </SubmitClaimResponse.v4>
</FK.TV.GetMessageResponse>
```

Figure 7 Sample XML for a SubmitClaim response

The following sample demonstrates a possible response for a SubmitClaim request with status manual handling and an information message.

```
<FK.TV.GetMessageResponse request-id="b4924e42-4214-ba93-af22-12345677ba23"
organization-number="8942132412" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubmitClaimResponse.v4 request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <claim-id>8123123123</claim-id>
    <claim-status>M</claim-status>
    <item-result item-id="1">
      <status>N</status>
    </item-result>
    <commentary id="1">
      <code>567</code>
      <commentary>Manuell handläggning på grund av utredning.</commentary>
    </commentary>
  </SubmitClaimResponse.v4>
</FK.TV.GetMessageResponse>
```

Figure 8 Sample XML for a SubmitClaim with status manual handling

The following sample demonstrates a typical response for a declined SubmitClaim request, it contains two treatments with two reimbursement-comments each.

```
<FK.TV.GetMessageResponse request-id="b4924e42-4214-ba93-af22-12345677ba23"
organization-number="8942132412" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubmitClaimResponse.v4 request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <claim-id>8999999999</claim-id>
    <claim-status>D</claim-status>
    <claim-amount>0.00</claim-amount>
    <item-result item-id="1">
      <status>D</status>
      <reimbursement-comment>E.7 Inom två år efter slutförande av åtgärd 865 är åtgärd
      871 inte ersättningsberättigande för samma käke</reimbursement-comment>
    </item-result>
    <item-result item-id="1">
      <status>D</status>
      <reimbursement-comment> E.9 Åtgärden kan eventuellt vara ersättningsberättigande
      efter en förhandsprövning inom 2 år</reimbursement-comment>
    </item-result>
    <item-result item-id="2">
      <status>D</status>
      <reimbursement-comment>E.7 Inom två år efter slutförande av åtgärd 865 är åtgärd
      871 inte ersättningsberättigande för samma käke</reimbursement-comment>
    </item-result>
    <item-result item-id="2">
      <status>D</status>
      <reimbursement-comment> E.9 Åtgärden kan eventuellt vara ersättningsberättigande
      efter en förhandsprövning inom 2 år</reimbursement-comment>
    </item-result>
  </SubmitClaimResponse.v4>
</FK.TV.GetMessageResponse>
```

Figure 9 Sample XML for a declined SubmitClaim with multiple reimbursement-comments

3.3.3 Information messages

The following table shows possible information messages for the SubmitClaim Interface.

Code	Description
505	Ärendet handläggs manuellt på grund av för sent inskickat, dvs. rätten till tandvårdsersättning och tandvårdsbidrag utreds.
507	Ärendet handläggs manuellt på grund av högt ersättningsbelopp, dvs. rätten till tandvårdsersättning och tandvårdsbidrag utreds.
508	Ärendet handläggs manuellt på grund av omgörning
516	Just nu har vi långa handläggningstider för ärenden där vi utreder om patienten har rätt till svensk socialförsäkring.
543	Ärendet handläggs manuellt för att fastställa om patienten har rätt till statligt tandvårdsstöd, dvs. rätten till tandvårdsersättning och tandvårdsbidrag utreds.
567	Ärendet handläggs manuellt på grund av kontroll innan utbetalning av statligt tandvårdsstöd, dvs. rätten till tandvårdsersättning och tandvårdsbidrag utreds. (vid innehållande/utredning)
576	Patienten är inte registrerad som försäkrad hos Försäkringskassan.
577	Patienten är registrerad i Försäkringskassan från och med YYYY-MM-DD.

Table 6 List of possible information messages for SubmitClaim

3.4 SubmitClaim Error response

An error response is sent if there is a technical problem or if the header validation fails. Technical errors could be sent directly from the SHS, but header validation errors are sent from SAP-CRM.

The EStatus parameter will in this case be set to E. This will be used to indicate that the error message structure should be populated and sent back to the user.

Error messages are sent back synchronously from SAP-CRM, but asynchronously from the dental journal systems point of view.

3.4.1 Message and translation

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IRequestId	request-id	Attribute		char (36)			ID used to link the response with the request.	This value must be copied from the "request-id" message of the inbound request XML message.
EStatus							Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid values: E=Error	If status=R, this xml structure is used.
	organization-number	Attribute		int (10)			The care provider's organization number	This value must be copied from the "organization-number" parameter in the inbound request XML message.

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
	clinic-id						The id that the clinic has been assigned by FK.	This value must be copied from the "clinic-id" parameter in the inbound request XML message.
EZclaimMessage\item\	error	Complex Type						The error response can be repeated multiple times.
EZclaimMessage\item\ EErrorNumber	error/ error-code	Element		int (3)	No	No	The unique code for the type of error that has occurred	
EZclaimMessage\item\ EErrorMessage	error/ error-text	Element		char (255)	No	No	The header/short description of the error	
EZclaimMessage\item\ EErrorDetail	error/ error-details	Element	X	char (255)	No	No	A more detailed description of the error.	

Table 7 Overview over the parameters and their translation for an Error response

3.4.2 Sample XML

The following sample demonstrates a possible error message.

```
<FK.TV.GetMessageResponse request-id="ba9241ab-ab12-3921-bb34-21348aba2381"
organization-number="8421812392" xmlns="http://fk.se/SHS/xsd/tanden">
  <ErrorMessage request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <error>
      <error-code>527</error-code>
      <error-text>Patienten har inte tillräckligt många ATB tillgängliga</error-text>
      <error-details></error-details>
    </error>
  </ErrorMessage>
</FK.TV.GetMessageResponse>
```

Figure 10 Sample XML for a SubmitClaim Error response

3.4.3 Error Messages

Code	Description	Source
001	Connection Error	Any
002	Technical Error	Any
003	Invalid XML	SHS
004	Vi har just nu tekniska problem. Du ska inte skicka om din begäran utan vi kommer att hantera denna när våra problem är lösta.	SHS
501	Obligatoriska parametern <parameter> saknades	CRM
502	Parametern <parameter> är i ett ogiltigt format.	CRM
503	Besöket kan inte registreras för tillfället, var god försök igen senare	CRM
504	Ändra så att antal intakta tänder är färre än, eller lika med, antalet kvarvarande tänder	CRM
521	Patienten kunde inte hittas	CRM
522	Användaren kunde inte hittas	CRM
523	Vårdgivar-ID kunde inte hittas	CRM
524	Mottagnings-ID kunde inte hittas	CRM
525	Tandläkaren kunde inte hittas	CRM
526	Relationen mellan vårdgivare och mottagning kunde inte hittas	CRM
527	Patienten har inte tillräckligt många ATB tillgängliga	CRM
528	Begärt ATB är inte tillgängligt	CRM
531	Patienten är inte längre registrerad för statligt tandvårdsstöd	CRM
532	Patienten är för ung för att få statligt tandvårdsstöd	CRM
533	Uppgift om kontonummer saknas	CRM
534	Patienten kommer inte från ett ersättningsberättigat land/region	CRM
535	Ogiltigt tillstånd/åtgärd vid besöksdatumet	CRM
536	Ogiltig kombination av tillstånd och åtgärd vid besöksdatumet	CRM

Code	Description	Source
537	Ogiltig kombination av tillstånd och alternativ åtgärd vid besöksdatumet	CRM
538	Ogiltig kombination av alternativ åtgärd och ersättningsbar åtgärd	CRM
540	Förhandsprövningen kunde inte hittas	CRM
542	En eller flera åtgärder har inte beviljats i förhandsprövningen	CRM
544	Den angivna patienten överensstämmer inte med den i förhandsprövningen	CRM
546	Den angivna vårdgivaren överensstämmer inte med den i förhandsprövningen	CRM
547	De beviljade åtgärderna i förhandsprövningen är redan utbetalda	CRM
550	Mottagningen eller vårdgivaren är inte aktiv	CRM
551	Startdatum på högkostnadsperioden går ej att ändra	CRM
552	Vänligen ange anledning för förseningen.	CRM
553	Referenspris för specialisttandvård kan inte begäras då åtgärd xxx inte är inom ditt specialistområde	CRM
554	Besöksdatum är i framtiden	CRM
555	Besöket är redan inskickat	CRM
556	En sjukdom som ger rätt till STB ska anges.	CRM
557	Du har inte uppgett att du vill använda STB.	CRM
558	Behandlande tandläkare är inte specialist.	CRM
559	Det begärda STB beloppet är högre än priset för STB-åtgärderna. Det kan inte vara högre än X SEK	CRM
560	STB åtgärd saknas.	CRM
562	Det begärda STB-beloppet är högre än patientens saldo. Det kan inte vara högre än X SEK.	CRM
563	Det begärda STB-beloppet är högre än priset för den förebyggande åtgärden. Det kan inte vara högre än X SEK.	CRM
564	Rad 0010: Referenspriset för Åtgärd XXXX gäller endast för specialisttandläkare	CRM
565	STB belopp saknas.	CRM
566	Förhandsprövning krävs på grund av föreläggande.	CRM
568	En eller flera åtgärder i förhandsprövningen är redan använda	CRM
569	En eller flera åtgärder är inte godkända i förhandsprövningen	CRM
570	“<X> stämmer inte med Förhandsprövning” (X= Care Provider ID/Social Security Number Or Foreign ID)	CRM
571	Det finns ingen godkänd Förhandsprövning för patienten	CRM
572	Patienten har inget abonnemangsavtal för aktuellt besöksdatum	CRM
573	Fel vid skapande av data att skickas till regelkontroll.	CRM

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Code	Description	Source
575	Åtgärdernas pris är lägre än begärt tandvårdsbidrag. Det totala tandvårdsbidraget kan inte vara högre än X SEK.	CRM

Table 8 List of possible SubmitClaim Error messages.

4 Integration 2 – push response

The second integration describes the asynchronous response sent back to the dental system mailbox.

4.1 SubmitClaim Push response

The interface is invoked by SAP-CRM when a claim has been processed and the initial status is M (Manual handling). This means that no final decision about the claim has been taken yet. This push response is sent when the claim has been handled manually and received a final status.

SubmitClaim.v4 uses push response v3.

4.1.1 Message and translation

The parameters and translation are shown in the table below:

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IRequestId	request-id	Attribute		char (36)	N/A	N/A	ID used to link the response with the request.	This value must be copied from the "request-id" message on the inbound request XML message.
EStatus							Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid Values: S=Successful response	If status=S, this xml structure is used.

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IOrgNum							The organizational number for the care provider.	This value will also be set as a SHS property.
IClinicId							The id that the clinic has been assigned by FK.	Used to place the message in the right mailbox in in SHS.
EClaimId	claim-id	Element		int (10)	No	No	The unique identifier of the Service Order that was created in the SAP-CRM System corresponding to the request.	This field corresponds to the Service Order ID created in SAP-CRM
EClaimamount	claim-amount	Element		float (13,2)	No	No	The total amount of the claim to be reimbursed as calculated by Försäkringskassan.	
EClaimStatus	claim-status	Element		char (1)	No	No	Indicating the status of the claim. Valid values: A=Received P=Partially Approved D=Declined	
EZcrmClaimRespI\item\	item-result	Complex Type						
EZcrmClaimRespI\item\ EItemId	item-result/ item-id	Attribute		int (10)	No	No	A unique identifier for the same line item-id that was sent in in the SubmitClaim request. The same identifier can be repeated multiple times if there are more than one reimbursement-comment.	This number will match the Item ID that was submitted in the Claim Message.

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SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
EZcrmClaimRespl\item\ EItemStatus	item-result/ status	Element		char (1)	No	No	Indicating the status of the line items. Valid values: A=Approved S=Subscription D=Declined	
EZcrmClaimRespl\item\ EComment	item-result/ reimbursement-comment	Element	X	char (255)	No	No		This element is not used in push-response.
EZclaimCommentary\item\ ECommentaryNumber	commentary	Complex Type	X				This is an information and warning field.	
EZclaimCommentary\item\ ECommentaryMessage	commentary/ item-id	Attribute		int(10)			A unique identifier for the line item in the submitted collection.	
EZclaimCommentary\item\ ECommentaryDetail	commentary/ code	Element		int(3)				
EZclaimCommentary\item\ ECommentaryDetail	commentary/ commentary	Element		char(255)				

Table 9 Overview over the parameters and their translation for the SubmitClaim Push response

4.1.2 Sample XML

The following sample message demonstrates a typical response where the claim was approved. Note that the push response uses version SubmitClaimResponse.v3.

```
<FK.TV.GetMessageResponse request-id="a4924e42-4214-ba93-af22-98739237ba23"
organization-number="8942132412" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubmitClaimResponse.v3 request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <claim-id>8000123155</claim-id>
    <claim-status>A</claim-status>
    <claim-amount>1250.75</claim-amount>
    <item-result item-id="1">
      <status>A</status>
    </item-result>
    <item-result item-id="2">
      <status>A</status>
    </item-result>
  </SubmitClaimResponse.v3>
</FK.TV.GetMessageResponse>
```

Figure 11 Sample XML for an approved SubmitClaim Push response

The following sample demonstrates a possible response for a partially approved SubmitClaim. Note that the push response uses version SubmitClaimResponse.v3.

```
<FK.TV.GetMessageResponse request-id="a4924e42-4214-ba93-af22-98739237ba23"
organization-number="8942132412" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubmitClaimResponse.v3 request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <claim-id>8000051889</claim-id>
    <claim-status>P</claim-status>
    <claim-amount>275.50</claim-amount>
    <item-result item-id="1">
      <status>A</status>
    </item-result>
    <item-result item-id="2">
      <status>D</status>
    </item-result>
  </SubmitClaimResponse.v3>
</FK.TV.GetMessageResponse>
```

Figure 12 Sample XML for a partially approved SubmitClaim Push response

5 Volumes

The following data is based on the total traffic during Mars 2018 (31 days).
Distribution to be spread throughout the day, but likely to be more load during the workday hours.

Received SubmitClaim requests:

per Year	per Month	per Day	per Hour	Size
11 170 392	930 866	30 028	1 251	~0.5kb

Table 10 Preliminary forecast for the volumes of SubmitClaim requests