

Tanden
Care Provider Interfaces
Pre Assessment STB v3

IT-product

Date

Version

PreAssessmentSTB v3

2018-06-04

RevK

Versions

Version	Date	Description	Name
RevA	2012-04-27	First signed-off version	Lars Dalenius
RevB	2012-05-24	Minor updates, corrected reference list and changed table cells for request and responses to green since this is a new interface.	Lars Dalenius
RevC	2012-10-25	Added information about STB-cause	Eva Hamberg
RevD	2012-11-20	CQ91520: pa-stb-id changed to mandatory in Integration 2 CQ91519: removed two Info messages. Added error messages 731, 734 and 750	Erik Haglund
RevE	2013-03-04	Updated error message 722 Added error message 004	Lars Dalenius
RevF	2014-03-06	CQ90276: Corrected SAP parameter names. Signed off by Bo Wahlström.	Lars Dalenius
RevG	2015-02-24	Changed "foreign-identity-number", new value=char(20), old value=char(60) Updates for conformity with all contracts Document name differs from FS, changed from: TV_Integration_contract_I-316_Pre_Assessment_STB_v3-RevG to: TV_Integration_contract_I-320_Pre_Assessment_STB_v3-RevG	Lars Dalenius
RevH	2016-04-24	<ul style="list-style-type: none"> • Attribute "vendor-name" is changed to mandatory. • 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 statistics. Signed-off by Mohamed Osman.	Lars Dalenius
RevI	2018-05-08	Updated for TVS 2018-06-21: <ul style="list-style-type: none"> • New information messages, Table 5 • Updated reference list for Confluence • Elements that are part of a Complex Type are now marked with bright yellow (described in Table 1) • Added item level for Complex Types Reviewed and approved by Alexander Karczewski	Lars Dalenius
RevJ	2018-05-30	Added new information message 716 in Table 5	Lars Dalenius
RevK	2018-04-06	Minor correction: Updated text for information message 576 in Table 5	Lars Dalenius

Attachment- and reference list

Number	Title, document ID, search path
1	Confluence: 002_04_05_I-320_STBPreAssessmentClaimV3_FS http://confluence.sfa.se/x/5QfxAQ
2	Confluence: 002_04_05_I-320_STBPreAssessmentClaimPushInterfaceV3_FS http://confluence.sfa.se/x/FgixAQ
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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The main information in this document is the tables which contain all parameters and their translation between XML and SAP parameters. There are 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 "PreAssessmentSTB" 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 PreAssessmentSTB 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:

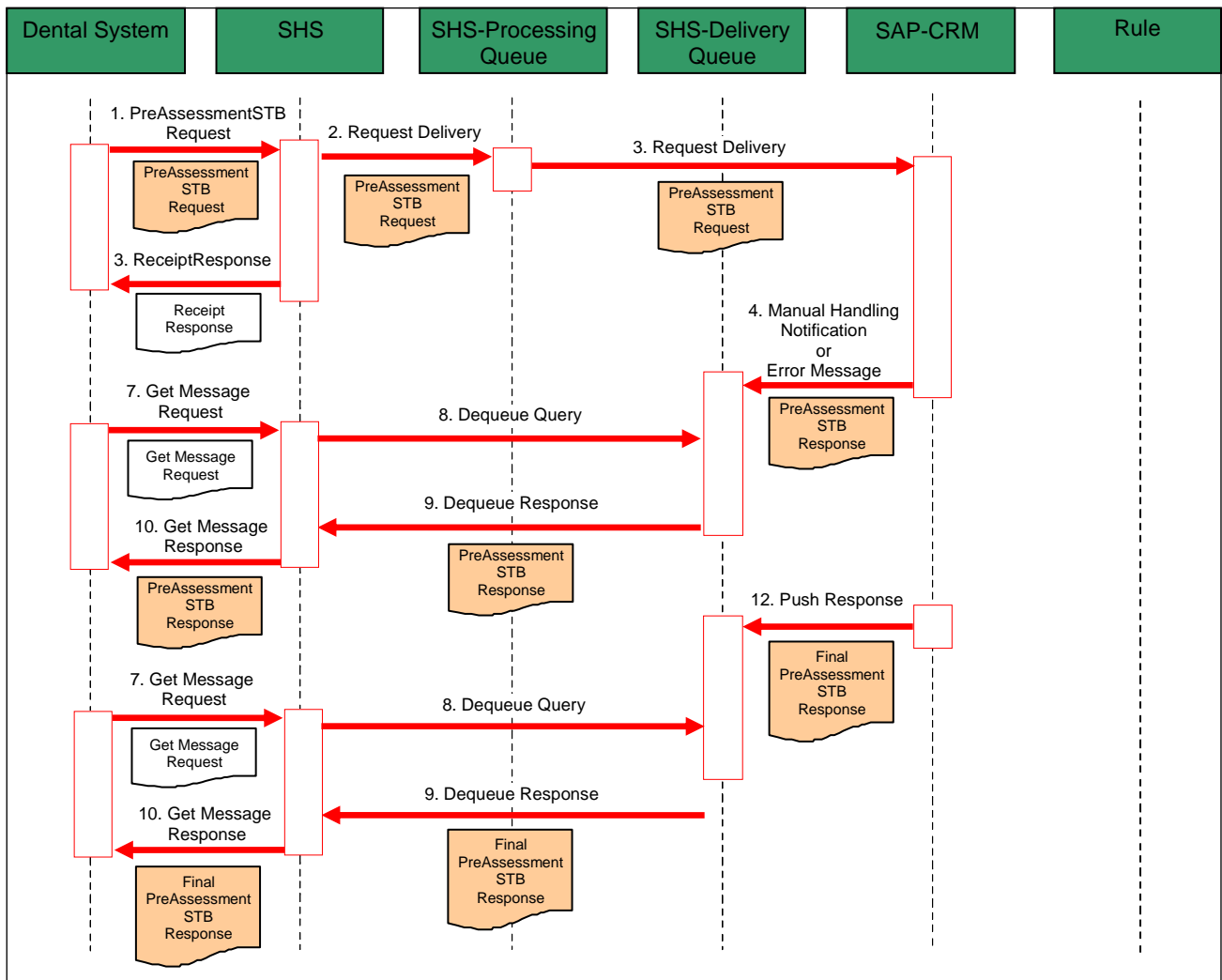


Figure 1 Sequence diagram for the PreAssessmentSTB interface

Architecturally, the messages will flow in the following manner:

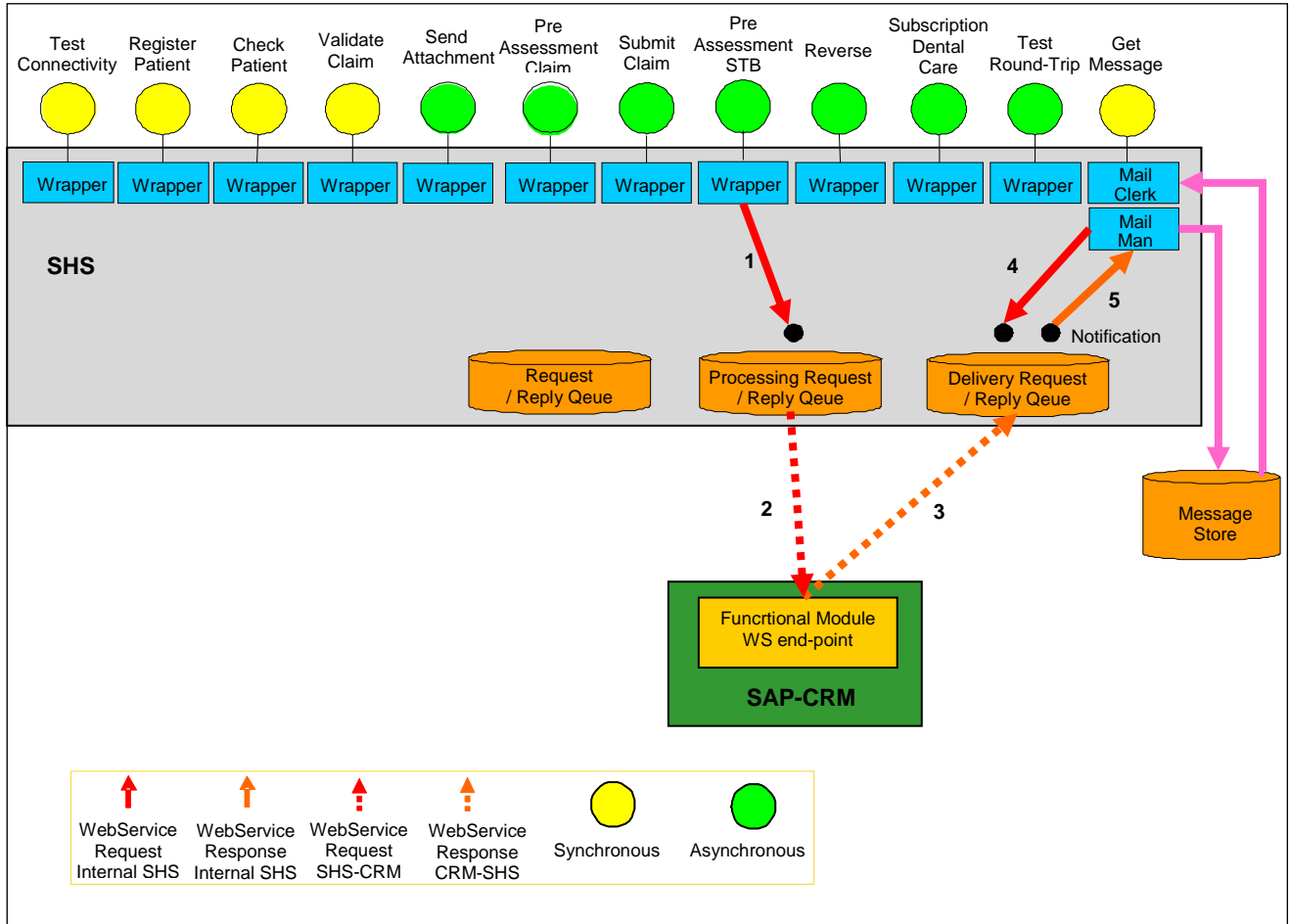


Figure 2 Architectural overview for the PreAssessmentSTB interface

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

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 the next chapter.

3.1 PreAssessmentSTB request

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

3.1.1 Message and translation

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

XML				SAP	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
request-id	Attribute		char (36)	IRequestId			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.
vendor-name	Attribute		char (30)					This attribute is mandatory, it is used for statistics.

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XML				SAP	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
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			The organizational number of the care provider. This parameter is sent in to be able to attach the correct organization number to the asynchronous response.	This parameter is sent in to be able to attach the correct organization number to the asynchronous response. 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.	

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XML				SAP	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.
stb-cause	Element		int(4)	IStbReason			STB reason code, 4 digits according to a predefined list.	The STB reason code list can be found at www.forsakringskassan.se

Table 2 Overview over parameters and their translation for the PreAssessmentSTB request.

3.1.2 Sample XML

```
<FK.TV.PreAssessmentSTBRequest.v3
  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="Pre-Assessment STB v3"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name-OPTIONAL"
  product-name="Dental-System-Product-Name-Goes-Here-OPTIONAL"
  version-number="V#-OPTIONAL"
  organization-number="2929291234"
  user-id="197512141502">
  <external-id>898799342GS242</external-id>
  <clinic-id>33391243</clinic-id>
  <social-security-number>198003141234</social-security-number>
  <stb-cause>2700</stb-cause>
</FK.TV.PreAssessmentSTBRequest.v3>
```

Figure 3 Sample XML for a PreAssessmentSTB request.

3.2 PreAssessmentSTB Receipt

A receipt is sent back to the user when the request has been received correctly. 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 is 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. Used to place the message in the right mailbox in SHS.	

Table 3 Overview over the parameters and their translation for a Receipt response.

3.2.2 Sample XML

The following sample demonstrates a possible response returned synchronously:

```
<FK.TV.ReceiptResponse
  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"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  organization-number="2412912421"/>
```

Figure 4 Sample XML for a PreAssessmentSTB receipt.

3.3 Manual Handling Response

The Manual Handling Response to the SHS message queue is used to indicate that the PreAssessmentSTB request has been successfully registered. It also informs the submitter of the pa-stb-id and to send documents electronically.

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 is 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	The SHS property correlation-id will be set to the value of request-id.	Since the message is synchronous SHS will be able to fetch request-id from the question.
EStatus							Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid values: S=Success	If status=S, 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.

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.
EPaStbId	pa-stb-id	Element	X	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.
EPaStbStatus	pa-stb-status	Element		char (1)	No	No	Valid values: M = Manual Handling	Status of the PA STB This field will be populated with an "M" if no error occurred.
EZclaimCommentary\item	commentary	Complex Type	X				This is an information and warning field.	
EzclaimCommentary\item\ ECommentaryNumber	commentary/ id	Attribute		int(10)	No	No	A unique identifier for the line item in the submitted collection.	
EzclaimCommentary\item\ ECommentaryMessage	commentary/ code	Element		int(3)	No	No		
EcommentaryDetail\item\ ECommentaryDetail	commentary/ commentary	Element		char(255)	No	No		

Table 4 Overview over the parameters and their translation for the synchronous PreAssessmentSTB response

3.3.2 Sample XML

The following sample demonstrates the initial response for an PreAssessmentSTB request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <FK.TV.GetMessageResponse request-id="00000001-1000-0000-0000-000000000005"
      organization-number="2021005521" xmlns="http://fk.se/SHS/xsd/tanden">
      <PreAssessmentSTBResponse.v3 request-id="a4924e42-4214-ba93-af22-98739237ab06">
        <pa-stb-id>6000000202</pa-stb-id>
        <pa-stb-status>M</pa-stb-status>
        <commentary id="1">
          <code>712</code>
          <commentary>Bilagor till förhandsprövningen STB kan biläggas elektroniskt</commentary>
        </commentary>
      </PreAssessmentSTBResponse.v3>
    </FK.TV.GetMessageResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

Figure 5 Sample XML for a PreAssessmentSTB response.

3.3.3 Information messages

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

Code	Description
712	Bilagor till förhandsprövningen kan biläggas elektroniskt.
716	Just nu har vi långa handläggningstider för ärenden där vi utreder om patienten har rätt till svensk socialförsäkring.
743	Ärendet handläggs manuellt för att fastställa om patienten har rätt till statligt tandvårdsstöd, dvs. rätten till tandvårdsersättning och tandvårdsbidrag utreds.
776	Patienten är inte registrerad som försäkrad hos Försäkringskassan.

Table 5 List of possible PreAssessmentSTB Information messages.

3.4 PreAssessmentSTB 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 SHS, but header validation errors are sent from SAP-CRM.

In situations where the inbound message from SHS is corrupted or there is an issue sending the request to SAP, SHS will generate an error response and send it to the clinic mailbox.

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				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 on 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=E, this xml structure is used.

SAP	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
	organization-number	Attribute		int (10)			The organizational number of the care provider.	This value must be copied from the "organization-number" message from the inbound request XML message.
EZclaimMessage\item	error	Complex Type						
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.	Not used today

Table 6 Overview over the parameters and their translation for an Error response.

3.4.2 Sample XML

The following sample demonstrates a possible error message returned synchronously from SHS:

```
<FK.TV.GetMessageResponse
  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"
  request-id="550e8400-e29b-41d4-a716-446655440000"
  organization-number="8421812392">
  <ErrorMessage request-id="a4924e42-4214-ba93-af22-9839237ba232">
    <error>
      <error-code>701</error-code>
      <error-text>Mottagnings-ID kunde inte hittas</error-text>
      <error-details></error-details>
    </error>
  </ErrorMessage>
</FK.TV.GetMessageResponse>
```

Figure 6 Sample XML for a PreAssessmentSTB 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
701	Mottagnings-ID kunde inte hittas	CRM
702	Patienten kunde inte hittas	CRM
703	Vårdgivar-ID kunde inte hittas	CRM
704	Användaren kunde inte hittas	CRM
705	Relationen mellan vårdgivare och mottagning kunde inte hittas	CRM
711	En sjukdom som ger rätt till STB ska anges	CRM
722	Förhandsprövning STB är redan inskickad	CRM
724	Förhandsprövningen är redan inskickad.	CRM
725	Patienten är för ung för att få statligt tandvårdsstöd.	CRM
731	Patienten är inte längre registrerad för statligt tandvårdsstöd	CRM
734	Patienten kommer inte från ett ersättningsberättigat land/region	CRM
750	Mottagningen eller vårdgivaren är inte aktiv	CRM

Table 7 List of possible PreAssessmentSTB Error messages .

4 Integration 2 – 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.

4.1 PreAssessmentSTB Push response

4.1.1 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)	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				char(1)			Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid values: S=Success	If status=S, this xml structure is used.
IOrgNum							The organizational number for the care provider.	This value will also be set as a SHS property.

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IClinicId							The id that the clinic has been assigned by FK.	Used to place the message in the right mailbox in in SHS.
EPaStbId	pa-stb-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,
EPaStbStatus	pa-stb-status	Element		char (1)	No	No	Indicating the status of the claim. Valid values: A = Approved D = Declined	
EValidFrom	valid-from	Element	X	Date	No	No	Approval date entered manually by case handler.	Used only when status is Approved., example: 2013-05-08
EvalidTo	valid-to	Element	X	Date	No	No	Two valid periods exist starting from "valid-from" date: <ul style="list-style-type: none"> • 4 years (default) • Life-time 	Used only when status is Approved. For life-time validity the date is set to 9999-12-31.
EZclaimCommentary\item	commentary	Complex Type	X				This is an information and warning field.	

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
EzclaimCommentary\item\ECommentaryNumber	commentary/id	Attribute		int(10)	No	No	A unique identifier for the line item in the submitted collection.	
EzclaimCommentary\item\ECommentaryMessage	commentary/code	Element		int(3)	No	No		
EzclaimCommentary\item\ECommentaryDetail	commentary/commentary	Element		char(255)	No	No		

Table 8 Overview over the parameters and their translation for the PreAssessmentSTB push response.



4.1.2 Sample XML

The following sample message demonstrates a response where the Pre-assessment was approved:

```

<FK.TV.GetMessageResponse
  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"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  organization-number="8942132412">
  <PreAssessmentSTBResponse.v3 request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <pa-stb-id>8577732222</pa-stb-id>
    <pa-stb-status>A</pa-stb-status>
    <valid-from>2013-01-01</valid-from>
    <valid-to>2016-12-31</valid-to>
  </PreAssessmentSTBResponse.v3>
</FK.TV.GetMessageResponse>

```

Figure 7 Sample XML for a PreAssessmentSTB push response where the request was approved.

The following sample message demonstrates a response where the Pre-assessment was declined:

```

<FK.TV.GetMessageResponse
  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"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  organization-number="8942132412">
  <PreAssessmentSTBResponse.v3 request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <pa-stb-id>8577732222</pa-stb-id>
    <pa-stb-status>D</pa-stb-status>
  </PreAssessmentSTBResponse.v3>
</FK.TV.GetMessageResponse>

```

Figure 8 Sample XML for a PreAssessmentSTB push response where the request was declined.

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 PreAssessmentSTB requests:

per Year	per Month	per Day	per Hour	Size
96	8	0,26	0,01	~0,8 kb

Table 9 Preliminary forecast for the volumes of PreAssessmentSTB requests.