Content

1 Introduction 4

1.1 Purpose 4

1.2 Scope 4

2 Interface List 5

3 Inteface Definition 5

3.1 MDN/IMSI Deactivation Real-time 6

3.1.1 minDeactivation Interface 6

3.1.2 notifyMobileNumberDeactivation Interface 10

3.2 MDN/IMSI Activation Real-time (out of scope for R1) 12

3.2.1 minActivation Interface 12

3.2.2 notifyMobileNumberActivation Interface 15

3.3 User Enrollment Real-time 17

3.3.1 userEnrollment Interface 17

3.4 EDI 5 – Shipped MIN/ESN and Scrap MIN/ESN files Batch Feed 21

3.4.1 EDI5 Process Flow Overview 21

3.4.2 SHIPPED_SENT Interface 22

3.4.3 SCRAP_SENT Interface 24

3.4.4 BDIF_PVN_EDI5 Interface (SHIPPED_ERR / SHIPPED_APP / SCRAP_APP / SCRAP_ERR) 26

3.5 Original EDI 2 – Married IMSI/ESN file Batch Feed 28

3.5.1 EDI2 Process Flow Overview 28

3.6 Activated ESN/MDN/IMSI file Batch Feed 28

3.6.1 ACTIVATED_SENT Staging Interface 28

3.6.2 PVN_STAGE Database Schema 29

3.6.3 Definition of PVN Staging Tables 29

3.6.4 notifyActivatedSent JMS Message Interface 30

3.6.5 ACTIVATED_ERR File Interface 31

3.6.6 notifyActivatedReceived JMS Message Interface 32

3.7 Cellular_ESN Data Feed 34

3.7.1 Cellular ESN Data Feed 34

4 Exception/Error Handling Process 36

4.1 Exception/Error 36

4.2 Error Notification Interface 36

1 Introduction

1.1 Purpose

This document is the primary detailed requirements description of all interfaces between BDIF system and PVN system. This includes BDIF owned interfaces exposed to PVN system, for which this document should be regarded as the primary source. It also lists PVN owned interfaces exposed to BDIF, to the extent as understood at this time, for contractual and reference purpose, but should not be regarded as the primary source of that information.

This document should be read and understood by all system stakeholders with an interest in the detailed interface specification between BDIF and PVN. Most importantly, this includes those who are building the system and those who will use it to carry out their business responsibilities.

1.2 Scope

The interfaces specification outlined in this document describe the detailed technical view of call interface, elements definition, error/exception handling etc. all pertinent information necessary for clients to use the interface effectively and correctly.

See Data Sharing Agreement (DSA) and System Requirement Specification (SRS) for the detailed data usage, sharing and system requirements, use cases and project scope.

2 Interface List

Data Feed	Interface	Owner	Description
MDN/IMSI Deactivation Real-time	minDeactivation	BDIF	ESN/MDN/IMSI real-time deactivation
	notifyMobileNumberDeactivation	PVN	ESN/MDN/IMSI real-time deactivation notification
User Enrollment Real-time	userEnrollment	BDIF	User enrollment
MDN/IMSI Activation Real-time	minActivation	BDIF	ESN/MDN/IMSI real-time activation (out of scope for R1)
	notifyMobileNumberActivation	PVN	ESN/MDN/IMSI real-time activation notification (out of scope for R1)
EDI 5 – Shipped MIN/ESN and Scrap MIN/ESN files	Provisioning.jms.ShippedSent_Queue	PVN	Shipped file sent data feed
	Provisioning.jms.ScrapSent_Queue	PVN	Scrap file sent data feed
	Bdif.jms.ShippedResponse_Queue	BDIF	Process response for Shipped / Scrap: SHIPPED ERR message sent SHIPPED_APP message sent SCRAP_APP message sent SCRAP_ERR message sent
Original EDI 2: 1) Encrypted Paired with A-Key file 2) Activated ESN/MDN/IMSI file	To be defined	Conti	Encrypted Paired with A-Key file will be sent to Conti, after PVN has notified BDIF that the Activated feed is good; the original Activated file will also be sent along so that Conti can cross check with the Encrypted file content
Activated ESN/MDN/IMSI file	ACTIVATED_SENT Staging	PVN	Load Activated_Sent ESN/MDN/IMSI file from China Telecom into PVS Staging
	notifyActivatedSent	BDIF	Notify PVN the Activated_Sent loading is done
	ACTIVATED_ERR File	BDIF	Generate ACTIVATED_ERR file from PVN Staging for China Telecom
	notifyActivatedReceived	PVN	Notify BDIF the processing result of Activated_Sent Staging data (BDIF depends on this notification to decide whether to hold on the encrypted file)
Cellular_ESN Feed	Bdif.jms.CellularEsn_Queue	BDIF	Cellular ESN messge sent

3 Inteface Definition

This section defines the data feed interfaces between BDIF and PVN system.

3.1 MDN/IMSI Deactivation Real-time

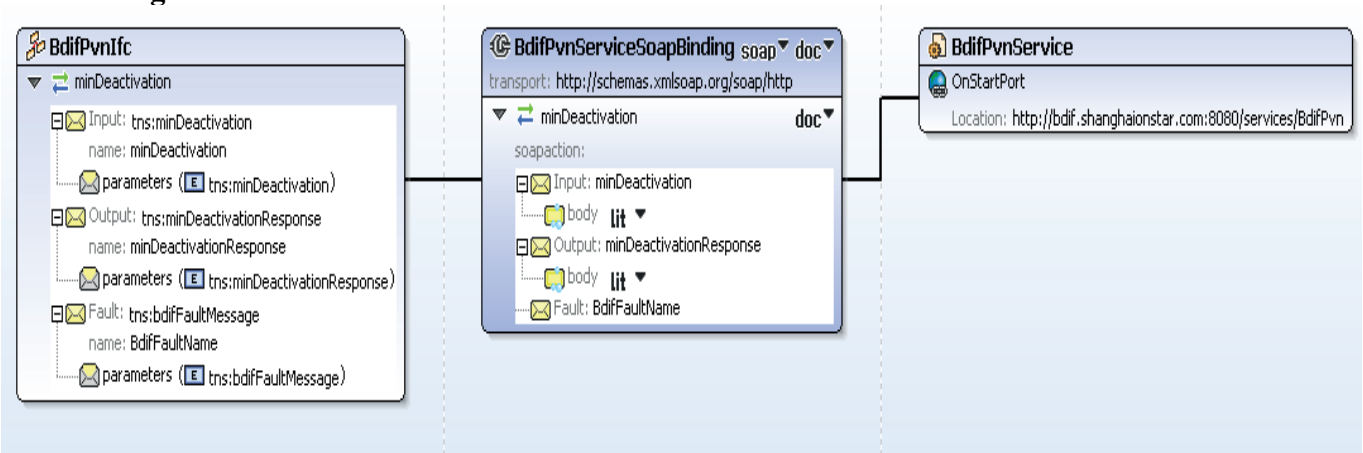
3.1.1 minDeactivation Interface

Interface ID:	MIN_DEACTIVATION_INTERFACE
Name:	minDeactivation

Description	
Interface Owner:	BDIF
Protocol:	SOAP/HTTPS
Security:	HTTP Authentication
Standard:	SOAP 1.1
Usage Pattern:	2500 users per day, 20 concurrent users
Volume:	1K per request
Notes:	

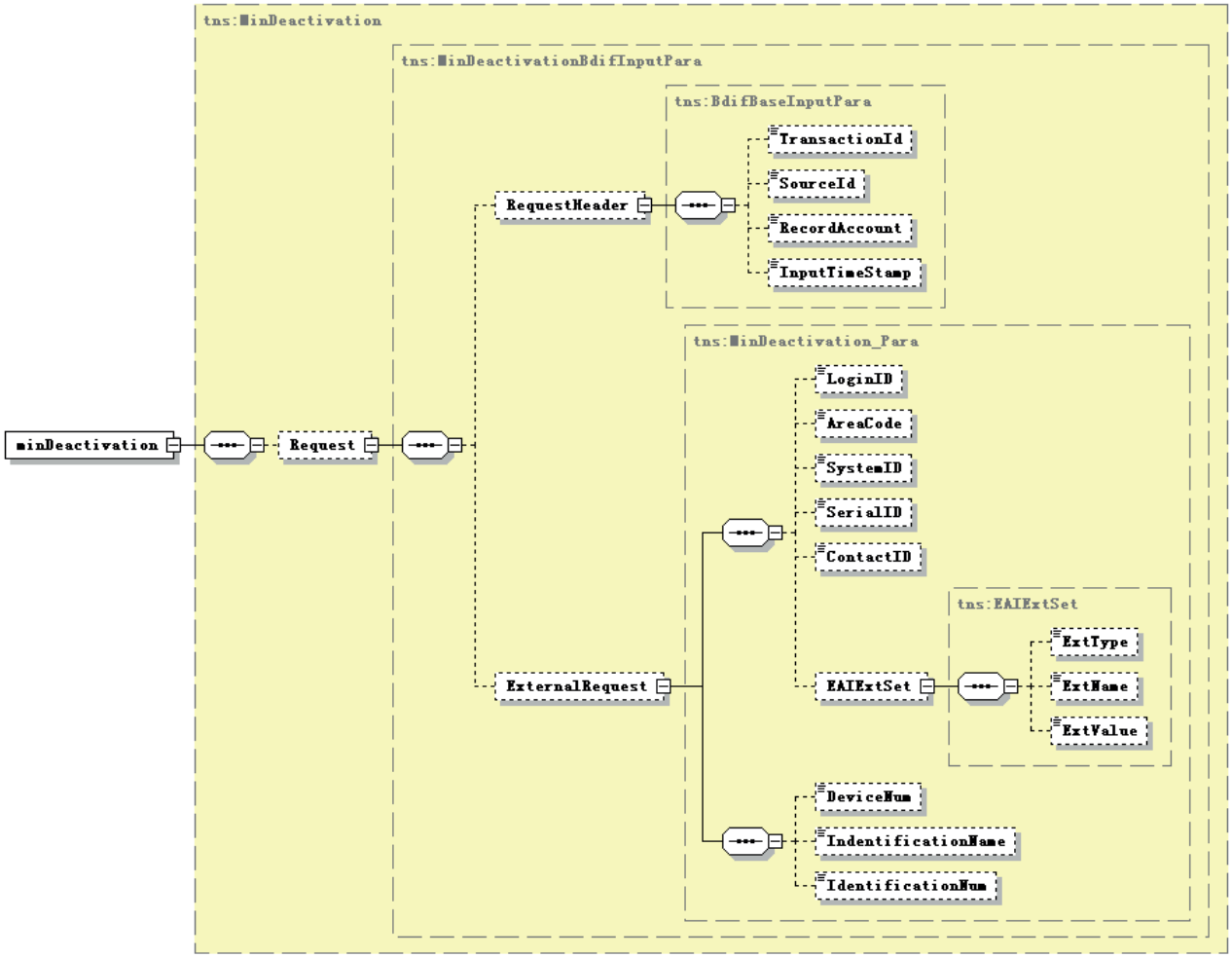
3.1.1.1Interface Definition Diagram

WSDL Diagram

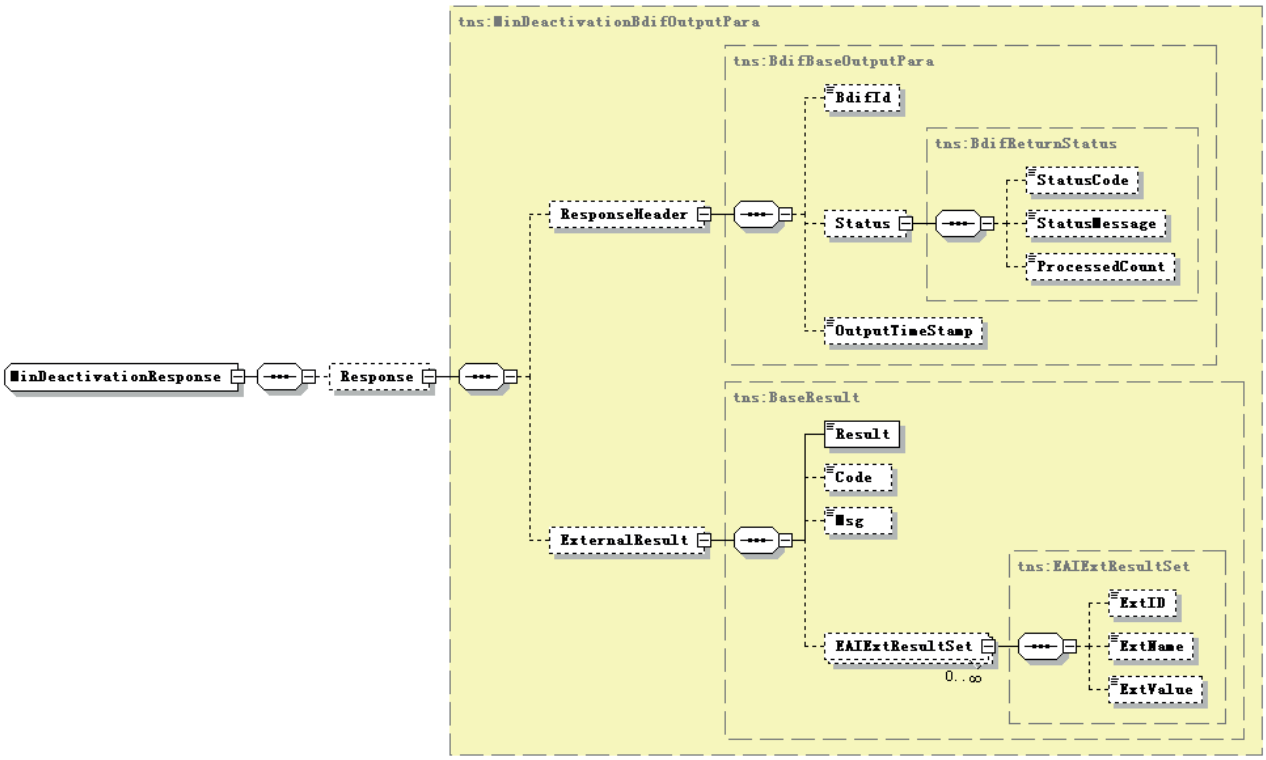


Schema Diagram

minDeactivation Request Schema:



minDeactivation Response Schema:



Yong:
Type: BdifReturnStatus
StatusCodes - What are the valid status codes?
StatusMessage - What are the valid status messages?

Jma: the response message schema here is left unchanged from the original design for two reasons:

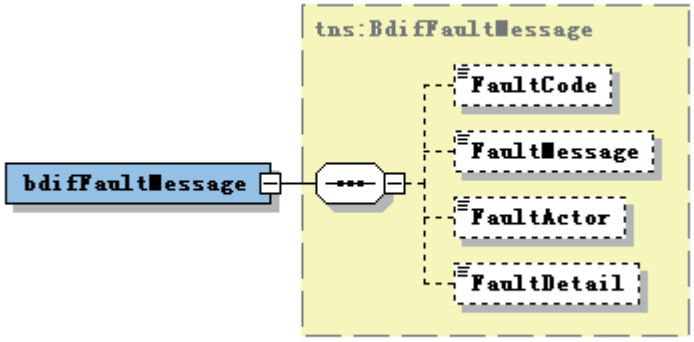
1) Keep the interface design as coherent as possible
2) For future extension purpose, when interface with Telecom goes Web Services eventually

Currently this response message is used mainly just for acknowledgement.
StatusCode – 0 (request received OK)
StatusMessage – Request Received

Type: BaseResult
Code - What are the valid Code?
Msg - What are the valid message
EAIExtResultSet – Why is there an EAIExtResultSet?

Jma: the BaseResult is used to wrap the external result returned from Telecom, in current case, it would be empty.

bdifFaultMessage



3.1.1.2Element Definition

BdifBaseInputPara

Element Name	Data Type	Description	Mandatory/ Conditional
TransactionId	string	Identifies the current transaction, equals the name of the interface call	M
SourceId	string	Identifies the Source Application	M
RecordCount	integer	Count of records	M
InputTimeStamp	dateTime	Timestamp of Input entered	M

MinDeactivation_Para

Element	Element Name	Data Type
DeviceNum	设备号 MDN	string
IndentificationName	证件类型	string
IdentificationNum	证件号码	string
AreaCode	地区编码，设定为 021	string
SystemID	ONSTAR	string
SerialID	消息流水号(16 位)	string
ContactID	接触流水号 ID	string
LoginID	受理工号	string
EAIExtSet	扩展查询条件	complex
ExtType	0:通道型参数、1:业务处理型参数	string
ExtName	字段英文名	string
ExtValue	字段值	string

BdifBaseOutputPara

Element	Element Name	Data Type
BdifId	Identifies BDIF instance for the	string

	transaction, for correlation purpose	
Status	BDIF return status	complex
StatusCode	Status code	string
StatusMessage	Status message	string
ProcessedCount	Processed records count	string
OutputTimeStamp	Timestamp of output	dateTime

3.1.1.3Interface Definition File

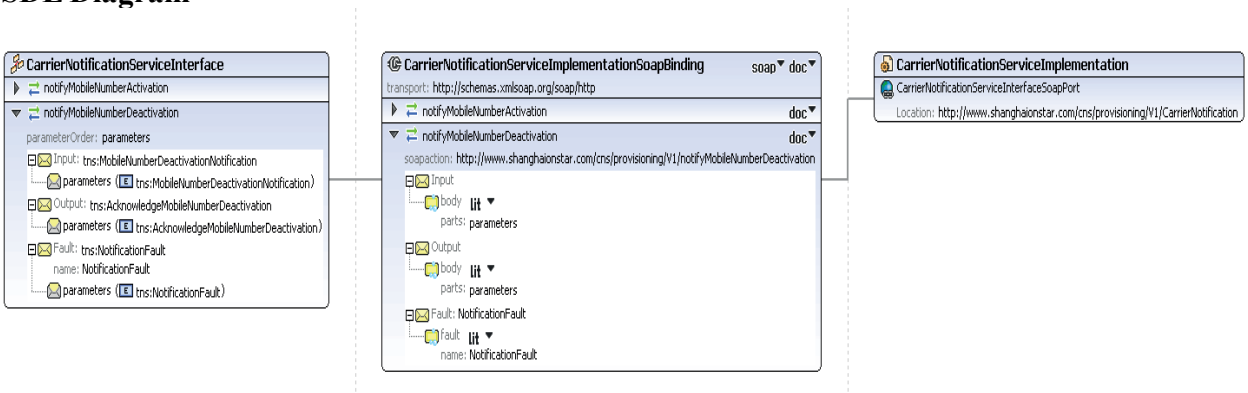
BDIF_PVN.wsdl

3.1.2 notifyMobileNumberDeactivation Interface

Interface ID:	NOTIFY_MOBILE_NUMBER_DEACTIVATION_INTERFACE
Name:	notifyMobileNumberDeactivation
Description	
Interface Owner:	PVN
Protocol:	SOAP/HTTPS
Security:	HTTP Authentication
Standard:	SOAP 1.1
Usage Pattern:	2500 user per day, 20 concurrent users
Volume:	1K per request
Notes:	

3.1.2.1Interface Definition Diagram

WSDL Diagram

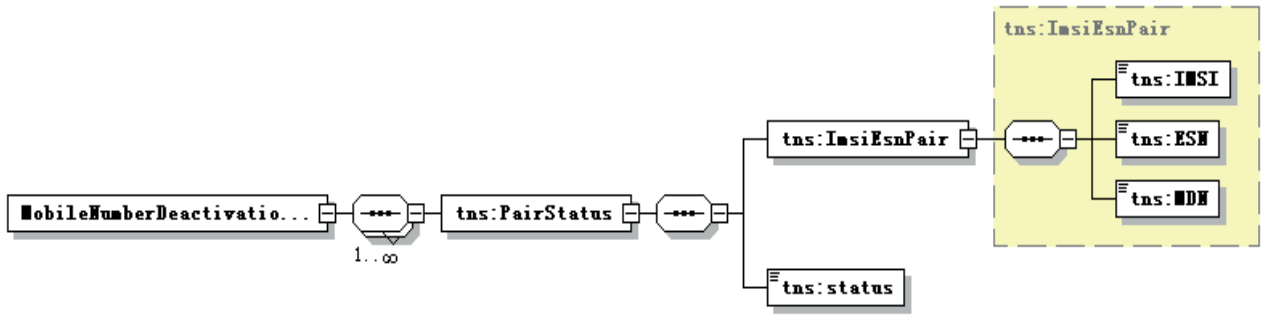


Schema Diagram

MobileNumberDeactivationNotification Schema
(PVN: please change the subelements occurrence from single to multiplicity, as already reflected in the diagram below):

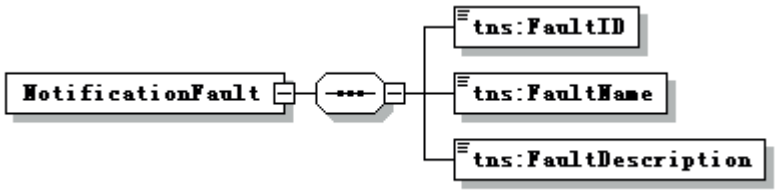
Each deactivation request may return different status, some maybe successful and some maybe failure. They can not be grouped together.

Jma: Yes they can, in each pair, the 'ImsiEsnPair' and 'status' are grouped as one occurrence, as already updated below (one more level of element 'PairStatus' is added in order to group the 'ImsiEsnPair' and 'status' together):



AcknowledgeMobileNumberDeactivation Schema:

NotificationFault Schema:



3.1.2.2Element Definition

Name	Type	Description
ESN	String	The Mobile Electronic Serial Number (ESN) for the Vehicle Communication Platform (VCP).
IMSI	String	International Mobile Subscriber Identification Number.
MDN	String	Mobile Directory Number.
status	String	Status
FaultID	String	Web Service Fault ID
FaultName	String	Web Service Fault Name
FaultDescription	String	Web Service Fault Description

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：https://d.book118.com/546000043003010155